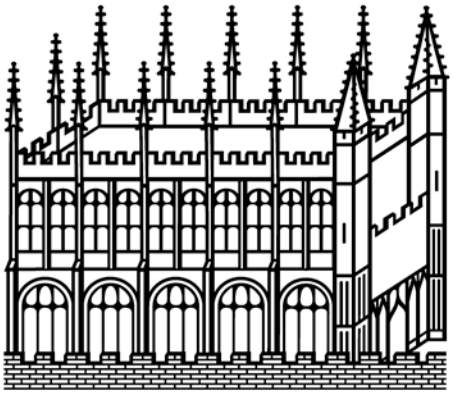


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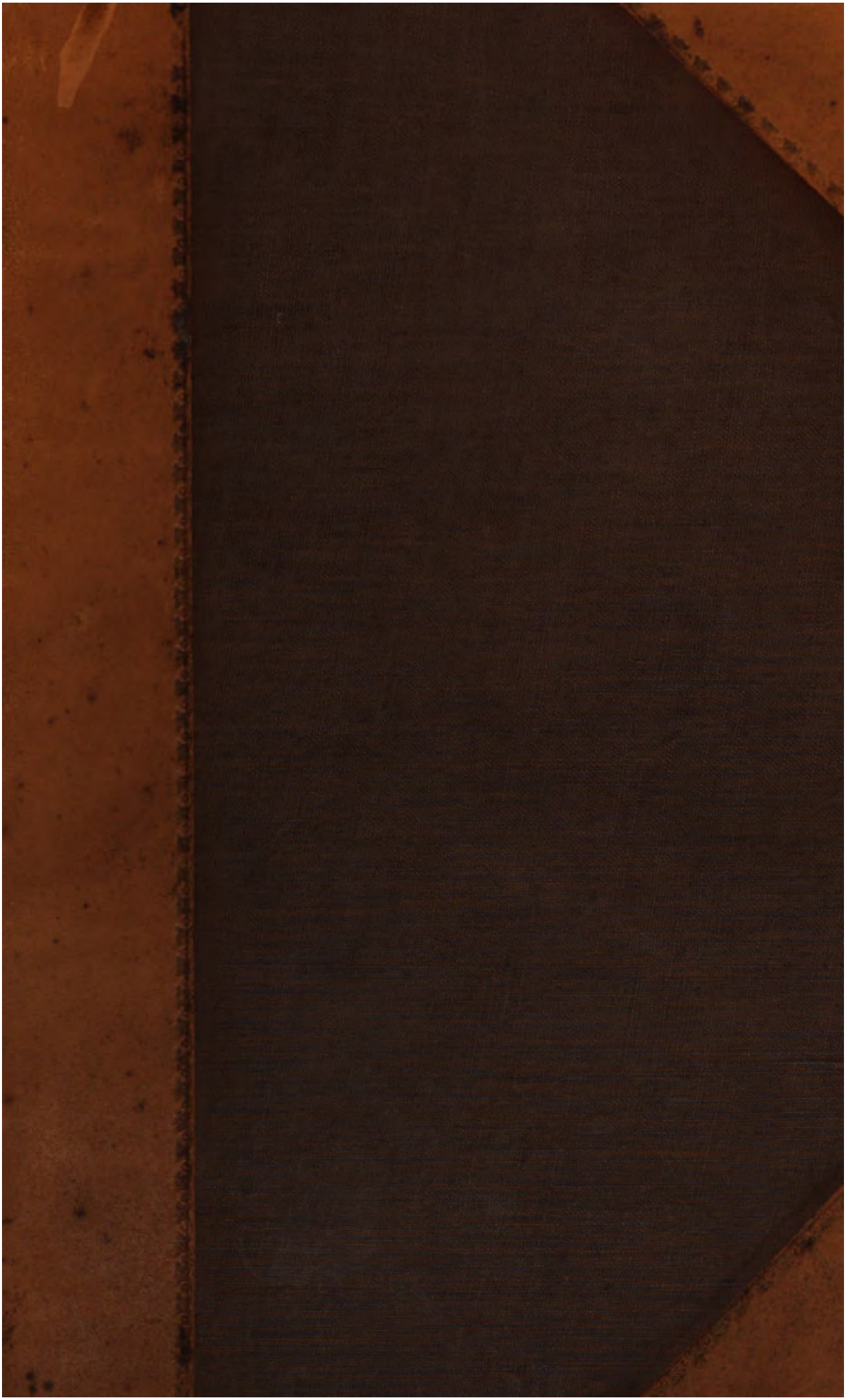
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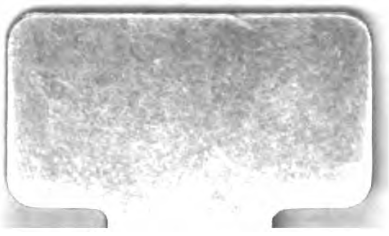
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A VIEW OF THE IMPROVEMENTS AND DISCOVERIES

IN THE

VARIOUS BRANCHES OF MEDICAL SCIENCE.

EDITED BY

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AND

AN ASSOCIATION OF PHYSICIANS AND SURGEONS.

Quærere verum.—HORACE.

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LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,
BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXIV., DELIVERED MARCH 25, 1833.

Gentlemen, — The specific and malignant disease, known by the name of *cancer*, may begin either as a molecular deposition in the tissue affected, from a derangement of its nutrition, or as a deposition of the heterologous matter upon what Professor Carswell terms a *free surface*, as, for instance, that of a serous membrane; here it is, then, in the form of a secreted matter. It generally has two stages, namely, *that of induration*, or *scirrhus*, as it is termed, the first shape in which the disease usually presents itself; and *that of ulceration*, which is a later condition of it.

It would lead, I think, to less confusion, if *scirrhus*, a term originally denoting any kind of hardness, were restricted to the induration, which is characterised by the texture peculiar to cancer, and marked by a decided tendency to cancerous ulceration. Had this rule been observed by the old surgeons, some parts of their works would have been more remarkable for correct descriptions, and more intelligible than they are found to be, with reference to the pathological condition of various textures, described as being affected with scirrhus. I believe all well informed surgeons of the present time only use the term *scirrhus* in the sense that I have explained.

The disease, in the stage of scirrhus, is also sometimes denominated *occult cancer*; and, in the ulcerated stage, *open cancer*, or sometimes *carcinoma*. I think that when the latter word is employed, the generality of surgeons now signify more particularly the ulcerated form of the disease. There is no uniform custom, however, about this point; and sometimes carcinoma is only synonymous with cancer.

Scirrhus, at its commencement, occupies a minute and limited space; it may be confined to one of the acini of the liver, as Professor Carswell has ascertained; in the breast, it is commonly of a globular form, and irregular and craggy, as it were, on its surface. It afterwards enlarges, though rarely in the degree or with the quickness exemplified in many tumours of a different nature; it also continues to be moveable for a certain time; but has a tendency to become fixed by attachments to the neighbouring textures, at an earlier period than what is observed with respect to most other swellings.

Scirrhus is likewise remarkable for its excessive firmness, its cartilaginous, or, as it is sometimes expressed, its stony hardness. The substance of it, however, is not one uniform, homogeneous mass, but it is intersected by *septa*, or bands, the interstices of which are filled with a yellow, grey, or light brown, pulpy, friable substance. These bands, or septa, are observed to diverge, as they proceed from the centre of the disease, sometimes radiating, as pathologists are fond of expressing themselves, a considerable way into the surrounding textures, so as to extend the same morbid action to them. The septa, now described, have a tough consistence, and are very much like a ligamentous tissue.

When a section is made of a scirrhus, a central point, or nucleus, may be observed, from which these dense ligamentous bands proceed towards the circumference. Sometimes the larger bands subdivide into smaller ones, which follow a course similar to that of their trunk, and ramify very regularly, or the bands may pursue from the first an irregular and intricate course, often uniting with and crossing one another, so as truly to present, when minutely inspected, a retiform appearance.

Frequently, in a more advanced stage of the tumour, the greyish matter, interposed between the firm tough septa, appears broken down or removed, its place being occupied by a glairy or a turbid fluid, by a very soft, pulpy, semi-liquid substance, or blood itself.

Gentlemen, I may next inform you, that primary scirrhus and cancer are most commonly noticed in glandular or secreting organs, —as the female breast, the skin, the mucous

tissues, the tongue, the cardiac and pyloric portions of the stomach, the cervix uteri, the rectum, the lips, especially the lower one, and the glans penis. The testicle and ovaries are also liable to cancerous disease. Those parts, which I have specified, are some of the principal ones on which cancerous disease makes its *primary* attack; but many other textures and organs may become the seat of it secondarily; as, for instance, the absorbent glands, the lungs, the liver, and even the bones. You know, gentlemen, from what I have said in former lectures, that, in persons who have long suffered from carcinoma, portions of the natural structure of their bones are absorbed, and a scirrhous substance is deposited in their place. This fact is sometimes exemplified in the ribs and sternum; and I now show you the upper part of a cranium, taken from a person who died of cancer of the breast, and you may plainly see the secondary effects of the disease on the parietal bones. Probably, if the viscera of the same individual had been carefully examined, the cancerous texture might also have been traced in several of them. I attended a gentleman's coachman very lately, in Montague-street, Russell-square, for carcinoma of the bladder, and the effects of this disease on the skeleton were such, that one of the ribs and the left thigh bone underwent spontaneous fractures previously to the patient's death. The rib and the thigh-bone I mean shortly to place in the museum of this University. As secondary effects of cancer, beginning in the lower lip, scirrhous formations have been noticed in the walls of the heart itself. A case, illustrative of this fact, was lately in St. Bartholomew's Hospital, and the particulars of it have been inserted in the Medical Gazette, by Mr. W. M. Coates. The primary cancerous affection was situated, in this instance, in the lower lip; a form of the disease, as Mr. Coates correctly observes, not unfrequently regarded as entirely local.

When cancer is regarded as a genus, comprehending in its species, scirrhus, common vascular sarcoma, pancreatic, medullary, and mammary sarcoma, and fungus hæmatodes, (the view adopted by Professor Carswell,) of course, many other parts may be set down as very liable to carcinoma, besides those now enumerated by me. Those diseases he considers to be of the same family, 1st, because they often present in the early periods of their formation certain characters common to all of them, however much they may differ from each other in their subsequent periods. 2ndly, because they all terminate in the gradual destruction, or transformation of the tissues they affect. 3rdly, because they all have a tendency to affect several organs in the same individual. 4thly, because they all possess, though in various degrees, the same reproductive character. Dr. Carswell describes two states of the heterologous deposit, of which these diseases consist; in one it has little or no tendency to become organised; its form and arrangement appear to be determined chiefly by external circumstances; and its formation and subsequent increase are entirely dependent on the nutritive function of the organ in which it is contained. In the second state, this deposit exhibits, on the contrary, a greater or less tendency to become organised; it possesses within itself properties, by means of which its subsequent arrangement and developement are affected, independently of the nutritive function of the organ, in which it is formed, except in so far as the materials of its growth may be derived from this source. The first example Professor Carswell calls *scirrhoma*, the second *cephaloma*. In this course of lectures, however, when I speak of scirrhus and cancer, only those forms of disease are signified, which have been alluded to in the commencement of the present discourse. The others will be considered hereafter. There, are, however, many interesting observations in Dr. Carswell's Illustrations of the Elementary Forms of Disease, relative to Cancer and Fungus Hæmatodes, which bring the subject completely into a new light; and which will no doubt receive that candid attention from the profession, to which his meritorious exertions have ample claims. Thus, one circumstance which he observes, and which is new, I believe, to the generality of pathologists of this country, is, that numerous examples might be given of scirrhus, medullary sarcoma, and fungus hæmatodes, as they are commonly called, originating in the same morbid state, and passing successively from the one into the other, in the order now enumerated. Indeed, he says, that we often meet with all the varieties of what he terms scirrhoma and cephaloma, not only in different organs of the same individual, but even in a single organ. And of so much importance has it appeared to Professor Carswell to establish this fact, that the coloured representations in his second Fasciculus are chiefly devoted to its illustration.

Scirrhus and cancer very rarely occur in subjects under thirty years of age, and not often in any individuals under forty or forty-five. The late Sir Everard Home, however, met with an instance of a true cancerous formation in the breast of a young woman under twenty. This was a rare occurrence, with reference to the breast, or cancer in general; yet I may tell you, what you will not find noticed in treatises on surgery, it is not very uncommon for scirrhus of the uterus to be met with in patients under thirty. We have had some melancholy instances of this fact amongst the patients of the Bloomsbury Dispensary.

In consequence of the female breast and the uterus being particularly often the seats of cancer, the disease more frequently afflicts women than men; and, gentlemen, I may remark, that there is another circumstance, affording an additional reason for females being more liable to this intractable disorder; namely, the change that occurs in

their constitutions about the period of life, when the menses cease. Hence, between the ages of forty and fifty, you find that they often begin to suffer from scirrhous and cancerous affections.

It is generally believed that various common tumours, ulcers, and pimples, may change into malignant ones, and assume the cancerous action, under the influence of particular states of the constitution. Thus, when a female has a tumour in the breast, not originally of a malignant nature, another morbid action may be excited in the part about the period of life when the menses stop, and the disease may then assume the character of scirrhus or carcinoma. Nay, a tumour of the breast, brought on by a blow, and beginning to all appearances with common inflammation, in a seemingly healthy woman, long before this critical period of life, will sometimes leave a hardness behind that will then change into scirrhus and cancer. I suspect, however, that common adipose tumours never degenerate into cancer.

Swelling is frequently considered not to be an essential feature of scirrhus and cancer. On this point, I think, Sir Charles Bell has delivered one of the most accurate statements. In cancerous diseases of the breast, there is not always an increase in the dimensions of the whole breast, but often an actual diminution of its total bulk. But what is true of the breast, or mamma, is not true of the disease, more generally considered; for the proper structure of the mammary gland frequently either shrinks, or is compressed by the scirrhous new-formed deposition; and sometimes the quantity of surrounding fat is lessened by absorption; and the consequences are, that the whole mass is less than the natural breast, or than what the breast was, previously to the commencement of the disease. Still it is a fact, that the disease is properly a tumour—it is indeed a preternatural growth—a new formation.

The difference in the feel of scirrhi depends very materially upon the quantity of fat around them; if much of the adipose substance be absorbed, you will readily feel the irregular knotty form of the disease; but, when a good deal of fat remains, the breast seems large, full, and smooth, streaked perhaps with blue dilated veins, and having sometimes an ulcerated aperture in its centre.

However, after a schirrus of the breast has existed a certain time, its character is generally denoted by the puckered state, and dull leaden or brownish colour of the integuments, the knotty and uneven feel of the disease, the occasional sharp darting pains in the part, its fixed attachment to the skin above, and to the pectoral muscle underneath it, and the early retraction of the nipple, a circumstance alleged to be produced by the extension of some of the scirrhous bands between the lactiferous ducts, whereby its spongy texture is destroyed.

A *true* scirrhous tumour of the breast, one disposed to be attacked by cancerous ulceration, is known to a man of experience by its remarkable hardness; its great weight in proportion to its size, which is seldom considerable; the lancinating pains occasionally felt in it, and its close connexion with the gland of the breast; so that, when moved, this gland moves along with it. The diagnosis will also be much assisted by reference to the patient's age.

With the exception of fungus hæmatodes, few other diseases so completely involve in their ravages every kind of tissue, skin, muscle, mucous membrane, cellular substance, lymphatic glands, &c.

In ordinary tumours, the skin does not usually become affected, till they have attained a considerable size; but, in true scirrhus, the skin generally becomes adherent to the morbid mass, and both discoloured and puckered.

Although a scirrhus of the breast may remain for months, and even for years in a quiet state, without advancing to ulceration, the disease is generally observed to ulcerate before the new formation has acquired great bulk. A large chasm is then commonly produced, partly by a sloughing, and partly by an ulcerative, process; and an excoriating, peculiarly fœtid ichor is discharged, often in such abundance, as to excite surprise in a person not accustomed to the view of this fatal disease. Its smell is also so different—so much more offensively disagreeable than any other kind of discharge, that, when once you have been acquainted with it, you will never forget it; and, afterwards, when a patient with ulcerated cancer is near you, your nose will tell you of his approach, though your eyes may be shut.

When the sloughs have been detached, partial but ineffectual attempts at reparation are made. Even granulations form; but they are greyish, hard, warty, and endowed with but little vitality; never covering the whole surface, but rising only at certain points, and soon changing into fungous growths of extraordinary hardness. However, sometimes cancerous ulceration really stops; cicatrisation even occurs at particular points; and a degree of mitigation is experienced; but the part never heals to any great extent—never becomes healthy. The margins of the sore become indurated, irregular, and twisted in various ways; in some places everted, in others inverted, or turned downwards and inwards.

The disease extends to other parts, and often to remote situations; the absorbent glands especially become affected. The disease is propagated from one gland to another, so that, after all the axillary glands are affected, those which lie under the clavicle, in the neck, or in the upper part of the chest, or under the sternum, in the course of the internal mammary vessels, become diseased.

The absorbent glands are indeed frequently affected in an early stage of cancer, generally becoming very much indurated, and having

almost the density of cartilage; but sometimes becoming softened and broken down at several points, and containing a purulent, or bloody fluid. The lymphatic vessels, entering or leaving the glands, also sometimes feel hard and wiry. In the advanced stage of cancer of the breast, so seriously is the function of the absorbents of the nearest arm sometimes impeded, that the limb is in a constant state of painful œdema, and rendered completely useless. In ulcerated cancer, frequent hæmorrhages take place from the fungous granulations; and these repeated losses of blood, joined with the constant pain and irritation of the disease, the want of sleep, and the progressive extension of the disorder to other parts of the system, soon bring the patient into the lowest state of debility. Nausea and disturbance of digestion now come on, followed by a distressing and incessant cough. Pains in the chest and oppression of the breathing increase from day to day; the patient becomes wan, sallow, and emaciated; the pulse rapid and faltering; and death at length puts an end to this scene of misery, often preceded by anasarca.

Gentlemen, you know that one deplorable effect of cancer in its inveterate form is to produce an extraordinary fragility of the bones, which are apt to be broken by the most trivial causes, and even by the ordinary action of the muscles attached to them. I have also informed you, that, in some of these cases, masses of schirrous matter are deposited in the vertebræ, cranium, sternum, or long cylindrical bones, in lieu of their proper texture.

When cancer attacks the skin or a mucous membrane, an induration or warty lump is first produced, which afterwards ulcerates, and the sore has a particularly hard base. The ulceration gradually assumes the appearance of cancer, and soon cannot be distinguished from a sore that has been the result of scirrhus in other textures.

With regard to the *causes of cancer*, one important question is, whether the disease is a local or a constitutional one? Its origin is frequently ascribed to blows, pressure, and external injuries; but, I believe, the whole history of cancer tends to prove, that, although it may follow a slight contusion, the scratch or irritation of a little wart or excrescence, that has been stationary and harmless for years, or a common inflammation or abscess of the breast, these circumstances can only be regarded as *exciting* causes, which would not have brought on the disease, had there not been a certain state of the constitution qualifying it for the production of the specific structure of a cancerous tumour, and the peculiar morbid actions by which the nature of cancer is distinguished.

I do not adopt the views of some surgeons, who get rid of this question by saying, that cancer is at first a local, and afterwards a constitutional, disease. If cancer were not always dependent upon constitutional causes, why should it be so rare in persons under thirty years of age? Why should it be so common in women at the critical change which affects their system about the age of forty-five? Why also should the disease be so frequent in particular families, as to excite the suspicion of its being hereditary? At all events, we must believe that the disease is the effect of a specific action in the part, preceded by some peculiar state of the constitution, without which such specific action would not have taken place. It is very true, that you occasionally meet, though very rarely, with the true cancerous texture in young persons, and that you are not always able to trace any defect in their constitutions; but, because you cannot discover it, you are not to presume that it certainly does not exist; and, as far as you can reason from other examples of the disease, you must infer, that when a scirrhous or cancerous disease forms either in a young or old person, there must be peculiarities in the constitution, without which such a complaint would not have been produced. As Professor Carswell justly observes, hundreds and thousands of individuals are daily affected with inflammation, without this local disease being followed by any other than its usual effects; a fact placing in the clearest light the necessity of a previously existing modification of the economy, as the immediate and essential condition of the speciality of the heterologous formations, when they occur in conjunction with inflammation. He illustrates this remark by the following case:—an individual has a tumour on the external surface of the body, presenting the characters of some variety of cancer. He has an attack of pneumonia or pleurisy, or both, of which he dies in the course of a few days. On examining the diseased lung, or pleura, we find, instead of an effusion of serosity, coagulable lymph, or pus,—the usual products of inflammation—that the lung is converted into a solid mass, resembling a section of fresh pork. It is in the state of scirrhus; and the pleura is studded with tumours of various sizes, composed of a similar kind of substance.

A very curious and interesting fact, in relation to this part of the subject, is adverted to by Professor Carswell in his highly valuable work, now publishing, entitled "Illustrations of the Elementary Forms of Disease:" I allude to the *formation of carcinoma in the blood*. According to his views, cancer is divided into *scirrhoma* and *cephaloma*, of both of which there are varieties, to which the terms *vascular*, *pancreatic*, *medullary sarcoma*, *fungus hæmatodes*, &c. are usually applied. He states, that the heterologous substance, which constitutes the two species of carcinoma, is present in the vessels which ramify in carcinomatous tumours, or their immediate vicinity; and that it can be traced from the trunks into the branches or capillaries. Also, that it is found in vessels having no direct communication with a cancerous part, as when

it is confined to a small extent of the vena portæ; and lastly, in blood that has been effused into the cellular tissue, and on the surface of organs. He observes, that the divisions of the vascular system, in which the carcinomatous substance has been found, are the venous and the capillary. The formation of carcinoma in the blood, he says, cannot remain a matter of doubt; and he adopts the belief, that the presence of an organised product in the blood can have no other source but the blood itself; and cannot be introduced into this fluid by absorption. From this view of the origin of carcinoma, says Professor Carswell, its formation in the intimate structure, and on the free surface of organs, follows as a matter of course. The material element of the disease is separated from the blood, and deposited under a variety of circumstances, which modify, in a greater or less degree, the form, bulk, colour, and consistence, which it afterwards presents in the several periods of its development. Dr. Carswell, therefore, does not agree with several pathologists, who limit the seat of cancer to any one tissue, nor does he ascribe its origin to any modification of structure, or special organisation. Here, however, we are to remember, that Dr. Carswell's views of carcinoma comprise, as varieties of this disease, several cases, which have usually been separated from it, not being regarded as entitled to the classification which he has assigned to them.

Scirrhus and cancer, in the ordinary sense of these terms, are common at all ages between 30 and 70. Sir Everard Home met with a single instance of the true scirrhus texture in a person only 15 years of age; and Sir Astley Cooper, in all his long and extensive experience, never saw cancer in more than two individuals, who were less than 30. Yet, as I have already stated, we have had several examples of scirrhous wombs in young women under 30, as verified by *post mortem* examination. The most common period for its commencement is the age of 50.

Another fact, which is curious, in relation to the influence of age on cancer, is, that when the disease occurs in persons of very great age, it is slow in its progress, and does not, in general, materially shorten their lives.

Cancer is known to all the world to be one of the most intractable diseases to which the human body is liable. When you consider it as a new formation—as an adventitious deposit, accompanied by the peculiar texture and organisation, which I have described, accompanied also by some peculiarity of constitution, or modification of the economy,—you must see, that the power of medicine can have little or no influence over the disease. Yet, we may not be justified in asserting, that scirrhus and cancer are absolutely incurable. Not very long ago, I attended a young woman, under 30, in Great Ormond-yard, Queen-square, who died of scirrhus and cancerous ulceration of the womb, as ascertained by dissection, the parts having been removed, and preserved by Mr. Miller, of the Bloomsbury Dispensary. Her mother, who was living in the same house, and far advanced in years, had had both her breasts entirely destroyed by cancerous disease, which had terminated in extensive sloughing. Here, no doubt, the whole scirrhous mass in each breast had been separated by the process established by nature for the detachment of the sloughs, and with them, I presume, the scirrhous bands, radiating from the tumour into the contiguous parts, were also thrown off, after which the ulcers healed like any common sores. The front of the chest on each side presents a most irregular mutilated appearance; the woman cannot now be less than 80 years of age.

As however this mode of termination of cancer is on the principle of extirpation, accidentally brought about by nature herself, strictly speaking, it may not affect the truth of the general observation, that cancer, whether in the state of scirrhus or carcinomatous ulceration, is positively incurable by any means, except such as are calculated to remove or destroy the whole of the parts affected. And, even when this is done, owing to the continued influence of constitutional causes, a recurrence of the disease, either in the same part or others, will always follow in a certain proportion of cases thus treated.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE VI.

Pathology and Treatment of Gastritis.

GENTLEMEN,—I shall begin to-day with the treatment of chronic gastritis, and I beg of you to bear in mind what I mentioned at my last lecture, that this disease, in its true and pathological meaning, is not sufficiently recognised. In general, it gets some wrong name or other; and as many practitioners are in the habit of prescribing for names, it generally meets with wrong treatment. It is called every thing but what it is, and its remedies are as numerous and as various as its appellations. By some, it is called dyspepsia, and is treated with bitters, astringents, and stimulants; by others, it is termed constipation, and treated with purgatives; the school of Abernethy look upon it as an affection of the liver, and prescribe blue pill and black draught; others give it the name of hypochondriasis, and exhaust the whole catalogue of nervous and anti-dyspeptic medicines in attempting its removal; in fact, it is called every thing but what it is, and the result is an unsteady and mischievous empiricism.

You will recollect a fact, to which I alluded in my last lecture, that the physiological condition of the stomach requires, that it should

be subject to frequent excitements of its vascular tissue, and that, this increased vascularity being the consequence of a natural process, digestion is, generally speaking, exempt from any kind of danger. If the brain or lungs were to experience an equal increase of vascularity, sensibility, and excitement, the consequences would be dangerous, or perhaps fatal, and we should have pulmonary and cerebral diseases produced. But though the stomach enjoys such a remarkable exemption from the liability to acute inflammation, under circumstances of repeated vasular excitement, yet the slow, insidious, chronic gastritis is an exceedingly common affection. I feel convinced that many persons die of it, or of the extensive class of fatal diseases which it frequently induces. But I rejoice to say, that we have good reason to hope, that the progressive amelioration of medical science will materially diminish the amount of human suffering from this cause. As physiological medicine advances, the number of those who die of unrecognised chronic visceral disease will be less and less, because diagnosis will become more extended and certain, and practice more simple and successful.

The first thing you should do, when called to treat a case of dyspepsia, is to ascertain whether it be a purely nervous disease, or a chronic gastritis. The majority of practitioners give themselves no trouble about this matter, not recognising the fact, that, of the number of dyspeptic persons who seek for medical advice, a considerable proportion are really labouring under a chronic gastritis, and forgetting, that, in consequence of long continued functional injury, what was at first but a mere nervous derangement may afterwards become complicated with organic disease. You must also bear in mind, that the stomach is perhaps placed under more unfavourable circumstances for bringing about a cure than any other organ, because the life of the individuals demands that the stomach, though in a state of inflammation, should still continue to perform its functions. In treating diseases of other organs, you will have the advantage of a comparative state of rest, but, in a case of the stomach, if you wish to preserve life, you cannot prohibit nutriment, and consequently you must run the risk of keeping up these periodic vascularities which its condition requires, which, though harmless in health, become a source of evil when the stomach is diseased. The obvious deduction from this is, that the cure of a chronic gastritis depends as much upon regimen as upon medical treatment, and particularly where the symptoms have arisen from long continued excitement, as in the case of persons who live highly. Here the treatment chiefly depends on regulating the diet, and if your patient has sense enough to live sparingly for a few weeks or months, you may be able to effect a cure without other treatment. The great error is, that most practitioners attempt to cure the disease by specifics, and when these fail they then go to the symptomatic treatment, prescribing sometimes for acidity, sometimes for nausea, sometimes for flatulence, sometimes for constipation, or "the liver," or debility.

You should be careful in the examination of such cases, and should try to ascertain, whether these symptoms may not depend upon inflammation of the stomach; for as long as the patient is in this state, the less you have recourse to symptomatic or specific treatment the better. It is hard to mention one single medicine which in this state will not prove stimulant, and if the stomach be unfit for stimulants, it must be unfit for the generality of medicines. There are numbers of cases of persons labouring under chronic gastritis, which have been cured by strict regulation of diet, and by avoiding every article of food requiring strong digestive powers. We find that articles of diet vary very much in this respect; some are digested with ease, some with pain. We might express this otherwise, by saying, that some require very little excitement of the stomach, and others very great vascular excitement. Patients, in this irritable state of stomach, can scarcely bear any kind of ingesta; and when you consider the great vascularity, thickening of the mucous membrane, and tendency to organic disease, you will be induced to think that every thing entering the stomach should be of the mildest kind, and not requiring any powerful determination of blood to that organ.

If you continually prescribe for symptoms, neglecting or overlooking the real nature of the disease, giving arsenic to excite the system, and iron to remove anæmia, and bitter tonics to improve the appetite, and alkaline remedies for acidity, and carminatives to expel flatus, you will do no good; you may chance to give relief to-day, and find your patient worse to-morrow; and at last he will die, and you may be disgraced. On opening the stomach after death, you are astonished to find extensive ulceration, or, perhaps, cancerous disease. Very often, in such cases, practitioners say that it is cancerous disease, and that no good can be done. But the thing is to be able to know, when you are called to a case, whether it is a case of mere nervous dyspepsia, or chronic inflammation of the stomach. Some of the best pathologists think that most of the cancerous affections of the stomach are in the beginning only chronic inflammations of that organ.

I believe we have not yet in this country adopted the plan of moderate application of leeches to the epigastrium in cases of chronic gastritis. I have seen in many cases great benefit result from the repeated application of a small number of leeches to the epigastrium, at intervals of two or three days. Here is a point which you will find very useful in practice. You will meet with cases which have lasted for a long time; cases where there is strong evidence of organic disease, and which have resisted the ordinary dyspeptic treatment. You will be called frequently to treat these three

different cases,—where the disease has been of long duration, where there is distinct evidence of organic disease, and where the disease has resisted the ordinary dyspeptic treatment. Here is a case of a patient labouring under what is called indigestion, and which has resisted the stimulant, and tonic, and purgative treatment.—Here is one fact. In the next place, the disease is chronic, and the probability is, that there is inflammation, and consequently that there is chronic gastritis. Now if, in such a case, you omit all medicine by the mouth, apply leeches to the epigastrium, keep the bowels open by injections, and regulate the diet, you will often do a vast deal of good. I have seen, under this treatment, the tongue clean, the pain and tenderness of the epigastrium subside, the acidity, thirst, nausea, and flatulence removed, the power of digestion restored, and all the symptoms for which alkalies, and acids, and tonics, and purgatives were prescribed, vanish under treatment calculated to remove chronic inflammation of the stomach.

What is next in importance to regulated regimen and local bleeding?—A careful attention to the bowels, which in chronic gastritis are generally constipated, and this has a tendency to keep up disease in the upper part of the digestive tube. Is this to be obviated by introducing purgative medicine into the stomach?—No. If you introduce strong purgative medicine by the mouth, you will do a great deal of mischief. You must open the bowels by enemata, or, if you give medicine by the mouth, by the mildest laxatives in a state of great dilution. A little castor-oil, given every third or fourth day, or a little rhubarb with some of the neutral salts, will answer in most cases. The diet, too, can be managed, so as to have a gently laxative effect. The use of injections is, however, what I principally rely on. I have seen many cases of gastritis cured by the total omission of all medicine by the mouth, by giving up every article of food which disagreed with the stomach, and by the use of warm water enemata. I have seen this treatment relieve and cure persons whose sufferings had lasted for years previous to its employment, and who had been considered by eminent practitioners to labour under organic disease of an incurable nature. It is important that you should bear this in mind. The old purgative and mercurial treatment of gastritis, I am happy to say, is rapidly declining; and British practitioners are now convinced, that they cannot cure every form of dyspepsia by the old mode of treatment. I do not deny that many diseases of the digestive tube may be benefited by the mild use of mercury and laxatives, but I think I have every reasonable and scientific practitioner with me in condemning the unscientific routine practice, which was followed by those who took the writings of Abernethy and Hamilton for their guide. I do not say that, where cases of gastric inflammation, treated after the plan of Mr. Abernethy, have proved fatal, the medicines have destroyed life; I merely assert that the patients died of inflammation, over which these medicines had no control; and the error lay in mistaking and overlooking the actual disease, as much as in its maltreatment. You will find some practitioners (they are becoming fewer in number every day), who seem to have but two ideas, the one a purgative, the other a pot full of faeces; but the connecting link,—the gastro-enteric mucous membrane,—that vast expansion, so complicated, so delicate, so important, seems to be totally forgotten. But practitioners are now beginning to see that purgatives are not to be employed empirically; that they should be administered in many cases with great caution, and with a due attention to the actual condition of the alimentary canal, and that they have been a source of great abuse in the medical practice of these countries.

Next to leeching and a proper regulation of the bowels is the employment of gentle and long-continued counter-irritation over the stomach. This may be effected by the repeated application of small blisters, or by the use of tartar emetic ointment. I have been in the habit of impressing upon the class, that the tartar emetic ointment used in these countries is too strong, the consequence of which is an eruption of large pustules, which are excessively painful, and often accompanied with such disturbance of the constitution as amounts to symptomatic fever. In fact, tartar emetic ointment of the ordinary strength produces so much irritation, that few patients will submit to it long. The form which I recommend you to employ is the following:—Take seven drachms of prepared lard, and, instead of a drachm of tartar emetic, which is the usual quantity, take half a drachm, directing in your prescription (this is a point of importance) that it be reduced to an impalpable powder; and you may add to it what will increase its action, one drachm of mercurial ointment. This produces a crop of small pustules, which give but little pain and are easily borne; and the counter-irritation may be kept up in this way for a considerable time, by stopping, for a few days, until the eruption fades away, and then renewing the friction. I have often seen the utility of this remedy exemplified in cases of chronic gastritis, where the symptoms of gastric irritation, which had subsided under the employment of friction with tartar emetic ointment, returned when it was left off, and again vanished when it was resumed. The case of the celebrated anatomist, Beclard, furnishes a very remarkable proof of the value of a well-regulated diet and repeated counter-irritation in the treatment of this disease. While he was engaged in the ardent prosecution of his professional studies he got an affection of the stomach, which he considered to be a chronic gastritis, and immediately put him-

self under a strict regimen, using at the same time repeated counter-irritation. He kept up the counter-irritant plan for a considerable length of time, for he found that, when he discontinued it, the gastric symptoms had a tendency to return. In this way he got completely rid of the disease. Several years afterwards he died of an attack of erysipelas; and, on opening his stomach, the cicatrix of an old ulcer was discovered in the vicinity of the pylorus, which was exactly the spot to which he had referred his pain during the continuance of his gastric affection.

Gentlemen, there is perhaps no science in which the motto "*medio tutissimus ibis*" is of more extensive application than in medicine. Some physicians on the Continent, particularly the disciples of Broussais, having repeatedly witnessed the advantages of strict regimen and local depletion in chronic gastritis, have pushed this practice too far. They seemed to forget that the system requires support and nutrition, which can be effected only through the agency of the stomach; they saw the evils which result from the use of stimulating food in cases of chronic gastritis; and, looking to these alone, they ran into the opposite extreme, the consequence of which was, that they kept their patients so long upon low diet, that they actually produced the very symptoms which they wished to remove. The patients became dyspeptic from real debility of the stomach and the whole frame. You remember a general law of pathology to which I have alluded on a former occasion, and which I shall again mention, as it illustrates this point, namely, that opposite states of the economy may be accompanied by the same symptoms. Thus we observe, that palpitation may depend on two different causes—on a sthenic or asthenic condition—on the presence of too much or too little blood in the heart. Now, it frequently happened that patients, labouring under chronic gastritis, and who had been treated for a long time after the strict plan adopted by the Broussaists, finding themselves not at all improved, went to other physicians who had different views, and were rapidly cured, by being put upon a full nutritious diet. In this way numerous cases, which water diet and depletion had only aggravated, were relieved, and the consequence was, that a mass of facts was brought forward and published, not long since, by a French author, against the antiphlogistic treatment of dyspepsia and chronic gastritis. It must be stated, however, that the cases which he published were chiefly those in which the depleting system had been carried to excess, and that they cannot, therefore, be received as proofs of the value of a stimulating diet in the treatment of chronic inflammation of the stomach. Bear this in mind; the sooner you can put your patient on a nutritious diet the better will it be for him. It would be absurd to keep a patient for many months, as the Broussaists have done, on slops and gum-water. It will be necessary for you to feel your way and improve the diet gradually. Commence by giving a small quantity of mild nutritious food; if your patient bears it well, you can go on; if the gastric symptoms return you can easily stop. If a small portion of the milder species of food rests quietly on the stomach, you may increase it the next day or the day after, and thus you proceed to more solid and nutritious aliment, until the tone of your patient's stomach regains the standard of health. Never lose sight of this fact, that you may have a case of dyspepsia depending on a chronic gastritis, in which, though you remove the *inflammation* by a strict antiphlogistic treatment, you may not by this remove the *dyspepsia;* and if you continue to leech, and blister, and starve your patient *after the inflammatory state be removed*, you will do great injury. Such a patient, falling into the hands of another practitioner who treated him on a different system, might be relieved, and his case quoted against you and your treatment, though this, at the commencement, was judicious and proper.

With respect to internal remedies, the school of Broussais think that there is nothing required but cold water and gum. This is going too far. In a former lecture I have drawn your attention to the fact, that in the treatment of acute inflammation there is a point where antiphlogistics should cease, and where tonics and stimulants are the most efficient means of cure. Of this fact the disciples of Broussais appear to be ignorant, and they consequently declared against every remedy for chronic gastritis except leeches and cold water. Now is this right? I think not. We find that, in all cases of gastric inflammation, a change in medication seems to be useful at some period of the disease, that is a change from antiphlogistics to tonics and stimulants, and I believe that in cases of chronic gastritis these remedies may be used with very great advantage, having, of course, premised depletion and counter-irritants. I believe too that most of the remedies, which we see every day unsuccessfully employed, would have acted beneficially, if the preparatory treatment which I have mentioned had been adopted. Among the best remedies of this kind is the oxide of bismuth; I have seen more benefit from the use of this than of any other medicine, after the treatment already alluded to. Generally speaking, the list of internal remedies for chronic gastritis is very small, but after the use of antiphlogistics you may prescribe the vegetable tonics and oxide of bismuth with advantage. The most decidedly valuable remedy, however, in the after stage of a chronic gastritis is the acetate of morphia, which I am convinced has a very powerful effect in allaying chronic irritation of the stomach. Dr. Bardsley of Manchester, in one of his published works, entitled "Hospital Facts and Observations," adduces many cases of gastric irritation which were completely relieved by

the use of this remedy, and I am perfectly satisfied of the truth of his statements. It may be said that Dr. Bardsley's cases were only instances of dyspepsia. But as his cases were extremely numerous, some of them of long standing, and the symptoms very severe, the great probability is, that some of them at least must have been cases of chronic gastritis. I know very few books, the perusal of which I would more strongly recommend to you, than Dr. Bardsley's accurate and instructive work. The great besetting sin of medical writers is, that their statements of successful practice are grounded on a very limited number of cases, or that, in publishing the result of their practical investigations, they only give their successful cases, and leave out those, in which the treament recommended has been found inefficacious. Yet this is a circumstance which should never be neglected. If a man declares that he has discovered a cure for gastritis, or dyspepsia, and brings forward one hundred cases in which the remedy has done good, the statement is still unsatisfactory and insufficient, because there may be one thousand cases in which it has totally failed. Unless he comes forward and gives both his successful and unsuccessful cases, of what value are his statements? Dr. Bardsley, with the candour and good sense which always characterise the philosophic inquirer, gives the result of *all* his cases, forms them into tables, and then leaves his readers to judge for themselves. From an inspection of these tables, you will be convinced of the efficacy of acetate of morphia in the treatment of chronic gastritis. I have been in the habit of using it with the most gratifying results after leeching, regulating the diet, and paying proper attention to the state of the bowels. There are some forms of the disease in which it is more useful than others. The particular form, in which it proves most serviceable, is where there is a copious secretion of acid from the stomach, (that form in which all kinds of alkalies have been exhibited), where severe pain and constant acidity are the prominent symptoms. Here I have seen the acetate of morphia act exceedingly well. You may begin with one-twelfth of a grain, made into a pill with crumb of bread, or conserve of roses, twice a-day; the next day you may order it to be taken three times, and you may go on in this way until you make the patient take from half a grain to a grain and a half in the 24 hours. I shall here mention the circumstances of a case, which I do not mean to bring forward as an instance of cure, but as an illustration of the extraordinary power which acetate of morphia possesses in relieving gastric irritation. A gentleman of stong mind and highly cultivated intellectual powers, which he kept in constant exercise, got a severe chronic gastritis; his appetite completely declined; he had frequent vomiting of sour matter; fœtid eructations; and such violent pain in the stomach, that he used, when the attack came on, to throw himself on the ground, and roll about in a state of indescribable agony. He applied to various practitioners, had several consultations on his case, and the opinion of the most eminent medical men was, that he had incurable cancerous disease of the stomach. These symptoms continued for several years, but for the last two or three years they were quite intolerable. He had repeated cold sweats, vomited every thing he took, even cold water, was reduced to a skeleton, and led a life of complete torture. Under such circumstances he tried, for the first time, by my advice, the acetate of morphia. He tried it first in doses of one-tenth of a grain three times a-day, and experienced the most unexpected relief. On the third day all his bad symptoms were gone. He had no pain, no vomiting, no sweats; his spirits were raised to the highest state of exhilaration, and he thought himself perfectly cured. He went out in the greatest joy, visited all his friends, and told them that he had at last got rid of his tormenting malady. In the evening he joined a supper party, indulged pretty freely, and next morning had a violent hæmatemesis, to which he had been for some time subject. All his old symptoms again made their appearance. He again had recourse to the acetate of morphia, and again immediately experienced relief, but the vomiting of blood again returned, so that he discontinued the remedy. This gentlemen is now in the enjoyment of good health. He regulated his diet, left off all medicine by the mouth, used warm water injections, and thus recovered from his supposed cancer.

I do not bring this case forward as an instance of the curative effect of acetate of morphia, but as an instance of its powerful effect in allaying gastric irritation. I could adduce other cases in proof of its value in the treatment of the after stage of chronic gastritis, and particularly of that form in which pain and acidity are the prominent symptoms; but I perceive my time has nearly expired. At my next lecture, I shall give some other particulars connected with this subject, and then proceed to the consideration of diseases of the small intestine.

DR. O'BEIRNE'S REJOINDER TO MR. SALMON.

To the Editors of the London Medical and Surgical Journal.

Gentlemen,—I find that Mr. Salmon's reply to me is a general one; and that, by embracing a great variety of points, it is calculated to divert the mind from the subject of organic stricture of the rectum, upon which we are mainly at issue, and which we had mutually agreed to leave to the decision of two distinguished members of the profession. This course may suit his purposes but will not answer mine. For the present, therefore, my rejoinder shall be confined to fixing your at-

tention, and directing my observations, exclusively to the matter in arbitrio. But I reserve to myself the right of seizing an early opportunity to answer the other parts of Mr. Salmon's reply.

Before I proceed further in this matter, I regret to be under the necessity of making known, and animadverting upon, some of the circumstances, under which reports upon the subject in question have been laid before the profession. The circumstances are these:—By mutual consent Dr. James Blundell and Mr. Bransby Cooper became umpires on the difference between Mr. Salmon and me; yet week after week, and month after month, continued to elapse without bringing any decision from these gentlemen. Such delay, in deciding a matter so easy to be determined, induced me to believe that their investigations could not be very unfavourable to me, and that there was a hitch somewhere. Accordingly I wrote to Mr. Cooper, calling upon him for an explanation, and urging him to come to some decision on the question. His answer was to this effect:—that he had waited for, but had not received, Dr. Blundell's opinion; that his own had been long made up, and that it was decidedly in my favour. Shortly after receiving this intelligence, Mr. Oldknow's letter appeared in the Lancet, and, in the course of a few days more, Mr. Cooper inclosed to me a statement from Dr. Blundell, the same, in all respects, as that which you and the Editor of the Lancet have published; and I found that this statement contained facts, which appeared to me to be perfectly conclusive, as to the soundness of Mr. Cooper's decision. I had, therefore, these favourable documents in my possession so early as the middle of last November, and might easily have anticipated my opponent, by many days, in placing the result before the profession. But, instead of doing so, or taking any advantage of Mr. Salmon, I again wrote to Mr. Cooper, and submitted to him the necessity of slitting the preparations marked A and B in their whole length, before either he or Dr. Blundell could fairly come to a final decision. But it would appear, that Mr. Cooper was prevented from making this fair and considerate proposal, or interfering further in the affair, by a step which Mr. Salmon had taking in the mean time, namely, requesting Mr. Stanley and Dr. Ryan to inspect his preparations, and give their opinions on the contested points. Now, although these gentlemen are perfectly unexceptionable, and their characters and opinions above all suspicion of partiality, I submit to you and to the profession, that this step was a positive breach of a compact, mutually agreed to and acted upon for three months; and, on the part of Mr. Salmon, any thing but respectful or complimentary to either his own friend or to mine. He tells you, indeed, that he took this step in consequence of "finding they (Dr. Blundell and Mr. Cooper) differed so materially." But was it then, or is it now, the fact? Dr. Blundell is silent respecting any such disagreement; Mr. Cooper says expressly, that his "observations bear a great resemblance to those made by Dr. Blundell, upon his inspection of the same preparations;" and I not only cannot see that any such difference exists between these gentlemen, but pledge myself to demonstrate, that they agree perfectly with each other. Let me suppose, however, that the umpires, originally appointed, differed as widely as the poles are asunder, and that this difference justified my opponent in calling in the aid of others without my knowledge or consent, would it not have been fair, and no more than fair, to have invited Mr. Cooper to be present at the inspection made by Dr. Ryan and Mr. Stanley? Yet this was not done; and that it ought to have been done will be evident from the fact, that, in consequence of the subject of organic stricture of the rectum being but very briefly touched upon in a part of one of the notes in my work, Mr. Cooper was obliged to call upon me for various explanations and definitions, before he became thoroughly acquainted with the exact nature of my views on the subject, or could come to a decided opinion on the question before him. It is clear, therefore, and it shall be my business to make it still clearer, that, on making their inspection, Mr. Stanley and Dr. Ryan had but one side of the question fairly placed before them.

The truth is, that Mr. Salmon, by being on the spot, has had great and obvious advantages over me, and has not been at all over-squeamish, or punctilious, in availing himself of them. In this controversy, also, he enjoys, and he knows it, advantages of another description, and of no mean importance. He is not, like me, defending his own views, but those which have been long and universally received; and, consequently, he can count upon seeing, ranged on his side, that great body of readers, who will not be convinced until they can no longer offer opposition, while I can only count upon the comparatively few, who are ready to embrace truth, let her come in ever so homely a garb, or from ever so humble a quarter. But let it not be supposed, that I mean to deprive my adversary of any one of these advantages, whether natural or acquired, or that it is my intention either to object to, or shrink from, any evidence that he has adduced. No, the cause of humanity and science spurns all such dexterous expedients, and demands to be pleaded boldly, frankly, and without subtlety, or evasion of any kind. In this spirit I shall now enter on my undertaking.

The exact nature and practical bearing of the difference between Mr. Salmon and me, on the subject of organic stricture of the rectum, do not appear to be fully understood, either by Mr. Salmon, himself, or, with the exception of Mr. Cooper, by any of the other gentlemen who have been engaged in deciding on that difference. It is indispensable, therefore, that I should commence by removing all obscurity in these respects. With this view, I shall exhibit, first, the ideas that are now, and have

long been, held, respecting the morbid conditions constituting organic stricture of the rectum; secondly, the various points in which these ideas appear to me to be false; thirdly, the danger and impropriety of a mode of treatment which has been suggested by these false ideas; fourthly, the peculiar views which my investigations have led me to entertain, respecting the formation of organic stricture at the upper extremity of the rectum, the manner in which the morbid action subsequently extends upwards and downwards; the different kind of strictures produced by its extension in the latter direction; the sources of the false impressions communicated, when the finger is employed to examine these strictures; and the manner in which these strictures require to be treated. By proceeding in this natural and orderly manner, I expect to succeed in placing the whole subject in clearer, fuller, and much more useful points of view, than the peculiar nature of the plan of my work admitted.

First, then, with respect to the received ideas of the morbid conditions constituting organic, or permanent, stricture of the rectum, the nature of these ideas cannot be more fully, or fairly exhibited, than by the following extract from the work of the very latest writer on the subject:—"Permanent stricture of the rectum," says Mr. Herbert Mayo, "consists in a partial thickening of the sub-mucous coat of the bowel, and of the adjacent cellular texture, through which means a smooth ring is formed, generally from a third to half an inch in depth, which projects into, and narrows, the channel. Sometimes the thickening does not include the whole circle of the intestine, but a segment only. It is presumable, that this thickening results from chronic inflammation. The ordinary seat of stricture of the rectum is from two and a half to four inches from the orifice of the gut; but sometimes it occurs at a greater distance, at six to seven inches for example."—Observations on Injuries and Diseases of the Rectum, pp. 165-6. London, 1833.

Two questions naturally arise out of the statements contained in this extract. The first is, can we account for the occurrence of such morbid conditions by any peculiarity in either the structure or the function of the rectum? I should think not. On the contrary, as the disorganising process is known, and admitted to commence in the sub-mucous and cellular tissues of the intestine, it is only necessary to reflect, that these tissues form a very loose and delicate connexion between the mucous and the muscular coats of the bowel, in order to see that, when they become the seat of such a process, the inflammatory action should necessarily spread equally in all directions, and consequently cause uniform, not partial, thickening of the parietes of the gut. It may be contended, perhaps, that the folds of the mucous membrane of the rectum favour the production of such circular septa or projections as Mr. Mayo and other authors describe. But this is a supposition which will not bear even a moment's examination; for, as the folds in question are almost wholly found in the longitudinal direction, it follows, that the septa, or projections, supposed to be thus formed, should not be found observing a circular, but a longitudinal, course; a course which no author has described them as taking. Hence it appears, that the mucous membrane cannot have anything to do with the production of such morbid growths; and it is perfectly obvious, that the peritoneal coat is quite out of the question. It only remains, therefore, to consider how far the action of the muscular coats of the rectum is capable of contributing to the formation of the morbid projections, or septa, under consideration. This brings me to a theory, which Mr. Salmon has advanced. After saying that he "merely contends for the existence of permanent stricture in the lower part of the rectum," and admitting that distinct, thickened, and shelf-like projections are exceedingly unusual in the two upper thirds of the rectum, he asserts, that "circular stricture will, from the redundancy of the circular fibres, be most commonly within reach of the finger." But, if this reasoning were correct, it should be equally applicable to a higher portion of the bowel, where the longitudinal fibres are known to predominate, and where, be it observed, he admits permanent stricture to be of such rare occurrence. Moreover, it is quite obvious that the only basis, on which this theory rests, is the supposition, that the longitudinal and the circular muscular fibres of the rectum act separately and independently of each other; a supposition, as perfectly original as it is untenable. For example, when these two muscular layers are compelled to relax by the descent of fæces, who is it that would dream of these layers not acting simultaneously? Again, when these layers are in the act of expelling the fæces, who is it that would dream of their not contracting together? Yet the only actions of these layers are relaxation and contraction. Away, then, goes Mr. Salmon's theory; and so will go, I have no doubt, every other that may hereafter be constructed with a similar view; for, although I have shown that the two orders of muscular fibres at the upper extremity of the rectum often combine to produce spasmodic, and eventually organic, stricture at that point, I can find no similar principle to account for the same order of fibres producing the disease lower down in the intestine. I repeat, therefore, that there is nothing observable in either the structure or the functions of the coats of this bowel, to explain the occurrence of such partial thickening of its walls, or of such morbid growth from its walls into its cavity, as are usually described by authors.

So much for the first question, which has arisen out of the statements contained in the extract which I have given from Mr. Mayo's work. But the second question which they

suggest, comes more home to, and at once grapples with, the subject in debate. It is simply this,—are the statements, just referred to, sustained by the evidence of pathological anatomy? In answer to this question, I have only to say, that the views, which I have advanced respecting the anatomy, physiology, and pathology of the coats of the rectum, induced me to attempt its solution, by examining carefully all the anatomical museums of this city. Two of these are extensive, and have been collecting for more than half a century; three of them, although necessarily smaller, contain a great variety of very valuable preparations; and I shall now state both the morbid changes I have not observed, and those which I have observed, in such specimens of organic stricture of the rectum, as these collections enabled me to examine.

Except at the upper extremity, I observed no partial thickening of the parietes of the intestines at one or more points, and leaving healthy spaces between them; nor anything like smooth rings, or segments of rings, of any depth, or projecting to any extent into, or narrowing, the cavity of the bowel. And as to the morbid changes which I have observed, they are easily described, and range themselves under the three following heads; first, thickening of the parietes and narrowing of the cavity, limited to a small portion, often but a few lines, of the upper extremity of the rectum; secondly, a greater degree of disorganisation at the same point, and extended, but with much less thickening of the parietes, and far less narrowing of the cavity, a short distance upwards into the sigmoid flexure, and downwards into the rectum; thirdly, a greater or less portion of the sigmoid flexure thickened and ulcerated, and all that great portion of the rectum above its pouch thickened in its parietes and contracted in its cavity. These are the only kinds of organic stricture of the rectum that I have found; and, of course, the only kinds of which I admit, or shall admit, the existence, until satisfactory evidence to the contrary is produced. The first of these may be termed *primary stricture*, because I have shown that it is the first formed, and produces the others. The last may be called *long stricture*, from its being often seen presenting appearances closely resembling those of the long cartilaginous stricture of the urethra. And the second may perhaps be fairly named *transition stricture*, as the parts are merely in the act of passing from the condition of a primary to that of a long stricture.

You have now before you all the facts and reasoning upon which I have adopted such peculiar views of organic stricture of the rectum; and you will perceive that the grand difference between Mr. Salmon and me, upon this part of our controversy, consists in my denying, that partial thickening, rings, segments of rings, or rings of any depth whatever, occur at any point below the upper extremity of the rectum; where, however, and let it be clearly understood, I admit the existence of a septum, with an opening of greater or less diameter in its centre. But I feel that all the facts and all the reasoning, that I have brought to bear upon the subject, will be insufficient to convince many of your readers, particularly those who have not read my work, if I do not endeavour to remove one great and very natural obstacle to their conversion,—namely, the distinct feel of a ring, or a succession of rings, communicated on such occasions to the finger in examinations per anum. I shall endeavour to prove, therefore, that this feel, however distinct and imposing, is altogether deceptive. For this purpose, I shall consider the matter under two opposite but natural points of view. First, then, let me suppose, that such an examination per anum is made by a surgeon, who believes, as all have hitherto believed, that the rectum, in its natural state, communicates freely, and at all times, with the sigmoid flexure, and that the parietes of the rectum stand wide open and apart. He feels that the pouch of the intestine is so open that he can roll his finger freely about in it, and that, on pushing his finger higher up, in the direction of the bowel, its point enters a narrow opening, or ring. But what idea does he form of the nature of this ring? The most natural that can be—that it is formed by an opening in the centre of a septum, thrown across the cavity of the gut, which he supposes to be always in a dilated and open state. The feel communicated to his finger being too distinct and perfected to be doubted, and the partial circular thickening, which he has so often seen at different points of the urethra, are all circumstances which combine to fix him in this opinion. But let me now place the matter in a different point of view. It seems to be generally admitted that I have succeeded in establishing the following facts:—first, that the rectum is much more muscular, and endowed with a higher order of motific nervous influence, than any other portion of the alimentary canal, the œsophagus alone excepted; secondly, that, as an inevitable consequence of this organisation of the rectum, instead of being in a dilated state, and communicating freely, and at all times, with the sigmoid flexure, the whole of that great portion of the intestine, comprised between its upper extremity and its pouch, is so firmly contracted as to cut off all communication with the flexure, except for the few seconds that the alvine contents are in the act of passing from the latter into the former, and being expelled from the body; thirdly, that, in consequence of having the middle and posterior divisions of the levator ani muscles inserted into it, and at opposite points, the pouch of the rectum is constantly open and dilated. Such being the real state of the facts, we are enabled to arrive easily at the true view of the matter. Thus, even in the natural state, when the finger enters a narrow opening above and leading from the pouch, and conveys the feel of enter-

ing a ring, we recollect that this opening is nothing more than that which is necessarily formed by the inferior extremity of the contracted portion of the intestine. Again; when the finger is pushed through this opening or ring, no matter to what height it may be urged, its point there receives a similar impression; because the parietes of that part of the bowel, immediately above the point of the finger, remain contracted, and, of course, convey the feel of a septum, with a narrow opening in its centre, thrown, as it were, across the cavity of the intestine. Thus we perceive, that the feel of a succession of rings or strictures, varying in number according to the manner in which the finger is introduced, may be communicated in examinations of even the healthy rectum. How much more imposing, therefore, must not this be in cases where the mucous and muscular coats of this bowel are morbidly thickened, particularly in those to which I have given the name of *long stricture?* So imposing, indeed, does this feel appear to have been in its nature, that, unless by its influence, it would be difficult to explain how such projecting ring-like strictures have happened to be spoken of as ordinary occurrences, without any attempt being made to establish their existence by the evidence of pathological anatomy. But, as I have already shown, that this, the only unerring evidence, is opposed to their existence, it is to be presumed that the influence of the sense of touch, which I have shown to be, in this instance, so very fallacious, will cease to sway the mind against the reception of views which appear to be as simple and natural as they are obviously well founded.

The practical bearing of the foregoing observations is very important. It is this:—to show the unscientific and dangerous nature of a practice, which has evidently been suggested by the erroneous notions, hitherto entertained respecting organic strictures of the rectum; and which consists in dividing such strictures as are within reach of the finger in the direction of the sacrum, and at other points of their circumference. This practice appears to have originated with Wiseman, and is recommended by Copeland, White, Sir Charles Bell, Calvert, Salmon, and Mayo. It is evident, also, from their works, that the object of these authors is to divide an annular septum, which they suppose to project from the wall into the cavity of the intestine. But, if any doubt be entertained on this point, it will quickly be removed by turning to page 334 of Sir Charles Bell's "Treatise on the Diseases of the Urethra, Vesica Urinaria, Prostate, and Rectum," where this distinguished surgeon will be found directing us "to notch the *membrane* in several places," and then adding, that "this will be more effectual, and attended with less hazard, than one deep cut across the *septum*." Is it not perfectly clear, then, that this is the wall of the rectum, and not a membranous septum traversing the cavity, that is divided in this operation? If, as it is asserted, the operation enables us to introduce a bougie, which could not otherwise be introduced, is it not equally clear that it does so by enabling the instrument to lacerate the bowel? Will not the same cut, that divides the stricture, particularly if that cut be in the direction of the sacrum, also divide the hæmorrhoidal arteries and veins, and cause dangerous hæmorrhage? If my view and statements be correct, all these questions must be answered in the affirmative, and the operation itself declared to be both useless and highly dangerous. But it is not merely on these theoretical principles that this opinion may be entertained, for the following extract, which conveys a very favourable idea of the author's candour and accuracy of observation, will be sufficient to show that it is also supported by the results of experience.—"The division of a stricture of the rectum," says Mr. Mayo, "is not entirely free from risk of one description. I divided, in a woman, a stricture of the rectum situated within three inches of the anus. In this case, as in the preceding, the division was made in a direction towards the sacrum. The wound bled at the time, but not to an extent to make me apprehensive of its return. A few hours afterwards, however, very serious hæmorrhage supervened. This was arrested by the introduction of a pledget of lint, saturated with a strong styptic solution, which was applied to the divided stricture. But the patient had lost so much blood, that I thought it not improbable that I should be compelled to look for and tie the bleeding vessel on account of a return of hæmorrhage. Except, therefore, under peculiar circumstances, I am not disposed to recommend the division of a stricture. The operation is painful; it does not render the use of the bougie unnecessary; and it is liable to be attended with a considerable loss of blood."—(Observations on Injuries and Diseases of the Rectum, pp. 173–4.) This extract contains matter bearing too strongly on the subject to require further comment. I shall, therefore, pass on to the consideration of the best mode of treating organic stricture of the rectum, whether situated within reach of the finger or not.

In what I have called *long stricture*, the cavity of the rectum is uniformly narrowed, and its coats are thickened, from the upper extremity to the pouch of the intestine; but there is nothing even approaching to distinct, thickened, and shelf-like projections found in the interior of the bowel. In cases of this kind, it is obvious that the stricture must always be within reach of the finger; and that the most natural and efficacious plan of restoring the natural calibre and condition of the gut is, by gradual and cautious mechanical dilatation, and thus causing absorption of the new matter deposited between the coats of the intestine. Hitherto the bougie has been the instrument chiefly employed to effect this object; but it is subject to several weighty ob-

jections. It is too inflexible to follow the course of the rectum, or be introduced with safety to the necessary height; and experience shows that it cannot be retained long in the bowel without great inconvenience, if not pain, from its weight and the unnecessarily strong pressure which, as a solid body, it exerts on the sides of the gut. On the other hand, in a firm but flexible gum elastic tube, of a size proportioned to that of the stricture, sixteen inches in length, and open at both ends, we have an instrument free from all these objections; for, although hollow and comparatively lighter than the bougie, it exerts so much pressure as is necessary; and when introduced high enough to enter a short way into the sigmoid flexure of the colon, which should always be our object, it can be retained in that situation for several hours, and with very little inconvenience. This last advantage is one of the highest importance to the end which we have in view. I know the fact to be as I stated it; and it may be easily explained thus:—when the point of a bougie enters the sigmoid flexure, the instrument is grasped a little lower down by the upper annulus or entrance of the rectum, so as to prevent the escape of either flatus or fluid fæces, with which, be it recollected, the whole of the colon is almost always distended in cases of stricture of the rectum. In other words, this state, instead of being relieved, is exasperated by the introduction of such a foreign body as the bougie, and the natural consequences are violent efforts at its expulsion; while, on the contrary, the introduction of a tube gives exit to the accumulated gaseous and liquid contents, and not only places the patient, but preserves him, in such a state of comparative ease, that he is scarcely sensible of inconvenience from the presence of the instrument.

We see, therefore, that we have only to proceed upon these principles, in order to be enabled to make a successful impression upon the long stricture of the rectum; and, *à fortiori*, upon the primary and the transition species.

I have now put you fully in possession of my general views, and the precise nature and practical bearing of the difference between Mr. Salmon and me, on the subject of organic stricture of the rectum; and, by having done so, have placed myself in a better position to meet Mr. Salmon's observations, and enter on a close analysis of the statements which Drs. Blundell and Ryan, and Messrs. Stanley and Cooper, have laid before the profession

Commencing, then, with Mr. Salmon's observations, that gentleman accuses me of "equal candour and incaution" for proposing such terms for the decision of our difference. I thank the gentleman for his acknowledgment that my conduct has been so fair and straight-forward in this respect. But, when he speaks of my incaution, he will find that he has attempted to seize the laurel before he has obtained the victory. Again, in alluding to my denial that distinct, thickened, and shelf-like projections do not exist lower down in the interior of the rectum than the upper extremity of the intestine; my opponent says, —"Dr. O'Beirne is but ill acquainted with those matters, else he would know that it is exceedingly unusual to find any other result in the two upper thirds of the rectum, how much soever it may be contracted, than a uniform thickening of its parieties, from deposition in the cellular tissue between the mucous and muscular coats, by reason of the longitudinal fibres preponderating at those points, while circular stricture will, from the redundancy of the circular fibres, be most commonly within reach of the finger." I have already exposed the weakness of the theory with which this passage concludes, and shall not now stop to notice the *courteous* terms with which it commences, but proceed to consider the several admissions it contains. So then, according to him, organic strictures, and, of course, shelf-like projections are exceedingly unusual in the two upper thirds of the rectum. This admission goes nearly the whole of the way towards acknowledging the correctness of my opinions. But Mr. Salmon is rather late in claiming an acquaintance with the fact itself, for so far from its being mentioned in either his work or in his lectures, he represents the matter very differently. Thus, at page 23 of his "Practical Essay on Stricture of the Rectum," he says,—"In the greater number of the cases which have fallen under my observation, the stricture has been situated between five and six inches from the anus," that is to say, situated in the two upper thirds of the rectum, where he now denies their existence. He cannot but know, also, that he is directly at variance with all authors, myself alone excepted, when he admits that distinct, thickened, and shelf-like projections are so exceedingly unusual in the two upper thirds of the rectum. It is evident, therefore, that this opinion is of very recent date, and that it has been forced upon him by the facts and arguments that I have adduced, aided by the results of the close examination to which his morbid preparations have been submitted.

In fact, the admission which I have just considered, and which, it is obvious this controversy has extorted, is of such a nature that my opponent is necessarily obliged to go still farther, and to say, that he "merely contended for the existence of permanent stricture in the lower part of the rectum," that is, at or very little above the top of the pouch of that intestine. But the context clearly shows, that he does not deny the existence of this kind of stricture at the upper extremity of the bowel, a point upon which we have not had any difference. It only remains, therefore, that I should show that organic stricture is never limited to any point within reach of the finger, in order to establish the whole of my views; and I expect to be enabled to do this by the

following analysis of the various reports which have been made upon the subject.

Doctor Blundell describes two preparations marked A and B. Commencing with his description of the first of these, and taking it, paragraph by paragraph, and comparing it with the descriptions of Dr. Ryan and Mr. Stanley, the following is the first paragraph to be examined:—

"In this preparation (A) there is a distinct annular contraction, as if produced by a packthread, drawn with moderate tightness round the bowel, closing in so much as to preclude the insertion of the little finger. This contraction is situated about two inches and a half above the outer verge of the anus, rather less than more, and is decidedly within reach of the fore finger, independently of the help which might be derived from urging." Mr. Stanley, under the head—"1. Specimen. From a female," informs us that the outer surface of the intestine presented a circular indentation of only one line in breadth, and to a depth sufficient to reduce the cavity of the bowel to about one-third of its natural size. Now, let me ask, are such appearances on the *external* surface of the bowel the natural consequence of *organic* stricture?—No: even my opponent admits that this form of the disease is produced by the deposition of new matter between the mucous and muscular coats; and that this new matter, instead of approximating, separates these coats from each other, and, consequently, *opposes* the formation of anything like an indentation on the external surface of the gut. It is certain, also, that we know of no instance in which organic stricture has been found, in any situation, so attenuated as to be scarcely one line in breadth. But Dr. Blundell's next paragraph supplies another objection to considering this preparation as one of organic stricture.

"Immediately above the stricture," says Dr. Blundell, "an incision has been made in the side of the rectum, the thickness of which is visible, and exceeds one-eighth of an inch, and the inner membrane, also exhibited, seems evidently in one part of it to be destroyed by ulceration, and in another, where it remains unbroken, its structure is changed, being roughened and thickened." From this description, it cannot be clearly collected that there was change of structure either *at* or *in* the point of contraction. Mr. Stanley only mentions it as being observed above the contraction. Dr. Ryan, however, describes "change of structure *in* and about the contraction." But, on the other hand, Mr. Cooper, in a letter to me, states, that the contraction is "evidently not the result of change of structure." In fact, it is evident that this point could not be ascertained by merely inspecting the free surface of the mucous membrane, and that the only way of deciding it, was to cut through the annular contraction, in order to see whether there was any deposition of new matter in the loose tissue connecting the mucous aud muscular coats. But this was not done; and if it had been, I have not the least doubt but that no such deposition would have been found, and that the annular contraction would have disappeared.

Upon the whole, it appears to me, that the appearances described by Doctors Blundell and Ryan, and Mr. Stanley, fully bear out Mr. B. Cooper in pronouncing this preparation to be one of spasmodic stricture, a variety of the disease upon which Mr. Salmon and I have not had any difference.

"In preparation B," says Dr. Blundell, "apparently the entire rectum, and part of the sigmoid flexure of the colon, together with the womb and vagina, throughout the greater part of its length (both in situ with respect to the rectum), are carefully exhibited. *In this preparation either the entire rectum, or certainly all except the upper portion, where it is continued into the sigmoid flexure of the colon, is exceedingly thickened, and so contracted throughout the whole of the thickened part, that the little finger, especially in the inferior portion of the rectum, could not be passed along it without some violence.* Where there has been most deposit, the coats of the bowel exceed in thickness three-fourths of an inch. Various sinuses run in various directions, one apparently opening into the vagina."

"The uterus and vagina, lying *in situ* upon the rectum, seem to mark distinctly that part of the rectum which is most contracted and thickened, and which, as described, is the inferior portion clearly within reach of the fore finger, which, indeed, on making an examination, must evidently bear upon it immediately on passing the anus." Mr. Stanley, under the head "2nd specimen.—From a male," is less accurate in his account of this preparation, but Dr. Ryan describes it very satisfactorily. "*One of these*" (specimens) says the latter, "*shows a considerable narrowing of the rectum below the sigmoid flexure through the whole extent of the intestine; the parietes are better than three-quarters of an inch in thickness, and the canal is so reduced as scarcely to admit the passage of the little finger through some parts of it.*" All these descriptions, however, are distinguished by one remarkable feature, namely, that not one of them contains even the slightest allusion to the existence of distinct, thickened, and shelf-like projections from the sides into the cavity of the rectum. Lastly, it is only necessary to bear this fact in mind, and to note those passages in the above statements which I have marked in italics, in order to see and be convinced, that Mr. Cooper is perfectly justified in considering this preparation to be a specimen of one of the three kinds of organic stricture of the rectum, which I have described in a note at p. 35 of my work, and to which I have given the name of long stricture.

So much for the material difference, which

Mr. Salmon supposes, most gratuitously to have existed between Dr. Blundell and Mr. Cooper. I have still, however, to advert to a third preparation, not adverted to by the former gentleman, but accurately described by Mr. Stanley, and briefly noticed by Dr. Ryan. It is thus described by Mr. Stanley. "3rd specimen from a male. The lower part of the rectum, to the extent of three inches and a half from the anus, is uniformly and considerably contracted. The mucous membrane is removed by ulceration from the whole of the contracted part of the intestine. Several fistulous passages extend from the ulcerated part of the bowel to the margin of the anus." Dr. Ryan notices it by saying, "in a third specimen there is a projecting irregular stricture, about an inch and a half in length." But I am either grossly deceived, or Mr. Stanley's description shows that this preparation was one of fistula in ano, not of organic stricture. Viewing it in this light, it is easy to see the cause of the contraction observed at the lower part of the rectum.

In this analysis I have proceeded upon facts, not opinions, and the results are as highly favourable to my views as they are unfavourable to Mr. Salmon's. But why has that gentleman confined himself to such evidence as the comparatively few preparations in his own possession are capable of affording, when I have offered him so wide a field as the great anatomical museums of London, for supporting his opinions? Such a mode of testing the correctness or incorrectness of my views on the subject, would have been perfectly conclusive; and I repeat, that I only wait to receive satisfactory proof of their unsoundness, in order publicly to renounce these views. Truth alone is my object, and I entertain no fear whatever of losing professional character by abjuring an error, entertained upon such seemingly strong and natural grounds.

Gentlemen, having concluded this part of my reply to Mr. Salmon, I trust that, as friends of science and advocates of free discussion, you will not be displeased if I reply also to some observations contained in a note which you have appended to Mr. Salmon's last communication. The note runs thus:—"Though we have given a most favourable opinion of Dr. O'Beirne's views on defecation, and still maintain that most of them will lead to the happiest result in the practice of medicine, yet we cannot agree with him on all points. We cannot assent to his doctrine, that the rectum is not a receptacles for the fæces, because we, and every one who has experience of the practice of obstetricy, have, during parturition, repeatedly detected feculent matter in the rectum, nay, the bowel is often impacted with it." I feel deeply grateful for the high opinion which you have expressed, and continue to entertain of my work; but I cannot assent to the proposition, that, in selecting the act of parturition for the purpose of showing that the rectum, in its natural state, does not permit the accumulation of fæces, you have chosen a fair ground of objection. The act of parturition cannot, it is true, be called either a morbid or an unnatural condition of the woman, but it places the rectum in an abnormal state. In that act violent expulsive efforts are made, which are not made in health, except at stool, and even then with much less force. Now, it is obvious that the same violent efforts which are made to expel the infant, must act also with great force upon the upper annulus, or extremity of the contracted rectum, force open its cavity, and fill it with fæces. It is likewise obvious, that, as these efforts are repeated, and as the head of the infant, in the act of parturition, presses against the lower part of the rectum and opposes the discharge of fæcal matter per anum, the fæces so forced into the bowel must become impacted. It is clear, therefore, that the fact of the rectum being found filled and impacted with excrement, occurs under circumstances altogether peculiar to the act of parturition, and, consequently, under circumstances totally unconnected with, and inapplicable to, an exposition of the ordinary state of this bowel. Indeed, so natural does the occurrence in question seem in parturient women, that it would be, I am sure, much more frequently met with, if the generality of pregnant females, particularly those of a respectable class, were not known to attend to the state of their bowels, at least for some time previous to their accouchement.

I have the honour to be, Gentlemen,
Your very obedient, humble servant,
JAMES O'BEIRNE, M.D.

North Cumberland-street, Dublin,
January 18th, 1834.

Foreign Medicine.

Researches upon the Development of the Class "Mammalia."

BY M. COSTE.

In a Paper read before the Academy of Sciences, Paris.

THE author commences by stating the difference of opinion of naturalists on this difficult question, and thinks that a sufficient number of facts, touching upon the ovum of the female, and of the mammiferous tribe, have not yet been accumulated in sufficient numbers to put an end to the uncertainty of inquirers into this subject. In the midst, however, of the contrary opinions which have been elicited, two stand prominent. The first considers the Graafian vesicles to be the same as the ovum of the mammiferous tribe; the second, on the contrary, supposes that the ovum is the small spherical body which these vesicles enclose. To resolve this important question, M. Coste

opened forty impregnated rabbits: the result of his observations leads him to suppose, that the small spherical bodies, contained in the Graafian vesicles, are the ova of the mammiferous tribe, and that these ova do not differ from those of birds. The vesicles of Graaf, says he, are not the ova of the mammalia, for they are much more voluminous than the ova which we meet with in the fallopian tubes; for example, in rabbits they are a line and a half in diameter, whilst the ova, found in the tubes, are about the sixth of a line only. On the other hand, if we look to what takes place in the ovary, two or three days after conception, we see that the number of Graafian vesicles, which has disappeared, is equal to that of the ova which have arrived in the fallopian tubes, but that, in the place which each of them occupied, their exterior membrane, torn in one point only, continues firm, to concur in the formation of the corpora lutea. This fact, which it is impossible to doubt, shows in a very evident manner, that it is not the Graafian vesicles which ought to be considered as the ovum of the mammalia, and that we must not, consequently, seek for the analogy with those of birds.

Ova of the Mammiferous Tribe.

There exists upon the internal surface of the proper envelope of the Graafian vesicles, a membrane, which is double in the whole of its extent, except in one point, where we find lodged a little spherical body, the sixth of a line in diameter: this is the true ovum of the mammalia; it is transparent, and composed in the following manner:—first, of an exterior envelope, which M. Coste speaks of under the name of vitelline, because, like the membrane which encloses the yolk of the egg in birds, it is in immediate contact with the cicatricula, and because it encloses the fœtus and its appendages, without having any immediate connexion with them; secondly, the vitelline or membrane of the yolk, which encloses in its cavity a spherical mass, of a yellowish-grey colour, composed of globules and granules; this mass is evidently the yolk of the mammalia, for it is upon it that is placed what is analogous to the cicatricula or blastoderma. At the surface of the yolk, we remark a membranous covering, of a yellowish-grey colour, whose external surface is in contact with the internal surface of the membrane of the yolk, and by its inner side with the whole extent of the surface of the yolk; this is a complete vesicle, in which the vitellus is enclosed; this disposition seems at first to exclude all comparison with the cicatricula of birds, since this last only appears on the surface of the yolk; but if we consider that the cicatricula of birds, some time after conception, becomes a complete vesicle, which encloses the vitellus, we shall then have no difficulty in finding an analogy with the vesicle which exists in the mammiferous tribe: this analogy appears more evident still, if we reflect that the omphalo meseraic vessels, which develope themselves in the germ of the mammalia, express in a faithful manner the disposition of the lateral vessels, which develope themselves in birds, and that the first traces of the embryo of mammalia appear in a point of the vesicle of the germ, formed by globules, which range themselves according to a methodical order on each side of a determinate or fixed axis, by means of the motions which produce the same phenomena in birds; the ova of the mammalia have then in the ovary, like that of birds, three parts, which it is necessary to follow in all the modifications, which conception determines.

1. The vitelline membrane, or membrane of the yolk.
2. The yolk.
3. The vesicle of the germ blastoderma, or cicatricula.

But the cicatricula of birds, whilst the ovum is yet fixed in the ovary, presents in the central part a little transparent vesicle, discovered by Purkinge, and which, he supposed, broke at the moment of conception. It becomes then necessary to know, if this vesicle exists equally in the mammiferous tribe. M. Coste inclined to the opinion, that animals of this class were deprived of it, until he by chance discovered, in opening an unimpregnated rabbit, upon the surface of the yolk, and in the substance even of the vesicle of the germ, a small, delicate, transparent vesicle, similar to a soap bubble. The existence of this appearance has been verified by MM. Laurent, Lauvillard, and Rousseau, who are perfectly satisfied as to the existence of a vesicle in the ova of rabbits. The author considers this fact as analogous to the vesicle of Purkinge in birds. He next passes to the examination of the first modifications which the ova undergo in their fall from the ovary. Two days

after conception they have penetrated into the oviduct, and are so similar to the small spherical bodies which the Graafian vesicles enclose, that it is impossible to doubt that they are, in truth, the ova of the mammiferous class of beings.

The membrane of the yolk, the vesicle of the germ, and the vitellus, or yolk, have not yet undergone any sensible change. Four days after conception, the ova have arrived at the cornua of the uterus, to the number of four or five in each, but have not yet any determined position. Like to a drop of water, or a bubble of air, they are free and moveable. At this time they are a line in diameter, and are visible to the naked eye. We recognise the vitelline membrane, and the vesicle of the germ; but the vitellus has not been absorbed in a manner proportionate to he growth of the vesicle of the germ. Five days after conception they have taken a fixed position, which they preserve during the whole period of gestation; they are placed in a constant line, from which they never deviate, and which corresponds to the insertion of the mesentery. They have not yet any other connexion with the uterus, besides mere contact; and now it requires a certain effort to detach them; they are always spherical, but now they are sensibly augmented in volume, being in diameter about two lines; the membrane of the yolk has acquired a bulk much greater than that of the vesicle of the germ, which it encloses, and which only occupies about a third or little more of its interior; it is connected by a point of its surface to the internal face of the membrane of the yolk, and in the place where this last is applied to the uterus; in the same part it presents a circular or elliptical spot, formed by globules, which are arranged according to a particular order, and which are placed at the external surface of the vesicles of the germ, and which is, in fact, the rudiment of the embryo.

From these remarks and experiments it appears, therefore—

1. That it is the small spherical body contained in the vesicle of Graaf, which is truly the ovum of the mammiferous tribe.

2. That this ovum is perfectly like that of birds.

The Bignonia Catalpa in Asthma.

Encouraged by the success which the Japanese physicians, Kæmpfer and Thumber, have met with in the employment of the bignonia catalpa in different asthmatic affections, some of the medical men in Naples have made trial of the plant, and have obtained results equally satisfactory. By administering in the morning a decoction made of the seeds, and part of three or four of the husks of this plant, in twelve ounces of water boiled down to six, and a similar decoction in the evening, the fit of asthma is much diminished in violence. The following is the result of an analysis of this plant, made by Signor Grosso:—about ten parts of an oily substance; malic acid partly combined with lime, partly in a free state; and, lastly, an uncrystallisable sweet principle; from which it appears probable that the medical properties are situated in the oily portion.—*Bulletino delle Scienze Mediche, Bologne.*

Sense of hearing transmitted to the Brain by Cicatrices in the Cranium remaining after the Operation of Trepanning.

From observations made at the Hôtel des Invalides it would appear, that the ear is not the only channel for the transmission of sounds, since loud noises may be transmitted to the brain by any opening made in the walls of the cranium, and by the cicatrices which replace the loss of substance after such opening. After performing the operation of trepanning on some soldiers in the Hôtel des Invalides, M. Perier, the assistant-surgeon, noticed that the sensation of an accustomed and unconstant noise succeeded the operation; this symptom was the cause of the discovery of this phenomena, from which it is impossible, *à priori*, to deduce the consequences. In the presence of M. Savart, the following experiments have been performed several times by M. le Baron Larrey. The ears of persons operated on were hermetically closed; but, notwithstanding this, the perception of sounds was evident, especially if they were directed in a line perpendicular to the cicatrix. By this same channel, vocal sounds were perceived at different distances, and in such a manner as to render any collusion between the experimenter and the sick person impossible. The beating of a watch was also heard at some inches' distance; but, upon firmly placing the palm of the hand upon the cicatrix, the ear still remaining closed, even the loudest noise was not heard.

ON PERICARDITIS.

BY A CORRESPONDENT.

It appears that some remarks which I made in a former number of your Journal, relative to two cases of pericarditis occurring in the Middlesex Hospital, have been met by a reply, somewhat illogical, from a "Stethoscopist." The point, and I believe the only point, on which the writer and myself differ, is the cause of a particular sound heard in the region of the heart, in the acute stages of pericarditis.

In referring to my brief observations upon the disease, I find that I am not so much disposed to lay down the law as my adversary would let it be imagined; for, in words of the greatest humility, I say, "I am inclined to think it more than probable that the sound (I mean the peculiar rough sound) is caused by friction external to the heart itself, and that my impressions were strengthened by some cases which I had seen." It is strange, but no less true, that, in medical arguments, facts, brought forward by one man to support a theory, serve another man for one decidedly opposed to it: such is, unfortunately, the case in the present instance.

Your correspondent begins by relating a case recently in the hospital. The patient was affected with rheumatism, and pericarditis came on. He states, that while lying on her back two sounds were heard, the one a bellows sound, the other a rough grating sound. And he goes on accurately enough to say, that the former of these sounds only was heard when the patient laid on her side or sat up. Now, this certainly must, in the eyes of the unprejudiced reader, go to support my idea rather than that of my opponent. Here are two sounds, the one apparently from a cause within the heart, the other more resembling the sound heard in pericarditis when as yet we do not suspect disease of the internal membrane. But the writer is anxious to do more than state facts, for he argues upon what he is not certain of in the following words:—"On the 22nd day he could speak pretty accurately as to the condition of the membrane, viz., that it was partially adherent." I would ask him, how does he know that it was partially adherent? He has not evidence that it was so? morbid inspection did not declare it to be the fact, therefore all this goes for nothing, and it is not too much to say, that it is false reasoning. The two sounds are quite sufficient for my point, and they are different sounds. The latter, which more particularly concerns me, goes away in particular positions. This does not militate against the idea of mamellated portions of lymph rubbing against one another, and giving rise to it. The lymph may be only in that spot where the reticulated surfaces would come into contact in one position of the patient, namely, on the back, or on the side, or when sitting up. Again; there may have been fluid in the pericardium; and the least change of posture, changing the situation of the fluid, might give rise to a morbid sound, or to no sound at all. But I must not insist upon this, since I have just found fault with your correspondent for building arguments merely upon supposition. At all events, it will be clearly seen that this case, which is triumphantly brought forward, if it does not support the doctrine of attrition, goes no way to disprove the truth of it.

The two cases I brought forward are said to be inappropriate; why so? In Scott, there was serum in the pericardium; but this very fact accounts for the peculiarity which is noted, namely, that the bruit was sometimes distinctly heard, at other times but faintly, and not in the same spot. Again; the sawing sound was heard at the base. The fluid which existed in the cavity may have prevented the rubbing together of the surfaces at the apex, but, not extending as far as the base, no impediment took place to the friction of the surfaces, therefore I conceive this case entirely bears me out. As to the second which I related, the writer labours under misapprehension. He seems to have entirely overlooked my observations (that the lining membrane is often a case of bruit, and often accompanying acute rheumatism) and thinks that I attribute all sound to attrition, thus distorting the statements which I made.

The second case, it will be seen, was related to illustrate the chronic form of pericarditis, and to show the value of the bruit—not to explain the cause.

In regard to the case which was successfully treated, I ventured to throw out a hint, that as the bruit was heard when the heart pulsated slowly, and disappeared when it acted forcibly, it might be because the obstacle which the lymph offered was overcome by the more powerful action. I am asked, why did

the excitement of the patient remove the sound? and why the heart, simultaneously with the disappearance of the sound, boecme accelerated? The excitement removed the sound in the same manner as it was removed when the heart acted forcibly; and I can offer no better explanation, than that the opposing lymph was more readily overcome; and, as to the second question, the heart may or may not have become accelerated; a change of position might affect the fluid (if it existed) in the pericardium, or the surfaces which gave the sound might cease from a very trifling cause to come into contact.

Your correspondent is surprised that the sound, if caused by attrition, should be between the sternum and nipple, as in this case, but I think, if his memory serves him, he will find that in the majority of instances it is so. I confess I cannot see the surprise, for a larger surface must come into contact at the base than at the apex.

Then it is doubted whether lymph could be firm enough to cause a rough sound. I need only appeal to any practical pathologist, who has seen lymph firm, mammellated, and thick, enveloping the heart, and lining the pericardium, for the possibility of a roughness being heard, where these surfaces meet one another in the action of the heart.

The various changes, which organised lymph undergoes, the secretion and absorption, which follow, are next alluded to. All these changes going on are so many arguments in favour of attrition. Who has not anxiously watched, day after day, a patient with pericarditis? Now, he has heard a sound, rough and grating; to-morrow it is lessened, and the next day it is gone. As the patient gets better it may return, and at length disappear, if there be perfect restoration of the part. And how is all this to be explained? When lymph exists, there may be attrition; when serum is poured out, it may be absent; when this is absorbed, the sound returns, and when the surface of the pericardium regains its natural state, there is no cause for the morbid sound.

The stethoscopist closes his remarks with the result of his investigations, and the burden of his song is, that the lining membrane of the heart is invariably the cause of the sounds heard in pericarditis. He thinks there must be inflammation internally if there be inflammation externally. This I must decidedly differ from, while I am, at the same time, ready, nay, anxious, to admit there is often a corresponding action; but that some cases of inflammation of the pericardium, without corresponding disease of the lining membrane of the heart, and attended with a bruit, have taken place, and do take place, there can be little doubt. I would not bring forward examples in proof of this, but refer your readers to those published by Dr. Stokes, these are at once conclusive, and the authority not to be doubted.

That the lining membrane is very often affected, and after a few years proves the cause of fatal diseases, is a fact too memorable to need comment; but it is also true that pericarditis may be cured. And where it is cured, I would suggest that no disease had taken place within the heart, when inflammation was going on externally. We find not unfrequently, in post mortem examinations, the pericardium universally adherent, and the heart healthy, the patients having lived to an advanced age, and dying of disease elsewhere, and not connected with the heart.

The writer, with some gravity, asserts, that an inelastic and puckered state of the valves and internal lining of the heart produces a rough, grating sound. I find no necessity for this, since all are determined upon the point; but he cannot mean that the membrane is inelastic and puckered in acute pericarditis, therefore we must look to some other cause than the valves or lining membrane, to account for the bruit in acute inflammation of the pericardium.

I have now to apologise for taking up so much space in your valuable Journal, and to thank your correspondent for calling my attention again to this interesting though obscure disease, as I find he has strengthened me in the opinion which I ventured to assent to, that attrition of the surfaces of the pericardium, covered with hard, unequal, and mammellated projections of lymph, may give rise to more or less sound.

January 2nd, 1834.

M. Guerbois has been appointed to the office of surgeon of the Hôpital de la Charité, vacant by the death of M. Boyer.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, January 25th, 1834.

Mr. Pettigrew in the Chair.

Some Peculiar Forms of Venereal Sore.

The minutes of the last meeting having been read and confirmed, and the instruments mentioned by Mr. Waite exhibited to the Society,

Mr. Hunt rose to mention the following case:—a gentleman had severe symptoms of gonnorrhœa, with pain beneath the frænum; leeches were applied by the surgeon who attended him at the time, and each bite formed a separate ulcer, which spread rapidly; the opinion of Mr. Hunt was then taken, and as he did not think it was a case of gonnorrhœa, mercury was prescribed, and chloride of soda injection used; this treatment was rapidly successful. Another case similar to the former had also fallen under his observation, and his experience led him to think that this was a form of syphilis simulating gonnorrhœa, but easily yielding to moderate doses of mercury.

Mr. Johnson had seen three cases of the same kind, and perfectly agreed with the last speaker as to their syphilitic nature, and the appropriateness of using mercury.

Some further remarks upon this form having fallen from one or two other members,

Mr. Johnson read the promised paper on some peculiar forms of venereal sores. The particular kind of ulceration, to which he wished to call the attention of the Society, is generally situated on the inner prepuce; sometimes it is complicated with gonnorrhœa, but generally is independent of this complaint. It appears at first as a vesicle, increases in size, and acquires the size of a split pea, bursts, then ulcerates, and afterwards forms granulations. In the cases which he had seen, there were many ulcerations present at the same time, in different states of progress; it is highly infectious, and is occasionally accompanied by eruptions of various kinds.

Several cases, illustrative of this new form, were then mentioned, and some judicious remarks upon the treatment made. In the first stage, which is one of inflammation, antiphlogistic remedies, calomel, senna, &c., are necessary; afterwards when the granulations have made their appearance, a modified plan of treatment is required, but a moderate course of mercury seems absolutely necessary for the cure. Another form of ulceration, or excoriation which appeared shortly after connexion, had fallen under his observation, and had like the former yielded to a slight mercurial treatment.

Mr. Hunt said that the affection, so well described by Mr. Johnson, was not of recent observation, for he had met with several cases of the same kind seventeen or eighteen years ago; he had found that the ulceration commenced in a minute vesicle, which was filled with clear fluid; this became slightly turbid on the second day, and at the end of the third contained a purulent secretion. Febrile symptoms accompanied this form of sore, and it was found to occur in persons who had irritable urethras, and to follow the introduction of a bougie; he did not think that it was of a syphilitic nature, and the result of the cases, which he had seen, seemed to prove the truth of his opinion.

Mr. Wade had met with sores similar to those which were now the subject of discussion. After describing these ulcerations, he stated that he had found small doses of blue pill of service; he did not think it characteristic of the complaint that there should be a number of ulcers

Mr. Greenwood made some remarks on the subject, but from the rapidity of his enunciation, we could not clearly comprehend the purport of his speech.

Mr. ——, house surgeon to the Lock Hospital, rose to confirm the observations of Mr. Johnson; many of the patients, in whom Mr. Johnson had observed this ulceration, had afterwards been seen by him, and he had found the symptoms perfectly to agree with those described.

Mr. Johnson, in conclusion, said that the sores mentioned by Mr. Hunt and Mr. Wade were evidently of quite a different nature to those which he had seen, and of which no description had to his knowledge hitherto been given.

Notice was then given, that Mr. Costello would, on the next evening, bring forward the subject of torsion of the arteries, after which the meeting separated.

MEDICAL SOCIETY OF LONDON.

Monday, January 27, 1834.

W. KINGDON, Esq., President, in the Chair.

Perforation and Disease of the Stomach.

THE minutes of the meeting were read, when

Mr. Moore stated, that the contents of the stomach, in the case mentioned by him at the last meeting of the Society, had been examined, and that acid (oxalic, if we understood rightly) had been found in them.

Mr. Leeson said, that, on the 19th of last month, in the evening, a female, æt. 16, was seized with vomiting, violent pain in the stomach, and headach; and he found, on calling next morning, that she was dead. An examination of the body was made, when two openings were found penetrating through the coats of the stomach, which were, in some other places, much attenuated. No other morbid appearances in the abdominal cavities were discovered. The fluid was not submitted to any examination. In answer to a question, he said that the blood coagulated and was not arterialised.

Mr. Proctor considered that the stomach might still go on performing its functions for a considerable period, even though extensively diseased. In confirmation of this opinion, he related the case of a gentleman who was accustomed to indulge freely in the pleasures of the table, and who had two severe attacks of vomiting, at intervals of several months. The opinion of many of the most eminent practitioners was taken, which was, that the pyloric orifice was in a state of disease. At length the patient died, and the stomach, with the exception of a small portion near the pyloric valve, was found one mass of disease.

A spirited discussion upon the subject of damaged grain followed, after which the Society separated.

MEETING AT THE ROYAL COLLEGE OF PHYSICIANS.

ON Monday evening, Jan. 27th, the President and Members of the Royal College of Physicians held their first meeting, for this year, in the library. There was a crowded assemblage of medical and other scientific individuals. Among the distinguished visiters who sat on the right and left of Sir Henry Halford, were Earl Grey, Lord Althorp, the Marquis of Lansdowne, Lord Melbourne, Lord Duncannon, the Lords Chief Justices of the King's Bench and Common Pleas, the Vice Chancellor, Bishops of London and Llandaff, Judge Alderson, Mr. Ellice, &c., &c.

Sir Henry then read a paper on the education and moral conduct of a physician, in which he forcibly illustrated the importance of classical and general education to medical students, he pronounced a high eulogium on the ancient classic writers; lauded the universities of Oxford and Cambridge as seminaries of learning; showed the value of a religious and moral education to the cultivators of medicine; commented upon the elementary branches of the healing art, and clearly demonstrated the necessity of studying all of them. He admitted that the English universities were inadequate for a medical education, and that the deficiency was supplied by students resorting to the schools of London, or to foreign universities. Harvey, Mead, Linacre, Sir George Baker, &c., were foreign graduates. He eloquently described the necessity of cultivating medical ethics, or the precepts for professional conduct, and alluded to the oath of Hippocrates, which enforced caution, chastity, and honour, as the leading virtues of a physician.

He concluded his paper with an eulogium on the late Chancellor of Oxford, Lord Grenville, during whose administration, the Hunterian museum was purchased by the government, and for which the profession would be grateful to the latest times. He observed that the noble lord was then associated with the illustrious statesmen (bowing to Earl Grey and the other ministers) who managed the affairs of this great country at present.

The paper was a classic, elegant, production, well read, and heard with profound attention. It did not contain the slightest allusion to Medical Reform, and was calculated to impress the Ministers with the idea that the College of Physicians was immaculate. They, of course, were not aware of the fact, that foreign graduates or British graduates, except those of the two universities, were not admitted into the College, and that the medical education of the London schools would not be acknowledged by the institution.

MEDICO-BOTANICAL SOCIETY OF LONDON.

Tuesday, January, 28, 1834.

Dr. Chowne in the Chair.

Mr. Guthrie, President of the Royal College of Surgeons, was admitted an honorary fellow of the Society.

Dr. Sigmond then read two papers on a species of lilac of the West Indies, transmitted by M. Ricord, the other, on hydrophobia, by a Polish Physician.

LONDON MEDICAL ASSOCIATION,

WESTMINSTER DISPENSARY, GERRARD-STREET, SOHO.

Tuesday, Jan. 28, 1834.

Dr. Ryan in the Chair.

Spontaneous Evolution.—Vascularity of the Teeth.

Mr. Thurnham related a case of spontaneous evolution at the seventh month of utero gestation, in which the fœtus was expelled perfectly doubled.

Mr. Peacock then read the following essay:—The subject of this paper is one on which great difference of opinion has prevailed between some of the first names of our profession, the one party contending for the possession of vitality and vascularity by the bony substance, while the other denied to it vascularity, but believed in a certain degree of vitality. What, however, vitality can be in the absence of vascularity I am at a loss to conceive. The latter, at the time of the publication of the natural history of the teeth, appears to have been the opinion of John Hunter; but in the diseases of the teeth, which he wrote subsequently, we find him adopting the belief that the teeth are similar in organisation to the bones, and subject to similar diseases. In this opinion he has been followed by Fox; and Bell, in his late work, has ably defended the vascular endowments of the teeth. In France, Meckel and Serres have supported the doctrine of their vascularity; and Duval has even gone so far as to suppose them possessed, under certain circumstances, of the power of repairing injuries.

The arguments against a circulation existing in the teeth are drawn from their apparent insensibility; their showing no vessels when the attempt is made to inject them in the ordinary way, and their remaining unchanged in states of system which affect the rest of the skeleton.

It has been said that they are not sensible; and as, without sensibility, we cannot conceive vascularity to exist, so we cannot believe them to be vascular. The power, which we possess of detecting the most minute atoms of any substance in contact with the teeth, has been considered as the result of a mechanism, similar to that of the foot of the horse and some other animals, and which is so beautifully displayed by John Hunter's preparation in the College museum. In this animal, the nerves of sensation are observed, on approaching the superior aspects of the hoof, to be divided into fasciculi, of numerous and delicate fibrillæ, to which the impressions, made on the insensible hoof, are conveyed by its vibrations, and through them transmitted to the sensorium. The nerves of the lining membrane of the tooth have been viewed as performing the same office as these fibrillæ; and the bony substance, while it presents a hard body for mastication, has been also believed to convey vibrations to the membrane. Without, however, wishing to invalidate the analogy here presented, it does not appear to oppose the notion of sensibility to a certain extent being also possessed by the bony substance of the tooth itself.

It must have occurred to every one who is accustomed to operate on the teeth, that, if the teeth be supported, so as to prevent a jar being conveyed to the socket, a file may be applied, with considerable force, to the enamel without anything which could be considered painful being induced, but so soon as the enamel has been removed, and the instrument comes down to the bone, the patient makes a sudden start, sufficiently evincing the difference of sensibility between the two structures. So also in scaling what are termed pitted teeth; no pain is complained of so long as the instrument is in contact with the enamel, but the slightest pressure on the uncovered parts can often not be endured. How, then, is this? did this sensibility depend on vibrations, conveyed through the bone to the lining membrane of the tooth, could we expect to find such difference in our perception of impressions, made on the surface of the enamel, only

two or three lines thick, and that of the bone beneath it? when, too, the fibres of the enamel are arranged in the very form best calculated to convey those impressions unimpaired. But we have yet stronger proofs that the bony substance is possessed of sensibility, for in disease we occasionally find it becoming so acutely susceptible, that the slightest touch causes a paroxysm of intense suffering. This I have several times observed in the denuded necks of teeth.

If, then, these considerations be sufficient to overthrow the idea of their want of sensibility, it may be right to proceed to the examination of the belief as to their vascularity.

Teeth cannot be rendered vascular by ordinary means of injection. This, however, we can scarcely deduce as an argument against their vascularity, since the same circumstance is observed in other parts of the system, the circulation through which is never denied. A more cogent objection is that resulting from John Hunter's experiments: from these it appears that young pigs, fed on madder, had their bones, and such parts of their teeth as were in course of formation, tinged red; but such parts as were already formed retained their natural hue. He further observed, that if, after discontinuing the madder for some time, the animal was killed, the bones were found of their usual colour, while the tinged teeth remained unchanged. If, however, we take into consideration the slowness with which it is admitted by Mr. Hunter the red colour was removed from the bones, and the less activity of circulation which the teeth must be allowed to possess, we can scarcely feel surprised at these circumstances, unless the animal had been allowed to live a very considerable time before it was destroyed.

The teeth, however, like several other parts of the system, present actual signs of vascularity only in states of disease. It is stated by Mr. Bell, that he has seen a clot of blood in the bony substance of the tooth; and it is well known that the teeth of those dying of cholera, and under other circumstances where an extremely congested state of the lungs exists, have their teeth in parts highly discoloured with blood. This discolouration, on breaking the tooth, is found not to be gradually extended from the circumference towards the centre, but to be disposed between laminæ of the bone, and to have an untinged layer between it and the surface.

It has been argued that the bony substance is not found to be changed in those diseases, which cause an absorption or increased deposition of the calcareous matter; but, though I am not able to say whether, in mollities, all the teeth are ever affected, their pearly whiteness in phthisis, and dulness in old age, are familiar to all.

With respect to the want of analogy between the mode of formation of the teeth and that of bone, I would contend that the existence of a perfect analogy is not necessary to the belief of their vascularity.

The osseous structure of the teeth must be supplied with such circulation and vital endowment as is consistent with the function which it has to perform, and the situation which it occupies in the system.

Teeth, subjected to maceration in weak acid, have their triple phosphates dissolved, and a cartilaginous matrix remains, corresponding to the size and shape of the bony substance of the tooth, being in this respect precisely similar to bone. Of the enamel I have never been able to obtain the animal portion, but during solution very dilute flocculi, apparently of a membranous nature, are observed to float in the fluid. The dark colour of the teeth of the lower animals is owing to a membrane covering it, which, during solution, separates in the form of small shreds. I am also inclined to believe that the yellow colouring which appears on the surface of some teeth, extending from the neck to the opposing surfaces, is also a membranous growth.

If the opinion which has been above supported be correct, it must necessarily lead to the abandonment of the ideas common till the time of Fox, and still to be met with in many of our professional writings, that caries is a mere mechanical corrosion from stagnation of saliva in a state of putrefaction, and other irritating substances. Caries is stated by Mr. Bell to commence at the periphery of the bony substance, at its point of connexion with the enamel, and thence to extend inwards towards the central cavity. The discoloration of the enamel he considers the effects of disarrangement of the perpendicular fibres of the enamel, from loss of support in the bony substance; and it is to his work that we owe our most luminous views of almost every point connected with the teeth.

Caries would appear to be the result of a diseased action dependent on a local or general cause, and acting upon an originally faulty organisation. Without the belief of an action taking place in the tooth itself, it would not seem easy to account for the softening, often found extending deep into the substance of a tooth, though, perhaps, the only external sign of this disease is afforded by a minute discoloration of the enamel, and no opening existing. And without the supposition of an hereditary predisposition to decay being called into action, we should have difficulty in explaining the healthiness of teeth in some families and individuals, and their proneness to decay in others, and the frequency of teeth being found similarly decayed which are in course of formation at the same time. Caries has been supposed precisely similar to the decay of pivoted or artificial teeth, but a little observation will show a decided difference between them. In caries, a dark line, marking the progress of the disease, will be observed extending from some point directly beneath the enamel to the central cavity. The decay of artificial teeth will be found to originate in any part of the bone exposed, and to spread equally in all directions, unless some obvious cause to the contrary exists.

The function of the lining membrane would appear to be to form the teeth, and advance them to a state of perfection; that of the periosteum of the external surface to maintain these organs in a state of vigour. Without this belief, it would not, I conceive, be very easy to explain the objection urged by John Hunter, that, long before the milk-teeth are shed, their nutrial vessels have been absorbed, though the teeth still appear perfectly healthy; and the circumstance of the frequency of ossification of the foramen, leading to the central cavity, taking place in persons of mature age, without the teeth seeming to suffer.

With respect to the milk-teeth, their nutrial vessels would seem to exist no longer than they are required for the growth of the tooth; when this end has been attained they become obliterated, and the tooth is then dependent on its periosteum alone for support, till, after the fangs have been absorbed to allow the permanent tooth to pass forward, it is at length shed. A similar function—that of nourishing the teeth after their nutrial vessels derived from the fangs have been obliterated—would seem to be performed by the periosteum of the permanent teeth.

An interesting discussion took place, in which Mr. Thurnham, Mr. Davies, Mr. Crutch, and others, took a part.

THE
London Medical & Surgical Journal
Saturday, February 1, 1834.

POLICY OF THE COLLEGE OF PHYSICIANS.—POLITICAL INFLUENCE.—ILLEGALITY OF EDINBURGH DEGREES.

THE first Meeting of the College of Physicians did not disappoint our expectations. The sketch, which we gave last week by anticipation, was so far correct in the outline, that, now that the event has become historical, we have little else to do than to fill in a few details, to convey a correct impression of the reality. The concourse of visiters was as great, and as varied, as we remember to have seen on any former occasion at Pall Mall East. Of course, the attendance of the Members of the Corporation was numerous; the Licentiates, who had been politely honoured with an invitation by the Presidents and Fellows, were many of them present; and among the unprofessional visiters we noticed, in addition to some of his Majesty's Ministers, several of the most distinguished persons at present in town. It has always been the dexterous policy of the learned President, to surround himself, on these occasions, with persons of high official rank in the state, without any regard to the mutations of politics; and, in this, we admire the versatility of his powers, and the depth of his genius. Whilst their presence illustrates the meetings of the Corporation, in a manner unknown to the other scientific bodies of the kingdom, it helps to impress upon the public an opinion of the influence of the learned President in the highest quarters, which is essentially serviceable to the

College at the present time, when the Corporation is, as it were, committed with the profession, and both are appealing to the powers of the state. Whether this influence, or supposed influence, will prevail against the appeal of the great body of practitioners to the Legislature, is a question, to one side of which we are too deeply pledged, heart and soul, to give an unbiassed opinion; but of this we are certain, that, should it prevail, it is all up with Medical Reform.

The learned President's address upon the education and duties of a physician deserves the praise of an elegant and classical composition, and was worthy of his reputation as an accomplished scholar. It never has been our desire to underrate the value of classical acquirements to a physician, and their influence in forming his character as a gentleman; but we cannot allow the pretence of their possession, under the colour of an academical degree, to supersede the far more important acquisition of professional knowledge, or to give any title, by preference, to the honours of the profession. We have not the slightest apprehension, that the race of scholars will become extinct among physicians if the privileges of the Universities were abolished to-morrow. Classical literature has become of less professional importance in our days, since Latin has ceased to be the language of the learned; and the modern student of medicine has little occasion to go beyond his native tongue, and perhaps one or two living languages, for his treasuries of knowledge. In the nature of things, therefore, it is absurd to exact a knowledge of the learned languages generally, or to any extent—nor is such an attempt made. Even Oxford, by her late regulations, allows the candidates for her degree in medicine to be examined in English. At the same time, some knowledge of Greek and Latin is indispensable, in order to have a thorough understanding of the language of medical science, which is constructed on their basis, and of which a full apprehension is as essential to the medical student as the explanation of his symbols to the algebraist.

But, in the higher uses of classics, as refining the taste and enlightening the understanding, we must leave their study and cultivation to the abilities and leisure of individuals; and we may rest assured, that medicine will not be without its share of scholars, as long as it holds out a sufficient inducement to men of talents to enter the profession. In the learned President's exclusive care of the *liberal* education of a physician, an eulogy upon the English Universities can scarcely be considered a digression; although, in an essay upon *professional* education, nothing further perhaps would be said about them, (and that by way of note,) than that they claimed, by virtue of their prerogative as chartered seminaries of instruction, the singular power of conferring medical degrees without possessing a school of medicine. The continuance of this privilege was, no doubt, included in the learned President's filial prayer of perpetuity for the Universities. And we may learn to estimate, from his admiration of these bodies, how great a sacrifice of principle he was compelled to make by stern necessity, in sinking their Graduates in Medicine to the rank of Licentiates in the proposed alteration of the College by-laws; if, indeed, such a change has ever been seriously thought of, or has even met with his sanction.

Of the authenticity of the rumoured statement relative to these alterations, we expressed some doubts last week. Whether it was the admitted desertion of a principle hitherto adhered to with such pertinacity, or the bare-faced attempt to foist *such* a change upon the Licentiates

in satisfaction of their claims,—both considerations induced us to pause and be incredulous. Another week leaves the rumour unvaried and uncontradicted; and, although the learned President carefully abstained from any allusion to the state of the profession, we are disposed to believe there is some truth in the report. We admired Sir Henry's eloquent recognition of the services of a former ministry in purchasing the Museum in Lincoln's-Inn-Fields; it conveyed a delicate hint, that his Majesty's present advisers have a glorious opportunity, as unquestionably they have, of earning the everlasting gratitude of the profession. But is it possible he could dream of inducing them to sanction such an alteration, as grateful to the profession, and the *ne plus ultra* of reform! The Fellowship of the College, though at present limited—unjustifiably limited—to English Graduates, is in some measure open. Every English Graduate has a *right* to the Fellowship. Under the rumoured by-law, the English Graduate is to lose this right, and to be sunk to a Licentiate. Degraded as the Licentiates are, they disdain the ignoble honour of seeing others reduced into their ranks, as a mean substitute for that elevation to which they claim themselves to be entitled. Unworthy as the preference shown to Graduates has been, the jealous distinction has not stifled all feelings of honour, nor will its abolition render the Licentiates insensible to the disgrace of submitting to a self-elective body, and permitting it to exercise its angry feelings, in awarding the dignity of professional rank to men of independence and talent. This would, indeed, be *too bad!* The very proposal of such a scheme of monopoly and misgovernment, in the midst of the changes our civil institutions are about to undergo, for the purpose of purifying them from evils of a like character, shows to demonstration how unfitted men become, by the long possession of power, to estimate the wants and demands of those over whom they have exercised their oligarchical privileges. It is impossible such men will ever submit to condemn themselves.

Although the cause of Medical Reform cannot be seriously affected by the perverse activity of the College, in propping up its favourite system of exclusion; this specimen of what it would do will, we hope, animate the zeal of the true friends of the cause with increased spirit. They see what they are to expect from the justice and generosity of the College in the little spot of the republic of medicine, to which its legislative influence extends. In fact, the College has but little power for good or evil. The changes which are called for are beyond its reach. Its own limited circle of seven miles, within which it has even failed to support its privileges and laws, because they are repugnant to the sense of the public,—its little circle, we repeat, must be spread over the whole kingdom. Its sounding title must be made to correspond with the fact,—instead of being a little coterie of physicians practising amongst the fashionables of London, it must embrace the respectable practitioners of medicine throughout the whole of England. It must be *their* Corporation. Were the alterations, now proposed, in actual operation for the last century, they would not affect the case of the general practitioners against the College in its essential merits.

A pamphlet* has lately appeared, which places the necessity of a Parliamentary inquiry into the state of the profession in a startling position. We will not enter into the local politics of the Edinburgh

* An Examination into the Causes of the declining Reputation of the Medical Faculty of the University of Edinburgh, &c.

University, or the quarrels between its public professors and its private lecturers, further than to observe, that they afford additional proof of the unsatisfactory condition of the profession in all parts of the United Kingdom. But we beg to impress upon the attention of the Graduates of that University the following alarming paragraph :—"The Professors of the University of Edinburgh are well aware that they have been granting medical degrees without any legal authority. If these degrees were questioned in a Court of Law, particularly in England or Ireland, there cannot be the least doubt it would be found that they are not worth one farthing, and could not be sustained."

It is not necessary, at present, to inquire into the correctness of this opinion;—it is sufficient for us that it is very generally entertained. It adds one item the more to the mass of grievances of which the profession has to complain to the Legislature. The profession is governed by self-elected, self-interested bodies: it has no connexion with its natural corporations: it is divided into jealous factions; and its legal constitution is founded on such anomalous contradictory charters and statutes, that it is difficult to say what are its legal rights.

RESIGNATION OF MR. LYNN.

The venerable and eminent Mr. Lynn, the senior surgeon of the Westminster Hospital, resigned on Tuesday last, and has been appointed consulting surgeon. His place will not be filled up, as there was an understanding that three physicians, and three surgeon were adequate to the duties of the hospital, and consequently there will no election for the office of surgeon or assistant-surgeon.

PETITION OF THE PHYSICIANS OF LONDON AGAINST THE COLLEGE IN PALL MALL EAST.

Petitions are being signed by the independent Licentiates, against the Royal College of Physicians, asking for a Parliamentary committee, and against a Royal Commission. The graduates of medicine, practising in London and throughout the country, should follow this example, while the general practitioners must not forget their own rights. Petitions should be forwarded from all parts of the United Kingdom, and as speedily as possible, as the monopolists are incessant in their exertions to prevent reform in any degree. They are using every kind of intrigue in misleading the government; but Lord Howick is too enlightened a statesman to be imposed upon by a few interested individuals, when the rest of the profession, the multitude, demand reform and redress of their grievances.

French Hospital Reports.

HÔTEL DIEU.

Colica Pictonum—Employment of Sulphate of Morphine in large doses.—Cure.

A man was admitted into the Hôtel Dieu with all the symptoms of painter's colic. For the first five days he was submitted to the treatment ordinarily used in La Charité; at the end of that time, the symptoms and the abdominal pains were just as violent as on the day of his admission. Two grains of the sulphate of morphine were given to him, and continued till evident symptoms of its narcotic effects were produced, and then all the symptoms vanished. This remedy, to which recourse has always been had in this hospital in cases of this nature, has generally been attended with success.

Two Cases of Lithotrity—Employment of the Instruments of M. Jacobson.

The first of these patients has been operated on several times; he is a man whose bladder is very irritable, and in whom each use of the instruments occasions a violent catarrhus vesicæ, which renders the cure tardy. At the last introduction, on Thursday, a fragment was seized and crushed; another was taken hold off, but a violent desire, on the part of the patient, to make water rendered it necessary to wait; the instrument was withdrawn; soon after which another small fragment passed into the urethra, and was extracted. Since the last operation the catarrh has been less violent, and M

Sanson has sanguine hopes of entirely ridding this patient of the stone in a few days.

The second patient is a woman, æt. 27; at the first operation a large soft stone was encountered, and broken without difficulty. The fragments remained in the bladder, but the irritable state of this viscus prevented the renewal of the operation; at the last report, however, the woman had passed some, if not all, of the debris.

HÔPITAL DE LA PITIE.

Cancer of the Right Kidney—Presence of Cancerous Matter in the Vena Cava, and in the Pelvis of the Kidney.

This patient entered the hospital with nephritis and disorder of the liver; the face was pallid; he had œdema of the legs, thighs, and scrotum; ascites; violent dyspnœa; scanty urine; and pain in the kidneys: he was treated for hypertrophy of the heart, which was clearly indicated by the stethoscope and by percussion, but died 18 days after entering the hospital.

Autopsy.—The heart was found much enlarged; each lung contained small kernels of encephaloid matter, and in the mesentery some of the lymphatic ganglia were found in a cancerous state; below the pillars of the diaphragm there was found a hard tumour, six inches long and two and a half broad, resting on the aorta, and containing, in its interior, the vena cava and right kidney, on the inside it was impossible to recognise any structure, for its tissue was replaced by a soft brain-like substance; this was more apparent at the upper than the lower part, where some traces of the original structure of the kidney were still left; the emulgent vein and vena cava, as far as the liver, were distended with this encephaloid matter, but the arteries were free; the pelvis and the calices were filled with the same matter; the left kidney was in a state of hypertrophy, and the liver was also enormously large. None of the other organs offered any thing remarkable.

Amputation of the Penis by a New Process.

M. Poirson, Chief Surgeon of Gros Caillou, has lately amputated the penis by a new process; he first introduced a soft flexible sound, some inches longer than the ordinary ones, into the bladder, and, having directed an assistant to place one hand on the penis, close to the pubis, and to hold the loose end of the bougie and penis in his left, divided, with a small amputating knife, both the penis and bougie. M. Poirson states, that the introduction of the instrument facilitates the operation, and renders the search for the arteries more easy.

HOTEL DIEU DE TROYES.

Fungus of the Bladder.

An emaciated old man, æt. 80, named Hubert Leon, was admitted for disease of the bladder and incontinence of urine, which was sometimes tinged with blood. He refused all medicines, and would not even submit to the introduction of a sound; after being in the hospital three weeks he died. The walls of the bladder were very much thickened, and although it was in an empty state, still it appeared above the border of the symphysis pubis; the cause of this unusual size was a large cancerous looking fungus, nearly filling up the whole of its cavity, and attached to its superior and anterior surface by a peduncle which appeared to arise from the mucous membrane; its surface was coated over with an orange coloured urinary sediment, and its interior appeared to be formed of a white pulpy substance, something resembling the structure of the brain.

Italian Hospital Reports.

Strangulated Hernia, cured by the effort of Nature.

BY C. BOZETTI.

This is a case which, without being so rare and curious as the relater supposes, still possesses considerable interest. A woman, ætat. 40, had hernia in the right groin, caused by lifting a heavy weight, it became strangulated, and as the practitioner, under whose care the woman was, did not recognise the complaint, no operation was performed; on the 9th day the tumour burst, and a great quantity of pus and fæces escaped. Signor Bozetti then saw the woman, when he recognised a portion of gangrenous intestine, which he imagined to be the cæcum, for he did not find any hernial sac; he brought the edges of the wound together, and in six days the granulations were already formed; in a month's time the fistula was reduced to a narrow opening, and two

months afterwards the cicatrisation was complete, and the woman was reported well.

Efficacy of Antimonial Powder in Neuralgia of the Face.

A painter of Catania was seized on the 5th of March, 1833, with a violent pain in the sub-orbital region of the left side of the face, preceded by vomiting and shiverings; the pulse, during the paroxysms of pain, was small, and the skin dry and rather hot; he had a sensation of general uneasiness, which diminished during the night, and at this time the pain in the face also abated a little. In the morning, however, the pains returned with renewed violence, and thus he continued till near the end of March, at which time his health became greatly disordered. Dr. Philippo Libra, having convinced himself of the nature of the complaint, prescribed sulphate of quinine, but this was continued for some time without the slightest amelioration. Opium, bleedings, purgatives, blisters, &c. were used in vain. Seeing that the pains continued, without the slightest relief from the treatment hitherto pursued, antimonial powder, in doses of six grains, was given; on the same evening the pain was less violent, and, by a continuance of its use, they became sensibly diminished in intensity each day, and, by the end of March, he was quite recovered.

Prolapse of the Uterus, caused by Labour.

This is the case of a woman, in whom labour took place very rapidly, and was followed by prolapse of the uterus, and violent hæmorrhage. Efforts were made by Dr. Sole to return it to its situation but without success, and consequently the woman was in a state of great danger, not only from the progress of the hæmorrhage, but also from the intense inflammation, which was caused in the uterus by its strangulation between the labia; snow and styptics were applied without success, and, after failing in his efforts at reduction, he was obliged to make several incisions with a bistoury, for the purpose of enlarging the opening of the vagina, after which the reduction was made with the greatest facility; a plug was then introduced into the vagina, and retained in that position by appropriate bandages; no ill consequence ensued, and in a few days she was convalescent.

HÔPITAL DE TRERIGLIO.

Removal of a Tumour, weighing twenty-four pounds, from the Neck.

Dr. Sacchi, Chief Surgeon to the Hospital, has lately removed from the neck of a girl, æt. 18, a tumour, 30 inches in circumference, and weighing 24 pounds; it extended from the parietal bone to the shoulders, and adhered to the spinous processes of the vertebræ; the interior was of an osseous stricture, and was enclosed by a hard substance, resembling scirrhus. The patient went on favourably after the operation, and was discharged cured in four months.

Belladonna in Obstruction from Biliary Calculi.

A boy, ætat. 15, after exposure to wet and severe cold, was seized on the 30th of March with incessant vomitings, rigors, weight at the epigastrium, and delirium; these symptoms, which were unattended by fever, lasted three hours. For two days they returned at the same period, but the third attack was half an hour later, and more alarming in violence; opium and quinine were prescribed by Dr. Solatte, but, although they afforded temporary relief, still they did notpreventthe daily occurrence of the paroxysm; ten days after the first seizure he was attacked in the night by an acute pain in the right hypochondrium, and tension of the abdomen; three days after this time the skin and conjunctiva became of a bright yellow colour, and the bowels were much constipated. In the space of forty days, all the remedies, which experience has recommended in such cases, were tried, but without any relief: suspecting the existence of a stone in the biliary duct, Dr. Solatte, whose patient the boy was, applied the extract of belladonna over the epigastric region and right hypochondrium; and, as the pains were diminished in violence by the application, he gave, internally, a pill, composed of the third part of a grain of the extract every two hours. On the 5th day, the dose then being half a grain every two hours, the patient became drowsy, when the hepatic pains entirely disappeared; within the course of the next three days he passed eight calculi, after which he recovered his usual health.

British Hospital Reports.

ST. THOMAS'S HOSPITAL.

Induratio Pulmonis.

Christopher Anderson, æt. 33, sailor, a native of Sweden; admitted into William's Ward under the care of Dr. Elliotson, Sept. 12th, 1833; states that he had an attack of influenza four months ago; to which succeeded great difficulty of breathing, cough, and profuse expectoration, pain being almost entirely absent. Has now slight pain in the lower part of the right side: great difficulty of breathing, much increased by lying on the side affected; there is almost complete absence of the respiratory sound over the right side of the chest, except beneath the clavicle, where mucous rattle is heard; pulse quick and small. Was visited by Dr. Burton, in the absence of Dr. Elliotson, who ordered

Hydrarg. submur. gr. j.,
Extr. conii, gr. v., ter die.
Empl. lyttæ lateri dextro.

15th. Pain somewhat relieved, but cough is more frequent, especially during the night.

20th. Profuse expectoration has come on since yesterday; difficulty of breathing still continues, and is much increased when lying on the affected side.

23rd. Rep. empl. lyttæ lateri dextro.

27th. The pills to be taken now twice a day.

29th. The mouth has become slightly affected, which has been followed by some relief; respiration apparently bronchial; is now heard over a more extended space.

Oct. 4th Visited by Dr. Elliotson, who prescribed,

Ung. iodinæ (iodinæ 3i., adipis ℥i., ft. ung.) lateri affect. infricand. per horam dimid. quotidie.
Tinct. iodinæ, ♏ v.;
Potass, hydriod. gr. ij.—Ex. aq. puræ, ℥iss, bis in die.

6th. Feels greatly relieved; can now lie with more ease on the affected side; cough also is diminished, but the expectoration is still profuse, the matter expectorated being more fluid than hitherto.

8th. Tinct. iodinæ, ♏ x.;
Potass. hydriod., gr. v., bis die.

11th. More cough and pain in the chest; pulse rather sharp. Ordered V.S. ad ℥x.

15th. The pulse was rendered softer for a time, but has regained its hardness; submucous rattle nearly all over the chest; respiration distinct at side. Ordered V.S. ad ℥x., opii, gr. j., pil. hydrarg. gr. x., bis die.—Omit. mist.

18th. Blood buffed and cupped. Pil. ter die sumendæ.

26th. Mouth affected; less difficulty of breathing; rattle much less distinct over the chest. Ordered, omitt. pil. hydrarg., cont. opium bis die.

29th. Cough is troublesome; pulse 84; considerable expectoration. Ordered opii, gr. j, ter die, sqr. smilacis asper. ℥ss, 6tis.

Nov. 15th. Respiratory murmur heard over the whole extent of chest. Ordered porter, half a pint daily.

Dec. 3rd. Has been improving rapidly; he still remains under treatment.

William Johnson, æt. 38, baker, admitted October 3rd, 1833, under the care of Dr. Elliotson. States that he has been ill a month. His illness commenced with pain in the chest, cough, and profuse expectoration, which still continue; respiratory sound is almost entirely absent on the right side of the chest, where the pain is principally felt; there is also dull sound on percussion, except beneath the clavicle, where it is more hollow than elsewhere; puerile respiration is heard on the unaffected side; pulse small and quick; tongue furred.

4th. Visited by Dr. Elliotson, who ordered

℞. Ung. iodinæ mitius (iodinæ ℥ss, adipis ℥j. ft. unguent.), lateri dextro quotidie per horam dimidiam.
Tinct. iodinæ, ♏ v.,
Potass. hydriod. gr. ij.—Ex. aq. bis die.

8th. Tinct. iodinæ increased to ♏ x., and potass. hydriod. gr. v.

11th. Respiration heard at the side of the spine, and in the front and side of the chest; less dyspnœa and expectoration.

15th. Respiration heard further down the chest; much less dyspnœa and expectoration.

18th. Can lie on the right side; respiration heard over a greater extent of chest.

Nov. 5th. The respiration is not heard below the fifth rib on the right side in front, but is audible below the same level behind.

11th. Discharged; directed to continue the ointment and medicine some time longer.

WESTMINSTER HOSPITAL.

Extraordinary Phenomena.

A middle aged man, of very athletic and robust form of body, presented himself at the hospital a few days ago, in order to show himself to the surgeons and students of the establishment. He is completely covered with a green horny substance, in the form of quills, not dissimilar to those which are produced on the porcupine. The parts, which have escaped the deformity, are his face, the palms of his hands, and soles of his feet, every other part of his person is abundantly supplied with this green horny substance. He sheds his horns annually, and a fresh crop succeeds. He has been thus afflicted since his earliest infancy, and all the male members of his family, down from the great grandfather, have been similarly well furnished. His general health is excellent, and his secretions very regular.

A model has been taken of him in one of the Borough Hospitals.

Case of Burn.

A young child was admitted a few days ago, very severely burnt about the face and arms, and presenting a most piteous appearance. The extent of the injury was very considerable, and there was a good deal of fever. The child seemed to suffer much pain, and its breathing was slightly affected. The burnt parts were dressed, and stimulating remedies administered. Large quantities of brandy were given, and flour plentifully sprinkled over the surface of the injured parts. This treatment has proved very successful in some cases of burns which have been recently admitted into the hospital.

ROYAL COLLEGE OF SURGEONS.

NAMES of Candidates who received Diplomas during the last month.

H. J. Bushell	Salisbury.
R. Smith	Aberdeen.
P. Dobson	Edgworthstown.
S. Smith	Clifton.
M. Griffin	Glinn.
J. S. Mosse	Dock-yard, Portsmouth.
W. Cass	Liverpool.
W. M. Carm	Dawlish.
J. Bortley	Bishopsgate Street.
H. Moon	Lewes.
J. Hodgson	Rawcliffe.
A. Dalrymple	Norwich.
R. Jones	R. N.
F. Cooke	Danton.
W. W. Bradshaw	Andover.
C. B. Gilchrist	Sunbury.
G. Smith	Castle Demington.
J. Woodforde	Bridgewater.
H. Baker	Malden.
T. Dyer.	Bengal.
W. Leech	Dublin.
B. Anningsen	Waltham.
H. Taylor	Hereford.
J. C. Williams	Kettering.
J. L. Roberts	Aberdeen.
T. Williams	Birmingham.
B. Dodsworth	Wheldrake.

APOTHECARIES' HALL.

NAMES of gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, January 23rd.

John Bryden	Manchester.
Thos. Frederick Brownbill	Manchester.
Thos. John Barlow Connell	———
Frederick Hobson Clark	Cranbourne.
John Leigh	Manchester.
John Charles Weaver Lever	Woolwich.
Hugh James	Carlisle.
William Morrison	Monmouthsh.
Owen Richards	Dolgelly.
Robert Uvedale West	Alford, Lincolnshire.
William Wilkinson	Hurst Hill, Yorkshire.

BOOKS.

AN Investigation into the Remarkable Medicinal Effects resulting from the External Application of Veratria. By ALEXANDER TURNBULL, M.D. 8vo. pp. . London: 1834. Longman and Co.

CORRESPONDENTS.

Dr. A. Thomson's communications have been received.

The Lecture of M. Roux has been received.

Mr. Swift.—Communications should be forwarded within the next ten days.

A Medical Student.—The rumour about a 100*l.* stamp, and 50*l.* for the diploma of the Royal College of Surgeons, is a hoax.

Medicus of Dublin.—The paper is too enthusiastic. We shall be happy to receive reports of cases.

A. Z.—The dose of strychnine is one twelfth of a grain, twice a day, in all the nervous disorders enumerated. After a few days it may be given three or four times a day.

Bibliophilos.—The arrangement of weekly journals precludes long reviews. Notices of books can only be expected, unless a production of great value is criticised.

A Reformer.—There will be an obstetric board at the Royal College of Surgeons.

METEOROLOGICAL JOURNAL.

MONTH. Jan. 1834.	Moon.		Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
22			51	53	45	29·42	29·67	82	83	W.	W.N.W.	Rain	Rain	Cloudy
23			48	55	54	29·58	29·65	85	85	W.S.W.	W.S.W.	Cloudy	Cloudy	Rain
24			55	57	47	29·75	29·65	84	83	W.	W.	Fine	——	Sleet
25	☺		53	57	46	29·91	29·97	83	79	W.N.W.	W.N.W.	——	Fine	Cloudy
26			53	55	47	29·95	29·74	79	80	S.W.	W.S.W.	——	——	——
27			49	55	38	29·63	29·57	80	78	N.W.	W.	Rain	——	Fine
28			45	51	34	29·22	29·24	78	79	W.S.W.	N.W.	Cloudy	Rain	Rain
29			35	39	34	30.02	30·15	74	73	N.	N.	Fine	Fine	Fine

50, *High Holborn.* WILLIAM HARRIS and Co.

ALL Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 106. SATURDAY, FEBRUARY 8, 1834. Vol. V.

LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXV., DELIVERED MARCH 26, 1833.

Gentlemen,—One circumstance, proving the connexion of cancer with constitutional causes, is the greater frequency of the disease in women, who bear no children, than in others who have families. This is a fact universally known and admitted; yet a female may have children, and even many, without being safe from an attack of the disease. One woman, I think, is mentioned by Sir Astley Cooper as falling a victim to cancer, though she had been pregnant not less than seventeen times. I have attended several women, who died of cancerous uteri, notwithstanding they were mothers.

Then, gentlemen, with reference to the prognosis and treatment of scirrhus and cancer, I may observe, what no doubt you are already well apprised of, that they are amongst the most intractable and fatal forms of organic disease to which the human body is liable. When you consider scirrhus as a a new formation, as an adventitious growth or deposit, accompanied by the peculiar texture, which I have endeavoured to describe, you must naturally be led to suspect, that it is not a case over which medical surgery can have much power. Indeeed, it is the belief of the most experienced and careful observers, that cancer, whether in the form of scirrhus, or carcinomatous ulceration, is absolutely incurable by any means except those plans, which bring about the total removal or absolute destruction of the parts affected. And even when this is done, a recurrence of the disease, either in the neighbouring tissues, or in remote parts and organs, will follow in a considerable proportion of the cases thus treated; another fact, confirming the truth of the doctrine, that cancer is a disease dependent on constitutional causes. When a cancerous disease is so situated as to admit of being entirely removed by means of the knife, no time, I think, should be lost in attempting to disperse the induration, or cure the ulcer, by other means. It is only while doubts prevail about the true character of the complaint, or while it is in a very early stage, that it is generally advisable to try plans which have in view the dispersion of the hardness, or the healing of the sore by external or internal remedies. The ground, on which I presume to offer you this advice, is, that all the medicines and applications, described in every pharmacopœia in the world, have already been tried for the relief and cure of cancer in thousands of instances, without the slightest advantage; and in innumerable cases, the time employed in the trial of them has afforded an oppportunity for the disease to extend from the part originally attacked, and which might easily have been taken away at first, to other parts not admitting of removal, and the patients have died, without having had that chance of being saved, which a timely operation would have given them.

You will occasionally hear and read of cancerous affections being cured by various medicines and applications. But the question is, whether they were diseases really attended with the true scirrhous formation and structure, or genuine carcinomatous ulceration? Numerous swellings, indurations, and ulcers, have more or less resemblance in their outward characters to scirrhus and cancer; and such are sometimes dispersed, or healed; but that a disease, accompanied by the genuine scirrhous texture, the heterologous substance that distinguishes it, can be cured by medicine, or any local means, not acting so as to destroy the part affected like caustic, is a proposition, against which the voice of experience is loudly raised.

Believing in this fact myself, I shall be brief in the enumeration of a few of the principal medicines, which have been repeatedly praised for their efficacy in scirrhous and cancerous cases; for, according to the view, which I have taken of the subject, they have been ex-

tolled without good foundation, and, in the trial of them, other diseases have been generally mistaken for those now engaging our attention. First let me mention *conium maculatum*, or *hemlock*, at one time praised up to the skies as a remedy both for cancer and scrofula. Then the extract of *belladonna*, a medicine which can only be given in very small doses, the effect of which is not to cure or stop scirrhus, or cancer, but to diminish the pain of the complaint. This is the most that can be said in favour of belladonna. Next I may notice *arsenic*, Fowler's solution of it, or the liquor arsenicalis of the London Pharmacopœia. I have frequently given it the fairest trial in cases of scirrhus and cancer; and am sure, that it has no power over them, though certain troublesome and inveterate ulcerations and tubercular diseases about the nose, lips, and other parts of the face, and on the tongue, will sometimes yield to it. Certain malignant looking sores on the face, reputed to be of a cancerous nature, were cured, under Mr. Carmichael, by exhibiting the *carbonate* or *phosphate of iron*, with the occasional use of purgative medicines. The dose of these preparations of iron varies from ℈j. to 3j. twice a day. They are now generally acknowledged to possess no specific virtues against true scirrhus and cancer. As for *mercury*, though it has the power of promoting the absorption of various indurations, and of curing different forms of the most obstinate ulceration, no modern surgeon has any confidence in its usefulness as a medicine for cancer. When the digestive organs are disordered in a patient with a scirrhous affection, when the hepatic functions are deranged, sometimes small doses of the blue pill, or compound calomel pill, with leeches on the epigastrium, or hypochondrium, and aperient medicines occasionally, will improve the general health, and put the patient into a better state for an operation; but neither this, nor any other medical plan, will serve to disperse a true scirrhus. The *muriate of barytes* has been tried, but it is now given up, as entitled to no confidence. Living altogether on a *milk*, or *vegetable* diet, or a diet just sufficient to keep the body and soul together, something very nearly approaching to starvation, is one of the schemes which have been resorted to. In the periodical works of the day, you will read of cancerous diseases yielding to *iodine*. At the Bloomsbury Dispensary, we have frequently tried it for such complaints in the breast, uterus, and lips, but without success.

Amongst the favourite *topical applications*, is the *liquor arsenicalis* properly diluted. *Arsenical pastes* are dangerous applications. I remember a patient being poisoned with them; he had a cancerous ulcer of the face; the surgeon covered it with the paste; and he died in a few hours from the absorption of the arsenic, and its deleterious effects on the system. If you are bold enough to attack cancerous diseases with caustic (which I am not) abstain at all events from arsenic, and employ *pure potash*, though, I think, you will often kill the patient even with this.

Narcotics, in the form of plasters, are sometimes employed, particularly *opium*, *conium*, *hyoscyamus*, and *belladonna*, blended in various proportions with the ordinary brown soap plaster. The *watery solution of opium*, and the *liquor opii sedativus*, you know, are common applications for all kinds of malignant ulcerations. In addition to these articles, I will merely refer to *carrot poultices*, *fermenting poultices*, *a solution of* ℥j. *of the sulphate of iron in* lbj. *of distilled water*; a *paste* composed of *carbonate of iron* blended with water, or sprinkling the ulcer with the powder; the solutions of the chloride of *lime and soda*; and covering the scirrhous part with a piece of hareskin, or fleecy hosiery, so as to protect the disease from the influence of vicissitudes of temperature, and the injurious effects of accidental blows.

Now, gentlemen, as none of these plans and medicines will cure cancer, you are obliged to consider what benefit may be obtained by extirpating the diseased part.

If the operation be done early, and performed on the principle of removing, not merely what is obviously diseased, but a good deal of the substance around the scirrhus or cancer, the result will frequently be a permanent cure, as far as that part is concerned. But the cure is not a certain thing. Indeed, after a cancerous tumour has been extirpated, whether the disease be indolent, or painful, small, or recent, there is no certainty that the disease will not return. On the other hand, it is not certain that the disease will return, even when it has made considerable progress previously to the operation. But, it is an undoubted fact, that the more recent the disease is, the less are the chances of relapse.

Hence, as you have no medicine which will cure scirrhus and cancer, you should recommend an operation for their removal as soon as no doubt exists about their nature. The prospects of the permanent success of the operation will also be greater, if, after its performance, you do not immediately think that every thing has been done that ought to be done. On the contrary, men of great experience find, that keeping the patient for some time afterwards on an alterative plan of treatment will materially lessen the risk of a relapse.

When it is impracticable to remove the whole of the diseased parts, it is a rule in surgery not to undertake an operation at all. The partial extirpation of a true scirrhus, whether by caustic or the knife, is sure to convert the disease into a fatal painful carcinomatous ulcer.

Another maxim in surgery is, never to perform the operation for the removal of a cancerous tumour when there is reason to believe, that the disease is not confined to the part, but has already extended itself to glands and several other textures more or less remote from the original seat of the disease.

What good can arise from cutting away a cancerous breast, when, perhaps, all the absorbent glands about the axillæ, neck, and within the sternum, are similarly affected? Where can be the prudence of cutting away an external scirrhus when there are cancerous depositions in the lungs, liver, bones, or other deep-seated textures?

Surgeons do not decline to operate when the axillary glands are diseased together with the breast; and when the whole disease in each situation can be thus removed, I consider the practice right; but, certainly, the extension of the disease to those glands very materially lessens the chance of a permanent cure. It shows, that the diseased action has passed to organs more or less remote from the original affection, and that the system may be inveterately under its influence. The celebrated Camper believed, that a sure sign of the incurability of a cancerous breast consisted in a shooting pain between the second and third ribs. He was convinced, that such pain denoted the extension of the disease to the lymphatic glands under the sternum. Gentlemen, let me advise you always to prefer the knife to caustic for the extirpation of cancerous diseases.

Is it right to operate when the disease is in the ulcerated state? The answer must depend upon circumstances. If the whole of the diseased parts can be removed, if the viscera of the chest and abdomen appear not to have suffered, and the lymphatic glands are not extensively affected, the operation is justifiable, though its chances of success are much less than those where the case is only a scirrhus, under similar conditions. The lips, however, have been removed in the ulcerative stage, without the disease afterwards extending itself to the submaxillary glands, or any relapse taking place. The same fact has been exemplified after the extirpation of portions of cancerous tongue.

When the opportunity for operating has passed away, palliative treatment is all that can be attempted. Appeasing the pain by the application of the watery solution of opium, or dressing the ulcer with the liquor opii sedativus, or with an ointment containing ʒj. of the powder of opium in every ounce of lard, are very rational methods. I had one patient lately with a dreadful carcinomatous ulceration of the breast. She found no dressing afford her so much ease as the common spermaceti ointment. The fœtor may be lessened by applying the chloride solutions; but they give not the ease derived from other dressings. To a scirrhus which it is not judged advisable to remove, you may apply soap plaster, containing a proportion of the extract of belladonna or hyoscyamus; or you may simply cover the part with a piece of soap plaster or soft fur. On account of the pain, the acetate or muriate of morphia may also be prescribed. This practice is most particularly called for in examples of ulcerated cancer. Where the agony is great, the disease is generally incapable of removal by the knife; and all that can be done is to render the patient's journey to the grave more free from misery.

The success of an operation will materially depend upon the whole disease in the part—every atom of it—being completely extirpated. I recommend you, in particular, always to make a free removal of the skin and cellular membrane around a scirrhous tumour, as the ligamentous bands frequently extend to a considerable distance around the perceptible induration and swelling. In a certain number of instances, a relapse will unfortunately take place, whatever be the precautions taken in the performance of the operation. The chances of recovery, however, are much greater after an early operation, when the disease has made but little progress. The prospects of a radical and permanent cure are also more promising when the operation has been properly performed, and strict attention is afterwards paid to the patient's general health. Hence, when you take away a scirrhus, do not think that you have fulfilled the whole of your duty to your patient; but give him such medicines, and keep him on such a regimen, as may be likely to produce a beneficially alterative effect on the constitution.

When the disease extends only to one or two of the axillary glands, and the patient seems to be free from organic disease in the chest and abdomen, you may perform the operation; but you will have to remove the diseased gland or glands in the axilla with the knife, after you have extirpated the scirrhus of the breast. The chances of recovery in such a case, however, are not equal to those in which the breast alone is affected.

The next specific disease, gentlemen, which I mean to describe to you is *fungus hæmatodes*. This was so named by Mr. Hey, in consequence of its tendency to throw out, with great rapidity, a large bleeding fungus-like substance, after ulceration of the skin has taken place. It is sometimes called *soft cancer;* and, by Mr. Abernethy, was named *medullary sarcoma*, from the resemblance it bears to the medullary substance of the brain. It is, in fact, very similar to the substance of the brain in all chemical and physical properties. Commonly it presents itself in masses, contained in fine membranous partitions. It is generally of the same consistence as the cerebral medulla; but, sometimes, it is much softer. It varies also in colour: in some instances it is quite white; in others light red; and it has occasionally been found to be of a deep red colour. A section of the tumour exhibits numerous bloody points. When superficial, it begins as a colourless swelling, soft and elastic to the touch, unless bound down by a fascia, in which case it has a firm tense feel. When immediately subcutaneous, it is elastic, and hence liable to be mistaken

for a tumour containing fluid. When it occurs in the testicle, it is frequently supposed at first to be hydrocele.

Like cancer, it has a tendency to spread to the absorbent glands, which become converted into a similar substance. In every sense of the expression, it is a new formation, an adventitious growth, whether situated in the cellular membrane, in the tissue of the muscles, in that of the viscera, or within the orbit, or in any cavity or on any surface of the body. When it occurs in deep seated parts, it has an invariable tendeney to make its way to the surface, and when this happens, a considerable swelling arises, the skin at length becomes thin and discoloured, and from being at first smooth, now projects irregularly; openings are formed in these projections, and a medullary growth springs up, which sometimes bleeds profusely. It is only at this period of the disease that the name of fungus hæmatodes is at all applicable; and even now it is not very correct, as the mass is not a fungus, but usually a substance of medullary consistence. As far as I have observed, medullary sarcoma is a constitutional disease, and rarely confined to one organ. It has been observed in the lungs, the heart, the liver, the spleen, the kidneys, the uterus, the ovaries, the mammæ, the mesenteric glands, the dura mater, and the thyroid gland, of which there is a fine specimen in Mr. Langstaff's museum. We have before us many specimens illustrating this disease in various parts of the body. Here is an instance of fungus hæmatodes of the kidney, taken from a child only two years old. Here is a preparation, in which the disease is seen enveloping the head of the tibia; it was likewise taken from a child, and I may now remind you again, that this disease is frequently seen in children. The next preparation shows the extension of the disease from the antrum to the brain, through the orbital plate of the ethmoid bone. Fungus hæmatodes appears, then, to be a disease of the whole system, and hence the generality of operations, undertaken for its extirpation, have not had the desired effect.

An early symptom of this terrible and very common organic disease, is a wan, pale complexion, such as is remarkably indicative of what may be termed a fatal organic disease. The patient generally dies hectic. One of its differences from cancer is, that it contains within its substance no ligamentous bands, or central hard nucleus, but consists of a soft pulpy matter contained within septa, composed of a fine delicate membrane. In order to be able to see its structure well, you should subject it to maceration or the action of alkalies. Now a scirrhous tumour is generally firm, hard, and incompressible from the very first; whereas there is a softness and elasticity about fungus hæmatodes, at once constituting quite a different character. The parts in this latter disease are not destroyed by ulceration, as in cancer. Fungus hæmatodes frequently attacks the liver, the spleen, the kidneys, and lungs, *primarily;* whereas it is alleged by some pathologists, that cancer only attacks these organs *secondarily;* a point, however, deserving of further investigation. Fungus hæmatodes is a disease of young subjects, and persons below the middle age, whereas cancer chiefly attacks individuals between the ages of forty-five and fifty, or older persons. With regard to the treatment of fungus hæmatodes, we know of no medicine which can correct the state of the constitution upon which this disease depends. The only chance we have of curing it is by the removal of the tumour at an early period of its formation, before the lymphatic glands and several other parts of the body have become affected. Thus, if the disease has extended up the spermatic cord, castration will be of no avail. I am of opinion that the viscera generally become diseased much sooner in cases of fungus hæmatodes externally situated, than is generally supposed. I am now speaking of that form of fungus hæmatodes, which comes under the care of surgeons, where the surface of the body, or the limbs are the seats of the disease. The fact, which I have just now mentioned, partly accounts for the general failure of operations. Fungus hæmatodes, as I should have explained, sometimes attacks the bones, commencing in the medullary, or cancellous texture, destroying their walls, and then making its way, by the annihilation of other tissues, to the surface.

Notwithstanding there is every reason for believing fungus hæmatodes to be a constitutional disease, and we find that, after an operation, there is usually even a greater disposition to relapse, than is manifested in examples of scirrhus and cancer, experience occasionally brings forward cases forming exceptions to this statement. I removed a testicle affected with fungus hæmatodes from a man more than two years ago; yet he remains perfectly well; and you will sometimes hear of the same disease in the eyes, breast, and limbs, being effectually extirpated by operation, without being followed by any return of the complaint. Unfortunately, the contrary more generally happens, so that the prognosis, which you deliver, should be qualified by a reference to this important fact.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE VII.

Organic Disease of the Stomach—Diseases of the Digestive Tube.

GENTLEMEN,—In speaking of the employment of counter-irritation in cases of chronic

gastritis, I forgot to mention the use of friction with croton oil, which has been found beneficial in many cases of chronic inflammation. It has been extensively used by many practitioners in the treatment of chronic affections of the joints, and in various forms of pulmonary disease; and I have employed it myself in some cases of chronic gastritis with benefit. I cannot say that the cases in which I have used it presented all the symptoms of chronic gastritis, but they were certainly cases of chronic gastrodynia, with severe local pain, nausea, and loss of appetite. It is an excellent counter-irritant, and gives very little pain. The mode in which I employ it is this,—take a few drops of croton oil, five or six, for instance, drop them on the epigastrium, and rub them in with a piece of lint or bladder, interposed between your finger and the skin, and the next day you have an eruption of small papulæ, which you can increase at will. There is one interesting circumstance connected with the use of croton oil frictions, which you should be made acquainted with. The liability to produce counter-irritation, seems to depend upon the absorption or non-absorption of the croton oil; if it be absorbed it will purge, but if it be not it will produce counter-irritation. In cases of this kind, therefore, where it produces the necessary degree of irritation in the skin, the chances are, that it will not act disagreeably by bringing on catharsis. I have only seen one case where there were both the eruption and catharsis. This was a gentleman who had lately suffered from dysentery in warm climates.

I may also mention, that, in convalescence from an attack of chronic gastritis, you must pay great attention to diet for a long time, because there is no affection of any organ in the body, in which an error in diet so rapidly induces a return of the original symptoms, as in disease of the stomach, while each return of the disease renders the attack more dangerous and unmanageable, until at last disorganisation takes place.

This leads me to speak of organic disease of the stomach. On this subject I shall be very brief; the best mode of communicating information will be to exhibit these preparations; you will derive more instruction from their inspection than from any lecture I could deliver. (Dr .Stokes here exhibited a number of beautiful preparations, from the Park-street museum, illustrative of various organic lesions of the stomach.) Here is a case, which some pathologists would call cancer, others chronic gastritis. I may remark here, that pathologists are divided as to what is the cause of cancer of the stomach, but the best informed are of opinion that, in those cases of gastric disorganisation, which are called cancer or scirrhus, all that can be demonstrated by the knife is referable to the results of chronic inflammation. This is a different proposition from saying, that chronic inflammation *alone* will produce cancer. As yet we know little of cancer; dissection of cancerous organs gives but scanty information; but this seems certain, that, in particular conditions of the economy, an inflammation of the stomach will end in cancerous disease. Here is an excellent preparation of the stomach of a person who died of cancer of that organ. For several years before his death he had a jaundiced look, an emaciated appearance, frequent vomiting, and severe pain towards the termination of the digestive process, a circumstance which denotes disease of the pylorus. He also had hæmatamesis. You see the inner surface in the vicinity of the pylorus presents ulcerations of the mucous membrane and thickening of the sub-mucous cellular tissue. The pylorus itsef does not appear to be at all contracted, but the parts around it are in a state of extraordinary disease. Look at the preparation again, and say what could bitters, or acids, or alkalies, or tonics have effected in a case of such extensive disease. Here is a stomach, in a state of long continued chronic inflammation, and exhibiting lesions, which some would designate as cancer of that organ. Now, though I do not know the treatment which this patient underwent, I would venture to say, that he took plenty of the usual anti-dyspeptic medicines. Yet in a vast number of cases, where enormous quantities of these remedies are taken daily, the stomach is in as bad a state as that preparation exhibits, and I feel the more strongly convinced of this, because I am aware that many persons die after having gone through the whole routine of anti-dyspeptic practice, and, when they are opened after death, incurable disease of the stomach is discovered. Here is an example of vast cancerous disease of the stomach; here is a very interesting specimen of chronic gastritis, chiefly representing a most remarkable and circumscribed ulcer at the termination of the stomach. Here you see is the ulcer, with raised, thickened, and introverted edges. Now, in all probability this ulceration was exceedingly chronic, for you percive nature has been at work with it, and has made some attempts at reparation. It is in such a case as this that patients generally refer their pain to a particular part of the stomach: digestion goes on without any pain until the food reaches a certain point, when acute pain is felt, and this continues until it is relieved by vomiting. The occurrence of this symptom, after an attack of acute gastritis, would lead you to suspect the formation of one or more ulcers, and the persistence of this localised pain should induce you to persevere in employing every means in your power calculated to remove the disease. The preparation which I now exhibit is interesting, as it shows the effect of corrosive poison on the stomach. The patient, to whom this stomach belonged, died in consequence of swallowing a quantity of sulphuric acid; here you see the consequences, the mucous

membrane is black and disorganised, exhibiting this ragged appearance. In some cases of malignant fever we have found the stomach presenting somewhat similar appearances; and the same state of the stomach is described by some writers as occurring in cases of intertropical fever. Here is a preparation, which you should inspect, chronic gastritis with a large ulcerated patch in the centre of the stomach. Here is another example of extensive cancerous disease.

A very few words will suffice for the state of the science on the subject of cancer of the stomach. It is very hard, nay, even almost impossible, to draw a line of distinction between the symptoms of cancer of the stomach and chronic gastritis, and I believe it is admitted on all hands that the same causes give rise to both. Long continued irritation will, in one case, produce cancer of the stomach, in another, chronic gastritis. Again, it is admitted by many, that what is called cancerous ulceration of the stomach has no appreciable difference from ulceration in various other organs; and hence some persons have gone so far as to say that there is no such thing as cancer of the stomach (separately considered); and that all the cases adduced of it are nothing more than so many forms of chronic gastritis. In the present state of medicine, we are not, indeed, possessed of any data which would enable us to come to a final determination on this question. It is certainly impossible to determine this point; but if there be anything peculiar in cancerous matter, similar to tubercular or melanotic matter, there is no reason why, under the influence of inflammation, it should not be developed in the stomach, as well as in any other part of the body. But whatever views we entertain on this subject, we must confess that, in the majority of cases, there is a chronic gastritis, and that the principles of treatment which would alleviate the patient's sufferings and prolong life, *are those which are calculated to prevent the occurrence of gastric inflammation*. The more you approximate the treatment of cancer to that of chronic gastritis, the greater comfort will you afford your patient, and the more will you prolong his existence.

The most celebrated case on record of this affection is that of the Emperor Napoleon. He died with extensive ulceration of the stomach, which, of course, was called "*cancerous*," and there were also distinct traces of disease in the liver, the mucous coat of the intestines, and the lungs. His disease was believed by himself to have originated in the stomach, and to this opinion he adhered, notwithstanding the results of some solemn consultations, at one of which his affection was declared to be an "*obstruction of the liver*," with a "*scorbutic dyscrasy*." At another it was pronounced to be a "*chronic hepatitis*," and a course of mercury recommended! When we reflect on this, and read in the account by Gaubert (which you will see in the *Examen des Destinies Medicales*), the regimen which was used, and the list of stimulating medicaments employed, you will not wonder at the words of this great man, when he was pressed to take more drugs, to swallow the universal nostrum, mercury, to which he had the greatest aversion. "Your disgusting preparations are good for nothing. Medicine is a collection of blind prescriptions, which destroy the poor, sometimes succeed with the rich, but whose whole results are more injurious than useful to humanity." But he got mercury, notwithstanding, mercury for his "digestive organs;" to "excite the liver;" to "remove its obstruction," and mercury to create bile, and purgatives to remove it; and tonics, and antacids, and stimulants; and he died in torture, and his body was opened, and the stomach was found "*cancerous*."

I should not omit mentioning to you, that in those cases of chronic gastritis, which run on to an incurable stage, the best treatment consists in a careful regulation of diet, in keeping the bowels open by enemata, or the very mildest laxatives, and in avoiding every thing capable of producing excitement. You will also derive advantage from the employment of gentle counter-irritation, and from the internal use of narcotics, which in such cases appear to have a more beneficial effect than any other class of remedies. With the exception of these, I do not know any other kind of medicine you can safely employ? and I believe that, in the majority of cases, you will find that the patients have taken already a great deal too much medicine. Anxious for relief, and urged on by the hope of obtaining some remedy capable of alleviating their sufferings, they have recourse to every grade of quacks, are persuaded to swallow every kind of drug, and are subjected to every form of harassing and mischievous treatment. The diet which you prescribe for such patients should be sparing but nutritive; give the stomach as little to do as will be consistent with the support of life and strength; and you may take it as a general rule in the treatment of all chronic affections of the digestive tube, whether cancer of the stomach, scirrhus of the pylorus, or stricture of the intestines, that there are two great principles of general application, preserving a gently open state of the bowels, and allaying inflammatory excitement.

Let us now proceed to the remaining parts of the digestive tube, of which the next in order is the duodenum. I shall not dwell much to day on the subject of duodenitis, because I shall revert to its consideration when speaking of jaundice, because inflammation of the duodenum is a common cause of jaundice, perhaps the most common, if we take the whole of its cases together. You are not to suppose that I wish to inculcate the doctrine that jaundice is a necessary complication in duodenitis, but it has been proved, that there is an extraordinarily frequent concidence between both,

and that jaundice very often seems independent of any mechanical cause, such as an obstruction of the biliary ducts. So far from this, that, in some cases, particularly those which are produced by, or accompany, a duodenitis, we have intense universal jaundice at the same time that the bile is flowing freely into the digestive tube.

The researches of the immortal Bichat gave the first hint which directed the attention of practitioners to the circumstance, that, in many cases where jaundice had existed during life, there was no obstruction or disease in the liver or biliary ducts, but that in such cases there was always more or less inflammation in that part of the digestive tube, into which the bile was immediately discharged, and this led ultimately to the discovery of the connexion which exists between inflammation of the duodenum and jaundice. In treating of the sympathies which depend upon continuity of surface, Bichat refers to the connexion which exists between the surfaces of mucous membranes and the ducts which open on them, and endeavours to show, that the natural mode of excitement in all secreting glands is a stimulus applied to the surface on which their ducts open. As examples of this, he instances the effect which food and other substances, applied to the mucous membrane of the mouth, have in stimulating the salivary glands; the effect which stimulants, applied to the conjunctiva or nose, have on the lachrymal gland, and many others. Hence Broussais concludes that, when the mucous surface of the duodenum is thrown into a state of excitement, we may have a consequent affection of the liver, for the duodenum bears the same relation to the liver as the mouth does to the parotid glands. That this is frequently the case, I think, is very probable. It is now established, that the cause of the yellowness in what has been called yellow fever, is disease of the upper part of the digestive tube, in which the duodenum is always involved; and that the fever itself (the typhus icterodes of the nosologists) has been found to be greatly connected with inflammation of the stomach and duodenum. During the epidemic of 1827, we had in the Meath Hospital a great many cases, which bore a striking resemblance to the yellow fever of warm countries, and particularly in this, that they were accompanied by intense jaundice, and inflammation of the upper part of the digestive tube. You will see in the works of Rush and Lawrence, two of the best American writers on yellow fever, that, of the numerous bodies they examined, there were scarcely any in which the jaundice was found in connexion with liver disease, but that in all cases there was intense inflammation of the digestive surface. I shall return to this subject when I come to speak of liver disease.

With respect to the jejunum, I may state that we know very little of the symptoms which characterise inflammation of this part of the intestinal canal; and it is a curious pathological fact, that this portion of the tube is, of all others, the least liable to inflammation.

In point of fact, we have no means of ascertaining what are the prominent symptoms of inflammation of the jejunum, because, in almost every case in which jejunitis has been discovered, there has been also extensive disease of the rest of the small intestine. We have cases of simple gastritis; there have been also cases of distinct disease of the duodenum. We may have disease in the lower third of the ilium, unaccompanied by an affection of any other part of the tube. The same thing may occur in the case of the cæcum, colon, or rectum, but it seldom or never occurs so far as the jejunum is concerned. I shall therefore pass over jejunitis, and proceed to draw your attention to one of the most important diseases to which the human subject is liable—*inflammation of the ileum*.

Inflammation of the ileum is a most important affection, for two reason; first, in consequence of its extraordinary frequency, and, in the next place, of its insidious latency, the disease generally requiring a considerable degree of tact and experience on the part of the practitioner to make out its diagnosis with certainty. In fever, it is the most frequent of all the forms of intestinal inflammation; and hence Broussais, finding inflammation of the ileum of such constant occurrence in fever, concluded that fever was only symptomatic of intestinal inflammation. Further researches have shown that he was mistaken, and that the inflammation of the digestive tube is, in many cases, secondary; but it is still a circumstance of almost constant occurrence, and in many cases of fever is the cause of death. Now, the portions of the intestinal tube most commonly affected in fever are, the stomach and lower part of the ileum, and the frequent occurrence of this in fever is very remarkable. There are few cases of typhus without it. In some cases of typhus you will, on examination after death, be astonished to find extensive disease of the intestinal canal, which, during life, had not attracted any particular notice, and this you will most commonly find in the lower part of the ileum. So common is it, that Louis says that ileitis is the grand anatomical feature of typhus fever; that is, had he been obliged to pitch on the lesion of some particular organ as giving a character to typhus, he would say that it was ileitis. There are other diseases, too, in which inflammation of the ileum forms the principal complication. In the diseases of children, which go by the names of worm fever, remittent fever, and bilious fever, I believe that ileitis is generally the first affection, and that the fevers are only symptomatic of it. It constantly occurs at some period or other of tabes mesenterica; and I believe, that in many cases it precedes the affection of the mesenteric

glands. It is exceedingly common in phthisis. In every case of phthisis, where diarrhœa has lasted for some time, the probability is, that there is ulceration in the cæcum, colon, and lower part of the ileum.

Now, what is the nature of this ileitis? This preparation (*handing one for inspection*), which I beg of you to hand round, will furnish a very good illustration of the disease. Here is a portion of the intestine exhibiting various distinct ulcerations of different sizes, occupying the situation of the mucous glands. I do not mean to say, that the character of the disease consists in this distinct ulceration; it is an essential disease of the mucous membrane, and of its glands, which exist in great numbers on the surface of the lower third of the ileum, and are called *solitary* and *aggregate*. These glands frequently take on the inflammatory condition, become softened, run into ulceration, and produce extraordinary sympathetic irritation of the whole system. There has been lately a great deal of discussion with respect to the question — Whether disease begins in the glands or in the mucous membrane, and whether we can separate disease of the glands from disease of the mucous membrane. This has been carried to a great extent; and a change has been attempted to be made in the name of the disease, it being entitled *dothin-enteritis* by those who say that the inflammation commences in the glands. But this I think is a mere refinement, and is carrying the thing too far. It is next to impossible for the glands to be affected without involving the mucous membrane, or for the mucous membrane to be affected without an extension of the disease to the glands. We sometimes, however, see the mucous membrane diseased without the glands being apparently engaged; but I think the glands are never engaged without the co-existence of disease in the mucous membrane. In this preparation you see the mucous membrane is just giving way; and here is an actual slough, where the mucous and submucous tunics have yielded to the inflammation. In the lower portion of the ileum we meet with an infinite variety in the size and number of the ulcerations: in some they are very close and numerous, in others there are only two or three detached ones; in some, the whole circle of the intestine is destroyed, and the ulcer is nearly as broad as the palm of your hand. It is interesting to consider, with respect to the pathology of the respiratory and digestive systems, how it comes, that ulceration of the mucous membrane is so much more common in the digestive apparatus than in the respiratory. For one ulceration of the bronchial mucous membrane from acute disease, you will have one hundred of the gastro-intestinal. For this peculiarity we cannot clearly account; but there seems to be more development in the digestive than in the respiratory system, and that this over-development produces a tendency to disease. This, perhaps, is an approximation to an explanation of the facts; and to this may be added, that the mucous membrane of the intestines is exposed to the influence of a much greater variety of agents. It is difficult to give an accurate idea of the symptoms of ileitis, as we can only arrive at a knowledge of it by negative evidence, or, as the French term it, "*par voie d'exclusion.*"

In a case of gastritis and of inflammation in the upper part of the digestive tube, the most prominent symptoms are thirst and vomiting. In this affection, too, there is thirst, but it is by no means so urgent as in the former cases, and there is generally no vomiting. In a case of acute gastritis there is always a desire for cold drinks. In this disease there is also a desire for fluids, but the patient prefers them warm. Here you perceive two symptoms, connected with the predominance of disease in the upper part of the digestive tube, are absent—vomiting and the desire for cold drinks.

Now, you are aware, that, in a case of inflammation of the colon and rectum, the most prominent symptoms are diarrhœa, tenesmus, and the passing of a quantity of morbid secretions. These symptoms, in a case of ileitis, are either wanting, or they are so slight as to excite but very little notice. If, then, in a case of intestinal disease, we abstract the characteristic symptoms of disease in the upper and lower part of the digestive tube from the phenomena of the existing disease; if we find that it presents symptoms which do not properly belong to either the stomach, duodenum, colon, or rectum; we conclude that it must depend on a lesion of the remaining part of the canal, and we are, in this way, led to the diagnosis of ileitis. Let us enumerate the symptoms of an ileitis. In the first place, thirst, without a preference for cold drinks; in the next, absence of vomiting; again, in the early period of the disease, there is generally a tympanitic state of the belly, and the patient seldom complains of pain even in fatal cases. This a point of extreme importance. There is, however, most commonly a degree of tenderness over the ileum, which you will be able to detect by an accurate examination, and this tenderness presents a remarkable difference from the tenderness of gastritis, both in degree and situation. It is very seldom so exquisite as in a case of gastritis, the patient can bear a considerable degree of pressure, and the tenderness, in place of being towards the epigastrium, is situated between the umbilicus and the crest of the ileum on the right side; here pressure excites pain. The tongue in this affection is generally of a dirty white, pointed, and red along the edges and tip; the pulse is quick and small, and the face is contracted. As to the nature of the discharges from the bowels they are exceedingly various; there has been as yet no diagnosis founded on their appear-

ance, and in some fatal cases they have been observed to retain an almost perfectly healthy appearance throughout. What would the gentlemen, who draw their diagnosis from chamber-pots, say in such cases? I have seen perfectly natural stools in cases, which immediately after have terminated fatally, and where, on examination after death, there was a vast extent of ulceration in the ileum. In addition to the symptoms just recited, the patient most commonly has *fever*, and this presents itself under various forms, frequently assuming the type of a simple continued fever; hence, in a great many cases, *the patient is merely supposed to labour under simple continued fever, and the existence of extensive inflammation of the ileum is entirely overlooked.* In other instances, there is more or less prostration, which increases with the progress of the disease, and the fever frequently receives the appellation of typhoid. Under these circumstances, the patient often gets bark and wine, every means is taken to support his strength and remove the typhoid condition of the system, the inflammation of the intestine is exasperated by neglect and mal-treatment, the patientt dies, and, on dissection, the ileum presents an enormous sheet of ulcerations.

In cases of this kind, where the diagnosis depends as much on negative as on positive circumstances, it is of importance to have a direct sign, by which we may be able to ascertain with some degree of certainty the existence of a suspected enteric inflammation, and I think I have discovered one, which I believe has not been as yet noticed; this is increased pulsation of the abdominal vessels. In many cases of acute inflammation of the brain, the increased pulsation of the carotids has been frequently remarked, and every one sees that, under such circumstances, there is an undue excitement of these vessels, or, in other words, that there is a want of proportion between the action of the carotids and that of the arteries of the extremities. If your finger be attacked by paronychia the same phenomenon is observed, the artery leading to the inflamed finger beats much stronger than the artery of the corresponding one on the opposite side. From these circumstances I was led to conclude that, in cases of acute inflammation of the digestive tube, there would be increased pulsation of the abdominal aorta; and, on following up the investigation, by examining several persons who had distinct and well marked intestinal inflammation, I found that my conclusions were well grounded. In such cases, I found not only a remarkable throbbing of the abdominal aorta, but I also discovered that this throbbing was prolonged to the femoral arteries, and that, on the other hand, there was little or no corresponding excitement in the arteries of the upper extremities.

CLINICAL LECTURES

DELIVERED BY

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At the Westminster Hospital.

LECTURE IX.

On the Anatomy and Diseases of the Bladder and Urethra.

GENTLEMEN,—There were two cases in this hospital some short time back, proving the observations I have made to you. In the first instance, a man was brought in very ill, indeed almost in a dying state with comlete retention of urine and died, Mr. Taylor, your late house-surgeon, dissected the parts carefully. This person had but one stricture, which you see at three inches from the orifice of the urethra: it is narrow, but complete; and the canal is so much dilated behind it, that a golden pippin of a large size might have been readily placed in it. Nothing was done for this man by those he consulted before he came to the hospital, nevertheless, the simplest puncture by a lancet pushed into this dilated part would have saved his life, if it had been done in proper time. This is one of the best cases I have seen to show the way in which the urethra will dilate behind a stricture, and, at the same time, the corresponding thickening of the coats of the bladder. It is an admirable instance of bad surgery, and demonstrates the necessity that exists for some legislative interference, which shall cause persons, who call themselves surgeons, to be at least reasonably educated; so that, when a man takes upon himself the office of a surgeon, the poor and the ignorant, who may not know much about the matter, may place some reliance on the fact of his having some knowledge of the art, if not of the science, of his profession. I was sent for, about four years since, to Market Street, beyond St. Albans, to see a man nearly in a similar situation. The scrotum was greatly swollen, and was half as large as my head. The urethra, just where it begins to be covered by it, was dilated, so as to form a distinct protuberance, and the skin covering it was black. Nature was going to relieve herself, by making an exit for the urine, by destroying the parts posterior to the stricture by mortification. The ulcerative process necessary to complete the object had, however, allowed the urine to escape into the cellular membrane of the scrotum. The man seemed to be dying, and there was no time to lose. I therefore at once cut into the urethra, through the slough and through the stricture. The gush of urine which followed gave complete relief. I then made several incisions into the cellular tissue of the scrotum, and squeezed out as much as possible of the urine, introduced a catheter into the bladder through the whole length of

the urethra, and returned to London, not expecting to see him again. He called on me, however, some three months afterwards, in good health; the scrotum had not sloughed so much as might have been expected, for which he was indebted to the free incisions made into it. The urethra had contracted again, and the parts were in many respects deformed, but he felt quite satisfied, and grateful for his life preserved.

The other preparation is also from a person who died in this hospital of inflammation of the lungs. As he was known to suffer from great difficulty in making water, I had the diseased part of the urethra removed. The stricture is a narrow one, at five inches from the orifice, and would only admit the point of a large lachrymal probe to pass through it. This small opening was at the upper and outer part; the urethra behind was not, nor is not in the slightest degree dilated, although he had, for some years, laboured under the complaint. I am induced to believe, from these and other similar cases, that the anterior and posterior parts of the urethra dilate more readily than the middle portion.

A stricture of the urethra is, then, I believe, always a result of inflammation; for, although in some few individuals, the origin may be apparently doubtful, I am inclined to believe, that, if the patient's early history could be accurately investigated, or ascertained, the disease would always be found to have been preceded by inflammation. I have known stricture form in consequence of the passage of calculi from the bladder at an early period of life; but this is by no means a common cause, although the complaint is sufficiently frequent among children; and when strictures do form in such cases, they usually follow as cause and effect, the small stone in its passage having been arrested long enough to produce inflammation, and, in all probability, ulceration at some particular part. The urethra of a very young person or child is not prone to form a stricture: it does not do so without a greater degree of inflammation and ulceration than will give rise to it in an adult; and it seems again to obtain this immunity at an advanced period of life. It is probable, that the urethra, about the age of puberty, like every other part of the body, receives a development independently of size, which renders it more susceptible, and which it loses again at a later period of life. Be this as it may, stricture of the urethra is the disease of young men, and not of old ones. An old man may have stricture from his youth, but he never applies to you at sixty, or even fifty, years of age with such a complaint, without being aware that he has long laboured under some disease in these parts. If he states that his complaints have only come on of late, you may rely that the neck of his bladder is in an irritable state, or has lost its natural elasticity, or that his prostate is diseased, or, at all events, that the complaint is in the prostatic part of the urethra, and not in that portion which is usually the seat of stricture in younger persons.

Disease of the kidney will often give rise to acute pain at the neck of the bladder, and even at the extremity of the penis. These parts may have become inflamed as well as irritable; the natural action of the urethra may be deranged in consequence, and irritation, inflammation, and stricture may be established in succession, in young persons, in its bulbous portion becoming membranous. An injury on the perinæum may readily, and with due relation to cause and effect, give rise to it; and long-continued irritation from disease of the rectum will do the same. Serious wounds of the rectum do almost always give rise to retention of urine, requiring the passage of the catheter, which becomes an important part of the treatment during the first days of inflammatory action; and where neither the bladder nor the urethra have been injured, the difficulty is usually found to exist at the membranous part of the urethra, and not at the neck of the bladder, and is dependent upon an undue contraction of the compressor urethræ, and a want of consent between it and the expulsor muscles. I have never, however, in these cases (and I have seen many), found this spasmodic contraction give rise to strictures; the patient has either died from the intensity of the original injury, or the inflammation has been unequal to the production of stricture of a permanent kind, although capable of giving rise to a distressing temporary derangement of an inflammatory spasmodic nature. Irritation of the neck of the bladder in middle aged persons often occurs from an acrid state of the urine, but it does not in them give rise to stricture.

The common cause of stricture of any kind is gonorrhœa, when neglected and allowed to run on to the chronic state called gleet; and it is assuredly not the severity of the attack that does the mischief, but its long continuance, or its renewal after the most marked symptoms have subsided. In a regiment of young soldiers of a thousand men, few cases of stricture occur, although hundreds of them may in turn be affected by gonorrhœa. It is only when they become older, and do not choose to undergo the discipline of an hospital, but continue to drink, and do their duty, leaving the disease to itself, or to some nostrum common among them, that strictures occur. The idea which prevailed a few years ago with some surgeons of great repute, that it was best to do nothing, and allow the disease to subside of itself, under a regular and orderly course of living, was a fertile cause of stricture in many who supposed they carried the precept into execution. Astringent injections were supposed (and the opinion was at one time carefully inculcated) to have been a common cause of strictures, but I believe there was some misrepresentation in this, almost amounting to something more; for a long and great experience has con-

vinced me that it is not the use, but the abuse, of injections which does mischief, and precisely in the same manner, that doing nothing is the source of mischief. The one is the abuse of too much means, or an improper use of them, the other the abstaining from means of cure altogether; and I further maintain, that it does not signify in what way a gonorrhœa is cured, provided it is quickly cured. But I do not mean by cured, a state in which a greater defect, or another disease, is caused of a more troublesome character. That is not what I call a cure, but only an exchange of one disease for another of a more serious nature.

When a gonorrhœa or a gleet has given rise to positive alteration of structure, or of obstruction in the canal, the symptoms are sufficiently marked, according to the several states and stages of disease, and the discretion and judgment of the surgeon are more called for in the ealier than in the later stages of the complaint; for he may in the first, by doing too much, make that disease permanent, which is only temporary, which would be a great evil; whilst in the latter he can only do a little temporary mischief. In order to understand this, it is necessary to bear in mind that the range of disease, from an inflammation, or spasmodic stricture so called, to an obstinately permanent one, extends from a mere vascular thickening of the internal mucous membrane, and of the cellular tissue which attaches it to the external elastic wall of the canal, unto a thickening and alteration of them with a deprivation of their elasticity, and extending even into the corpus spongiosum, or surrounding parts.

A gleet, or muco-purulent, or nearly serous discharge from the urethra, unattended by pain in micturition, and only accompanied by it when the erectile tissue is dilated, may be caused by several states of the canal. The most common is a chronic, or sub-acute state of inflammation, almost degenerating into passive, affecting the mucous membrane and its subjacent cellular texture only. The next in order is where any, or several of the large follicles are dilated and diseased, a state which occurs most frequently about the fossa navicularis, or first inch and a half of the urethra; and, lastly, when ulceration takes place from either of these, or any other causes in the course of the urethra generally, from the external orifice to the neck of the bladder. The first state may exist for many months, and then gradually cease, and the parts be restored to their natural state, without leaving any mischief behind, although it very rarely does so, unless the habit of the patient's life has been temperate. I occasionally see some old friends of mine, whom I had under my care near thirty years ago, and who suffered in this manner for ten, twelve, and eighteen months, drinking all the time from one to three bottles of wine a day. They never have had strictures, nor have them now, but these are *raræ aves*, and I could note a long catalogue of others who comported themselves in a similar way, who have long since been numbered with the dead, or are suffering for their errors; and it is from the observation of a great number of these cases, and of the general results of the different kinds of treatment, that I am induced to say, cure your disease quickly, but cure it carefully and thoroughly, and it signifies not by what means. You will often find that what cures one person will have no effect on another.

The chronic state of inflammation, essentially constituting gleet, may be quite local, but it is frequently constitutional, and can only be cured by constitutional treatment; and it is not easy to decide when the constitutional treatment should entirely supersede the local, or be combined in a particular manner with it. It must be regulated by that tact which is obtained by good sense, founded on good teaching and on observation. When the patient is regular in his habits and apparently in high health, the distinction or discrimination becomes very difficult, and the practical result often belies the preconceived opinion. When a gonorrhœa has terminated at the end of three or four months in a thin watery discharge, which is scarcely perceptible at times, although easily brought on, and becoming considerable on a slight excess of any kind, there is a part of the passage in a chronic state of inflammation, which general treatment will rarely cure, and which local means, without great attention, will not reach; for it is rare that this low inflammation is confined to the specific distance of Mr. Hunter or the first two inches, but, on the contrary, more usually exists also in those parts in which it has been excited by sympathy, or by extension of inflammation, viz. the bulbous, the membranous, and the prostatic parts of the urethra. It becomes, therefore, advisable that the affected part should be ascertained by the bougie, which is also often the best means of cure; but it is a two-edged instrument, alike the means of health and safety, and of misery and long suffering. In the hands of a skilful surgeon, it is the harbinger of health, in those of a rough and violent one, it is the cause of disease. If there be a lesson which deserves and demands a most strict observance, it is that which inculcates gentleness, lightness of hand, and patience in the use of the bougie, as opposed to roughness, force, and haste. It is agreeable, sometimes, to pass a bougie readily where another has failed; it is flattering to self love to pass a larger one, and the patient himself often exults as well as his surgeon, but in the end he will have nothing to boast of, except, perhaps, a permanent stricture. The bougie, selected for an examination of this kind, should not exceed two-thirds of the size of the orifice, and should be passed along the canal until a sensation of pain is experienced, when its progress should cease; if there is little thickening, the pain will gradually subside, and the bougie may again be gently pressed on. If it now passes easily, and with little sensation, it is of a proper size to do good, but, if at the attempt to pass it, the pain is augmented, it

will generally do harm, and ought to be withdrawn, and a smaller one substituted on the next occasion, and so on, until one will proceed with little comparative inconvenience. It is in these cases that the first introduction of a bougie often causes the patient to faint; and to prevent his falling, and to enable them to act with vigour, sometimes a vigour beyond what the case requires, some surgeons place their patient's back against the wall. This you have seen I never do, because I take it to be a most butcher-like proceeding; but there is no disputing about taste, and some persons like that position, because, as they say they cannot flinch. For these cases a soft bougie is the best, it looks less formidable although it does not always pass the easiest. The pain is usually felt in the bulbous part of the urethra, if there be no disease anterior to it; and is usually described as a sharp pain, differing from the subsequent or burning sensation experienced on the bougie passing along the membranous and prostatic parts, and which is also accompanied by so strong a sensation of making water, that the patient says it is actually coming, and in some rare instances it does positively flow, although usually it is but a heightened sensation, and he sees to his surprise that it is so. It is now that he feels sick, turns pale, fancies a thick mist before his eyes, drops of perspiration stand on his forehead, and, if not assisted, he falls, even before he can ask for a chair or a glass of water. I always let a patient stand before me, and with an arm chair behind him, and, when I see these symptoms coming on, I seat him in the chair, and bend his head down until it touches his knees, which removes the faintness better than water or any cordial you can offer him. This faint feeling is hardly experienced a second time, and very rarely a third. I have known it, however, always recur on the introduction of a metallic bougie, but never on that of a soft one. The instrument should not in these cases be used more frequently than once every four days, and the size should be very slowly augmented. If the bougie meets on the second trial with a greater instead of a less obstacle, or gives more pain, its use must be desisted from for a time, and perhaps never resumed. If it be continued, the mischief will gradually increase, and at last a permanent stricture may be the result. The surgeon has, in fact, caused and kept up such repeated irritation, that the inflammation has extended into the adjacent elastic structures, and given rise to a greater evil than it was intended to cure. In these cases, leeches, the warm-bath, and other remedies, I shall frequently allude to for the cure of irritable urethra, must be had recourse to. The part often bleeds in such cases on the slightest touch, and will do so sometimes even when the bougie is doing good, not harm; but I have never found a bleeding of this kind mischievous; on the contrary, it seems to do good, by relieving the overloaded and excited vessels, so much so, that I think patients usually say, after they have ceased to be alarmed by it, that they do not mind a little blood, as they always feel easier after it; an old sufferer invariably says so. A large bougie, carried forcibly through a urethra of this kind, sometimes cures, which appears paradoxical, but the fact is, that a great deal of irritation is excited of a new kind, and, under the means employed for its reduction, both that and the old irritation gradually diminish, and even actually disappear, leaving the part nearly in a state of health, and into which it ultimately passes; more often, however, a great and permanent accession of irritation is the result, extending even to the mucous lining of the bladder, and giving rise to great distress. An officer of dragoons, suffering from gleet, applied to a surgeon, saying he must leave town that day to join his regiment; on which the other replied, that he must then do something for him, and passed down a large bougie, which only went through with almost intolerable pain. The gentleman travelled the same night to his regiment by mail, was laid up for three months, and came back to town to put himself under my care, making his water every hour, which was loaded with one third part of mucopurulent matter resembling pure pus. It took three months more to remove the symptoms thus caused by the introduction of a bougie a little too violently. When the complaint is trifling, and the mucous membrane but little swelled or inflamed, the method of Bruninghausen, which consists in firmly closing the orifice of the urethra, by pressing the sides of it against each other, and then dilating the canal by attempting to make water, which is thus prevented from flowing, may do good in a similar way to the bougie, but it cannot, I conceive, be useful in cases of permanent stricture.

When the patient will submit to an examination of the part by the bougie, so that the seat of irritation may be ascertained, the cure can almost always be completed by it, provided the part is not very irritable or of great extent, or there is nothing peculiar in the constitution of the patient; in either of which cases it will not succeed, nor in some without other assistance, in which the bougie fills the canal without pain, yet the discharge still continues. A gentleman placed himself under my care some half a dozen years ago, on account of a gleet, for which he had consulted several persons in vain. On examining the urethra, I found he had such a very large one, that all my silver sounds were too small to fill it, I had therefore two steels ones made, Nos. 19 and 20, the last larger than my fore finger, and it was only when the canal was dilated, so as to be put a little on the stretch, that he was cured; but this was not done without the aid of an aluminous injection. This gentleman always laughs and gives me a nod of recognition when we meet in the streets, and I certainly have never seen such another urethra, except, perhaps, a similar

one might be found in one of the mummies at the College.

I cut off the arm of an officer of cavalry, in front of Fuente Guinaldo, in the year 1811, and met him in 1816, in Bond-street. He said he was under the care of the late Mr. Pearson, for a discharge and strictures, but would leave him if I wished, and come to me. I told him not to do so, but to stay where he was well off. He did so, and six weeks afterwards he called on me, to say that his urethra was perfectly sound, save the discharge, which was quite as much as ever, and that Mr. Pearson had recommended his taking the chalybeate Cheltenham waters. I advised him to obey orders like a good soldier. He did so, and, in the course of a month, as his health amended, his complaint disappeared. He calls on me now whenever he comes to town, to have a bougie passed, and occasionally, although one-armed, uses one himself.

A nobleman applied to me last year, on account of a discharge, which yielded tolerably easily to cubebs or to copaiba, or to a mixture of either, or of both, with the tinct. benzoes, comp., but as soon as they were omitted it returned, and injections fared the same fate. I did my best, but with no better success than my predecessors. I then recommended the bougie, but this he disliked, and went to Dublin, where he met with no better success. From thence he travelled on the continent, and was ultimately cured by the waters of Spa.

It often happens, that the same remedies, which have proved inefficient at one time, will render especial service at another, and the same may be said of injections. A gentleman applied to me under similar circumstances with the last, despairing of being cured, having, as he said, tried every means of stopping the discharge in vain. He had taken cubebs in the usual manner, with only temporary advantage, but by swallowing two drachm doses every two hours, when awake, for three days, it was at last permanently arrested, and he has lived to contract several other gonorrhœa, which have proved less obstinate; the successful method in this case is not, however, less fallacious than any other. In another case, of nearly similar character, the tinctura ferri muriatis effected a cure, I believe, not from any specifi influence on the urethra, but by amending the general health. Quinine acts in a similar manner.

When one spot only in the urethra is irritable, and resists the use of the bougie, however gentle the manner of introducing it, I am in the habit of making applications direct to the part. An ointment, composed of the argentum nitratum, liq. plumbi subacet., and ung. adipis suillæ, in varied proportions from two grains to ten of the former to one drachm of the latter, is an admirable application. Its great efficacy in chronic inflammation of the eye induced me to use it for chronic inflammation of the urethra, and I have reaped the greatest advantage from it in many very obstinate gleets, depending on chronic inflammation and thickening of the mucous membrane, even of the prostatic part of the urethra, where, by common consent of all British surgeons, no caustic in its solid form ought to be applied. Lead, opium, belladonna, used in a similar manner; the dregs of the vinum opii mixed with lard have all been useful in removing that degree of irritation which stimulants can alone control and subdue. These applications must all, however, be used with caution and judgment; in fact, they must be used but not abused.

When the urethra is generally irritable, I have not found them equally serviceable, and as this state seems to be materially dependent on the constitution of the individual, general means of cure are of more importance than local ones; indeed, the surgeon should abstain from them altogether; the urethra should never be touched, although remedies may be used externally, such as the mercurial or iodine ointments, or even blistering, or the argentum nitratum, applied so as to produce that effect.

The internal remedies I rely most on, in such cases, are mercury and hemlock, with rest and attention to diet and the state of the bowels; the occasional application of leeches and the hot-bath, followed by a change of air to the country, or the sea-side. I have never sent a patient, under such circumstances, on a tour up the Rhine that they have not returned quite well, provided there was no permanent stricture. The pil. hydrargyri I find the best preparation, in the proportion of from one to two grains three times a-day, with from three to ten grains of extr. conii. The effects of the one on the gums, and the other on the head and stomach must be carefully watched, and the remedies increased or diminished accordingly. When the patient has gone through a long course of saline and alkaline remedies without effect; when cubebs, and copaiba, and the terebinthinæ have failed, and bougies of every kind have only rendered the part and the patient more irritable; these remedies, and a change of air and scene, if only for a mile or two into the country, will often prove most efficacious. If a young man, with an irritable urethra, will go to dinners, balls, and the opera, and drink wine, and sit up until two in the morning, you had better wait until the season is over before you endeavour to cure him.

When the gleet is dependent on one or more excrescences in the urethra, their bleeding and the sensation communicated by the bougie will usually lead to the suspicion of their existence, and it will ultimately cure them; for, in such cases, internal medicine cannot I conceive, be of any avail. When from the pain being felt at one spot, and one spot only, or particularly, and which can be made manifest by external pressure, in the

first five or six inches of the urethra, and it does not yield to common means, although the bougie, of a full size, meets with little obstruction, it is probable an ulcer exists at that part, and the ung. argent. nitrat. will be of great service. I have had two cases lately under my care, in which a gleety discharge was attributed to a painful spot within the first inch of the passage; this increased, and the ulcer, luckily proceeding forwards, became visible, and at last affected even the orifice, with a very syphilitic aspect; the cure in both was effected by a gentle course of mercury, and a mild astringent injection.

Sir E. Home has delineated the follicular appearance of the urethra exceedingly well in one of his magnified engravings. Some of these follicles, as well in the fore as the back part of the urethra are large, and when affected by chronic disease become much more so, and resemble small cavities or sacs, in which a pea might be lodged, and in which the point of a bougie will often catch. In the prostatic part of the urethra, the ducts of the prostate will also give rise to a similar result, so that the stoppage of a bougie in this situation would often lead to the suspicion of stricture, and to much mischief if stricture were admitted to take place in this part. In the anterior portion, a larger solid bougie always rides over the spot where a smaller one has caught, and shows the error, which an impression taken on a soft bougie will prove; although the freedom with which the urine passes belies the possibility of a stricture to the extent of apparent obstruction. These follicles will often prove very intractable, particularly when situated just behind the glans penis, I find an injection of the solution of the argentum nitratum, of from six to twelve grains to the ounce of distilled water, one of the best remedies, as it can be made to enter the cavity of the follicle without difficulty. Sometimes the follicle does not enlarge at its orifice, but, on the contrary, the opening into the urethra seems to become smaller or to be positively closed up, whilst the inflammation continues in the cavity itself. Under these circumstances, the cavity enlarges, so as to be felt externally; and when this takes place, as it occasionally does, just behind the frænum præputii, it gives rise to a very troublesome disease. The little cavity being put on the stretch by the secretion poured out within, at last yields, I believe, by ulceration, and a portion of its contents are effused into the cellular structure between the two layers of skin forming the prepuce, and through the internal layer of which, near the frænum, or near the fold or edge, it at last finds its way, and one or two small sinuses are thus formed, which are more disagreeable than painful. A very fine lachrymal probe can be made to follow the course of these sinuses, which often communicate and lead to the original seat of evil. The first person I had occasion to treat, labouring under this affection, was a lieutenant-colonel in the army, in the year 1816, who had two sinuses of the kind described, one on each side of the frænum. These I divided; then the frænum, then the outer wall of the urethra, which is here very thin, so that the cavity of the follicle was exposed; and when a solid sound was introduced into the canal, it seemed to be covered by the thinnest possible layer of membrane only. Under slight stimulants and astringent applications this gentleman got quite well. I have seen several cases of the kind since, which, as far as I recollect, have not attracted the attention of surgeons, writing professedly on these subjects. The last was of a neighbour of mine, residing in Cork-street, who, after a gonorrhœa, suffered from an inconvenience of this nature. He had applied to three surgeons of great reputation before he came to me; and had worn a silk thread, by way of a seton, in a double sinus for the last three months; this I removed, and then divided the sinuses in the prepuce down to the follicle; they healed in consequence, and removed all the inconvenience he laboured under, the prepuce about the frænum being only a little more moist than usual from the secretion from the follicle. He says himself that he is quite well and cured of his disease. Instead of the enlarged follicle yielding and discharging itself externally in this manner, it sometimes increases in size, and by pressure can be made to empty itself into the urethra, which it does in less quantity at all times, and thus keeps up an interminable discharge. When ulceration has taken place in the orifice, so as to enlarge it, instead of diminish it, as in the previous instances, the urine gets into and distends it on every attempt to make water. Pressure of the finger, on such occasions, and the use of mild stimulants and injections, will frequently give rise to the diminution of the swelling, and the cessation of the discharge; but if the swelling should increase, and threaten to inflame, and burst externally, the surgeon should anticipate this process by opening it, so as to have sound instead of ulcerated external parts, and then endeavour by stimulants, such as the red precipitate, or the green digestive ointment, or the argentum nitratum, alternated with the sulphate of copper, to induce it to heal from the bottom. I have seen every effort, however, fail, and a permanent small opening has been the result, requiring the pressure of the finger upon it every time the individual passed his water. When a follicular gland of this kind becomes hardened, and shows no sign of alteration, it may be left to nature, but sometimes, in addition to the hardness which can be felt by pressing the corpus spongiosum between the finger and thumb, a secretion takes place from it keeping up a gleety discharge, accompanied by irritation, and occasional chordees, which render the patient very uncomfortable. Nature does little, and stimulants do less in these cases. From the ung. hydr. c. camph. I have de-

rived considerable advantage, provided it is long continued, and at length a cure will be effected, if the patient will be regular and continue its use for a sufficient length of time. I have also seen much good follow the application of a blister, and where all other things have failed, pressure made by introducing a moderate sized catheter into the bladder, and then by strapping around that part of the penis with sticking plaster. The catheter should not be too large, or it will produce irritation, neither should the adhesive plaster be applied too tight. The patient must be kept quiet, and in bed or on the sofa, and on any irritation supervening, the process must be for a time suspended. Sometimes these swellings, or tumours resembling them, dwindle away into small indurations, which become almost of a cartilaginous hardness, the erectile tissue in which they are situated appears to have lost its natural property, and whilst every other part is fully distended, this remains a small hard tumour. In some cases it is absorbed, leaving however a hardness, which does not admit of the part being dilated, and causes a hollow in it, when the rest of the erectile tissue is distended. I have seen the same thing take place in the corpora cavernosa, when they become more or less crooked, on dilatation taking place, and the part, in some rare instances, seems to be changed into bone.

OBSERVATIONS ON THE USE OF BLISTERS IN BUBOES, AND OF TINCTURE OF IODINE COMPRESSES IN HYDROCELE.

BY P. RICORD, D. M. P.,

Surgeon of the Hôpital des Vénériens, &c.

TRANSLATED BY ALEX. THOMSON, M.B. OF ST. JOHN'S, CAMBRIDGE.

From the Journal des Connaissances Medico-Chirurgicales, for January, 1834.

Of Blisters in the Treatment of Buboes.

Blisters have been used in the treatment of buboes, but all practitioners are not agreed upon the precise circumstances indicating them, and which we shall endeavour to develope, in an ensuing article upon this subject. M. Renaud, doctor of medicine, and a distinguished professor of Toulon, has recently proposed, in a work presented to the Academy of Medicine, the employment of the blister in all or almost all the cases of buboes, without distinction of period or duration. From the explanations, which he himself had the kindness to give me, when he did me the honour to visit my clinical service at the Hôpital des Vénériens, I have employed his method, which consists in placing upon the buboes a blister, which on the next day is dressed with linen ravellings, soaked in a solution of the deuto-chloride of mercury, twenty grains to an ounce of water, and the following are the results I have obtained.

In twenty-three patients affected with syphilitic buboes, or those deemed to be such, fifteen were not yet arrived at the period of suppuration, and eight were already suppurated, the skin more or less attenuated, and the purulent collection united into an abscess.

Of the first fifteen patients, seven have been obliged to have successive blisters, the solution of the corrosive sublimate not having at all kept up the suppuration of the skin. Of this number six have been cured without suppuration; and, by a resolution, arriving more speedily than by the ordinary means. In one, the suppuration supervened, and it was necessary to open it; the other eight had blisters; two have been cured by resolution; six have opened spontaneously, of which two did with a vast separation of the skin.

In the eight patients in whom the buboes had already suppurated, and who had equally had blisters placed according to the method of M. Renaud, two have been cured, without their buboes having opened, the pus having been little by little re-absorbed, and the skin at the surface of the blisters having presented that sort of purulent transpiration indicated by M. Renaud. In the other six, after spontaneous apertures, and a great separation of the attenuated skin, it has been necessary to have recourse to the caustic potass or to the bistoury.

These results that we present here in mass, and without precising the cases, since the author of this method applies it to all, have not given us the same results as to him; for M. Renaud has told us that, with the blister, spontaneous apertures of the buboes are very rare, and that more rarely still, has he been obliged to have recourse to artificial apertures.

Without participating entirely in the opinion of my brother, our results have been different. I think that the blister, applied in suitable circumstances, and which we shall hereafter appreciate, is a powerful means in the treatment of buboes.

Employment of the Tincture of Iodine for the cure of Hydrocele.

Cases of hydrocele, independent of any syphilitic cause, frequently present themselves

in my ward; and I have already been able to employ, in five patients, a new means in the treatment of this affection, and one which has furnished me happy results; this means is the tincture of iodine, diluted with distilled water, and applied upon the tumour by aid of compresses imbibed with it, and in which the scrotum is enveloped. The different degrees of concentration, in which I have employed it, are the following:

Take of
Tincture of iodine, 1 drachm } ⊕ by weight,
Distilled water, 3 ounces } Fr. measure.
Mix them.

Tincture of iodine, 2 drachms } ⊕ ditto.
Distilled water, 3 ounces }
Mix them.

Tincture of iodine, 3 drachms } ⊕ ditto.
Distilled water, 3 ounces }
Mix them.

Tincture of iodine, 6 drachms } ⊕ ditto.
Distilled water, 3 ounces }
Mix them.

In a subject whose skin is very delicate, and the epidermis thin, the first formula suffices. When there is less sensibility and some hardness of the tissues, it is passed on successively to the other formulæ. For the medicine to act, the patients must experience a rather vivid, but supportable sensation of heat, and without there being burning or vesication, the skin of the scrotum must become brown, or pass into brownish red, the epidermis becoming *like parchment*, and forming scales, that are detached, leaving beneath them a sort of thick transpiration still without vesication. So long as these results be not obtained the dose of the tincture of iodine must be increased, the quantity of distilled water remaining the same; but when these effects have been succeeded in being produced, the same degree of concentration of the tincture must be continued by renewing, twice a day, the compresses steeped in it. If pain supervenes, it is suspended for some days, and resumed subsequently, until the disappearance of the tumour.

The following cases, drawn up by M. Rattier, and collected in my service, will show the advantageous results of this method of treatment.

Jean Gouttel has been for nine years back affected with a hydrocele of the left side, of which the formation had been preceded by an orchitis, the result of a blow on the testicle. The tumour has remained stationary up to the present day, 5th Oct.: its bulk equals that of a large turkey's egg; the tunica vaginalis appears distended with more force than usually; but no symptom of inflammation is remarked.

M. Ricord ordered the use of the tincture of iodine at two drachms. Until the 4th day the action of the medicine is little marked; on the 6th the epidermis is detached in brownish scales, and abundant transpiration is produced; on the 7th the tumour is much less tense,—there is formed upon the scrotum a sort of dry and blackish pellicle. On the 15th Oct., new exfoliation, the scrotum is very humid, the tumour is diminished in bulk,—it is no more than one-third of its primitive size; the solution is carried to three drachms. The phenomena we have indicated are reproduced regularly until the 2nd of November, and the patient goes out cured. M. Ricord has again seen Gouttel on the 23rd November, and the cure has appeared to be radical.

To this observation we shall add those we have already published in the *Gazette des Hopitaux*, and equally drawn up in the clinical service of M. Ricord.

Pierre Verger, fourth ward, No. 14, affected with an incysted hydrocele of the cord, has been cured, after fifteen days' treatment, by the use of the tincture of iodine, employed at first during five days at a twenty-fourth, and the following days at a twelfth.

Claude Cardot, first ward, No. 4. This patient has been perfectly cured of a hydrocele, of a considerable bulk, in thirty-six days. During the first fifteen days, the solution of the tincture of iodine at two drachms was employed, and afterwards at three drachms.

Jacques Fauché, first ward, No. 29, for the radical cure of a hydrocele, complicated with induration of the testicle; it has required thirty-five days' treatment, during the first ten the solution was at two drachms.

Delorme, first ward, No. 18. In this patient the treatment has been long, but in some measure proportionate to the bulk of the hydrocele; the solution of two drachms has been employed during thirty days nearly, and during twenty days, the solution at three drachms.

Errata in Mr. Thomson's Paper on Tubercles, in No. 98, Vol. IV.

Page 624, col. 2, lines 31 and 32, *for* " more

abundantly than from the walls of the envelope generally; though this was also the case, all doubt," &c., *read* "more abundantly than from the wall of the envelope generally, though this was also the case. All doubt," &c.

Line 46, same page and col., *for* "who have spent so much of their lives in attempting to prove theoretically, that tubercle differs from other morbid growths *neither* in its essential *nor* organic structure," *read* "who have spent so much of their lives in attempting to prove theoretically, that tubercle differs from other morbid growths *by* its essential *non*-organic structure.

Foreign Medicine.

Method adopted by M. Roux to restore the Perineum in cases of division, or complete Rupture.

The plan recommended by this surgeon is the same as that employed in cases of hare-lip; that is to say, after having pared, with a cutting instrument, the cicatrised borders of the ruptured part, he approximates the edges, and keeps them in contact, by means of the twisted suture. M. Roux thinks that the numerous failures in this operation have been caused by not keeping the internal edges of the wound in contact, and thus allowing of the entrance of fluid between the lips, which would naturally tend to prevent adhesion; it was, then, with the intention of remedying this, that he has made use of the twisted suture, and with such success, that, out of four cases of old rupture, three have been followed by complete cure; in the fourth case, the circumstances under which the operation was performed were so extremely unfavourable, that the patient died. The first performance of the operation was, in the first instance, only partially successful; for some weeks an opening in the deep part of the perineum existed, which, however, afterwards closed. This female has since been delivered of a child, without any rupture or other ill consequences.

Galvanism against the Poison of the Viper and Serpent.

M. Pravas lately read a paper before the Academy of Medicine, relative to the employment of galvanism against the poisons of the viper and serpent. In 1831, M. Breschet sent to him the vesicles of many of the serpents of India, collected in the four preceding years; with a lancet, he opened that of the coluber major; the virus was yellow and acid, and reddened tincture of turnsole; a pigeon, whose thigh was inoculated with it, died in a little time, with the ordinary symptoms of this poison. At Altorf, in the year 1830, four dogs were inoculated with rabid virus of this kind, one of them was then submitted to the action of a galvanic pile four hours after, and was cured; in the three other instances the galvanic pile was not applied, and the animals died in about fifty-three hours.

In March, 1833, out of four dogs thus inoculated, two were galvanised, and recovered, the others were not treated in this way, and died in a rabid state.

The Phosphorescent Fungus growing in the South of France.

It is not, we believe, generally known, that there is found growing in the south of France a species of the fungus tribe, which emits a phophorescent light at the period when decay commences. The inferior lamellated face is the only part which possesses this peculiar property, and as this is turned downwards, it is only the reflection on the ground at night which can be perceived; no particular odour accompanies this luminous appearance, which is inherent in the tissue of the lamellated structure, and which is percepticle in the smallest portion, even when separated from the rest; friction, however, destroys by degrees this property. Experiments have been made with the microscope, both in the day and the night, upon this class, but no difference in structure between the part endowed with this phosphorescent property, and that which is not, has hitherto been discovered. It appears, then, that the luminous phenomena manifest the greatest activity in the reproductive organs, and an activity, which is transient in vegetables and animals, is commonly marked by increase of colour or odour, but rarely, as in this case, by phosphorescent qualities.

Since the fructification of some of the fungi takes place with a phosphoric light, may we not attach more credit to the assertion of Beaufort, who says that, from one of the species of African flowers, a flame escapes at the moment of its blooming? The phosphoric

appearance, which was probably the real state, might with ease be exaggerated into a flame, by any one who saw with the eyes of a traveller.—*Gazette Médicale.*

Physiological Considerations upon the Organ of Hearing.

BY M. G. BRESCHET.

In a valuable memoir on the above subject, lately presented to the Royal Academy of Sciences in Paris, the author says, that, from the anatomical consideration published in a preceding memoir, it would appear that the vestibule is the most important part of the labyrinth, being in truth the proper organ of hearing; and that all the other parts are only accessories. Audition, considered in this manner, belongs exclusively to the vestibule and semicircular canals,—it is, in fact, to these parts that the organ of hearing is reduced in the entire class of vertebrated animals. In fishes, the ampullæ of the semicircular canals are very voluminous, the tubes long, and the median sinus very large. The sac, of which the existence has been proved in man, and at least suspected in mammiferous animals, is large, and well marked in fishes. In the cartilaginous fishes, the difference in size between the semicircular canals and the other parts of the labyrinth is much more remarkable than in the mammiferous tribe; a considerable space exists between the cartilaginous walls and the exterior surface of the labyrinth, which is occupied by the perilymph; in many of the bony fishes, however, the membranous labyrinth is only suspended on the inside of the bones of the cranium, and is filled with a liquid which appears to be analogous to the humour of cotugno, found in the semicircular canal in man, the mammiferous tribes, birds, and reptiles. After entering into a minute account of the structure of the component parts of the ear in fishes, which our limits will not allow of extracting, M. Breschet remarks, that the analogy of structure between the ear and the eye is very remarkable; thus we find in each organ three media traversed, in the one by rays of light, in the other by sound. In the ear we find a liquid, called the perilymph, enclosed in the vestibule, as in the eye we find the aqueous humour, contained in the first space; in the ear also there is a second fluid, called the vitrine, enclosed in a small membranous apparatus, upon the walls of which expand the nervous chords, in a similar manner to the expansion of the optic nerve around the vitreous humour of the eye. The ololithes or the octoconies resemble also in situation the crystalline lens. There are, perhaps then, two kinds of impression produced on the ear by sounds; first, the impression which is made upon the lamina spinalis of the cochleæ; second, that which operates upon the sac, and the ampullæ of the semicircular canals. The small disc of the stapes, corresponding to the fenestra ovalis, instead of transmitting sounds directly to the acoustic nerve, spreading out on the membrane, transmits only the sonorous vibrations to the liquid of cotugno or perilymph. The two liquids, by which the cavities of the labyrinth are occupied, appear to multiply the points of contact of the acoustic nerve with the vibrating body, to render the excitement more lively, and to augment for this purpose the vibratory faculty of the membrane of the sac; the experiments of M. Savart show, in fact, that any tissue or paper, moistened, conveys vibrations with greater facility than when dry. Sounds are transmitted to the labyrinth in the greater portion of fishes only by osseous or cartilaginous walls; and this mode of transmission would, perhaps, be less advantageous than that performed by means of the cavity of the tympanum filled with air; and, by an osseous chain, put in motion by the vibrations of the external air, if these animals lived in the air; but they inhabit a medium more dense; and we are disposed to consider this mode of transmission through solid walls more advantageous by such a medium.

Observations on Intermittent Fever.

All intermittent fevers, according to M. Roche, depend on one and the same cause: whether they arise in the midst of a morass, upon the banks of rivers, in the midst of a great town, or in a country considered healthy, they all depend on the contact of miasma with the nervous centres. If fevers, then, are the consequence of the introduction into the economy of a particular miasm, they are, according to the author, caused neither by inflammation, nor by affection of the nerves, but by the admission of poison. The proof, according to him, lies in the period of the cold fit, the hot stage, and the perspiration, which represent, as it were, in miniature, the phases of in-

toxication. Each paroxysm is not, as we might expect, a fresh entrance of the poison, since the paroxysms often continue long after the malady has quitted the nidus of infection; but these paroxysms are repeated, even until the elimination of the miasma introduced into the economy is complete. The interval between two paroxysms is the maturing of the poisonous miasma, to which succeed the eliminatory efforts, which occur so frequently, that the morbid agent is not completely expelled. The author considers the administration of quinine only beneficial, because it possesses the property of neutralising this miasma. This, then, is the antidote in intermittent fevers, and the bleedings, vomitings, purgatives, and sudorifics, which sometimes arrest the paroxysm, act only by the elimination of the morbid agent.

The following list of suicides, committed in London between the years 1770 and 1830, has been extracted from the *Gazette Médicale de Paris*.

Indication of Causes.	Men.	Women.
Poverty	905	511
Domestic grief . . .	728	524
Reverse of fortune . .	322	283
Drunkenness and misconduct	287	208
Gambling	155	141
Dishonour and calumny .	125	95
Disappointed ambition . .	122	410
Grief from love . . .	97	157
Envy and jealousy . .	94	53
Wounded self-love . .	53	53
Remorse	49	37
Fanaticism	16	1
Misanthropy . . .	3	3
Causes unknown . . .	1381	377
Total	4337	2853

We read in the *Dorfzeitung*, that the homœopathic system has received a severe blow at Vienna. The physicians, practising according to this doctrine, have been visited by the police, the medicines have been seized, and the whole of the homœopathic pharmacy has been suppressed. Many of the inhabitants, favourable to this mode of practice, have determined upon petitioning the Emperor, that they may be permitted to live and die homœopathically.

MEETING OF THE MEDICAL PROFESSION AT LIVERPOOL.

On Wednesday last a public meeting of the profession was held at the Medical Library, in accordance with a resolution of the Medical Society. There were about one hundred medical men present. Dr. Rutter was called to the Chair.

Mr. M'Culloch (honorary surgeon to the workhouse) called the attention of the meeting to certain remarks made by Mr. G. Rogerson, at a late meeting of the Medical Society, and which the *Lancet* had copied from the local papers. He then read the passage as follows:

"In Liverpool, talent is not the standard; abilities are not the passport to their public offices. The sons, nephews, or even the grandmothers (*a laugh*) of a locally influential character, would be elected in preference to a Hunter. Relationship, matrimonial alliances, and commercial connexions, are the heads of this medical hydra."

He then animadverted on what he called the injustice of those remarks. It had been said, that the sons, nephews, or even grandmothers of a locally influential character would be elected in preference to a Hunter—

Dr. Anderson here said, that this discussion was out of order.

The Chairman assented, and called Mr. M'Culloch to order.

Dr. Collins.—Let the gentleman have rope enough, and he'll hang himself. (*A laugh.*)

Dr. Lane then moved the first resolution (seconded by Mr. G. Rogerson,) to the effect, that "the partial and restrictive distribution of privileges, legalised by the different charters at present possessed by the various colleges throughout Great Britain,—the numerous sources of medical licences—the discordant and, in some instances, imperfect systems of professional education allowed by universities,—the extremely defective preliminary classical education of great numbers of young men now introduced into the profession,—the insufficient proof of competency, upon which individuals may gain legal permission to practise the art and science of medicine,—the exclusion of persons (already recognised by British medical incorporations as duly qualified to exercise the healing art) from practising physic in particular districts,—the im-

proper interference of the apothecaries' act with the rights of well-educated physicians and surgeons every where, but particularly in rural districts, to prepare and compound medicines for their own patients—the non-protection afforded to legitimate practitioners against collision with uneducated empirics—the tacit permission given to quacks and all unqualified persons to exercise the functions of educated members of the profession—and the fact so universally prevalent, of druggists prescribing medicines, to the danger of his Majesty's subjects, as well as the disadvantage and prejudice of those legally authorised, are circumstances which, in the opinion of this meeting, evidence the imperfections of the laws of the medical profession, and prove the necessity of legislative interference."

The resolution, as originally proposed, contained an allusion to the power (rarely exercised, we believe,) of the bishops to confer medical degrees, and was omitted, from respect to the clergy, and in the hope that the coming change in the church would remove the grievance.

Dr. Jeffrey objected to the clause relating to the druggists, as he did not wish any particular class of persons to be pointedly alluded to, and they would be generally included in the term " unqualified persons."

Dr. Collins suggested, that the druggists should be mentioned, for the fact was well known, that they actually did prescribe, as if they were qualified.

The clause was retained, every one, except Dr. Jeffrey, being in favour of its reception.

Dr. Collins then suggested the propriety of introducing a clause to the effect, that medical remunerations should be legalised.

The Chairman said, that this had been in contemplation, but was left to the Committee. Physician suffered much from the advantages now taken of their peculiar situation in this respect. He himself had lost much money on this account.

A Committee of seven was then appointed to draw up a petition embodying the spirit of the first resolution. They are to correspond with the Medical Associations of London, and to adopt such measures as it may seem requisite for the assurance of an amelioration of the state of the medical profession. The following gentlemen were named on the Committee:—Dr. Rutter, Mr. Geo. Rogerson, Dr. Jeffrey, Mr. Christian, Dr. Lane, Dr. Macintyre, and Mr. Van Oven.

The meeting then adjourned, after a vote of thanks had been given to the Chairman.

IMPORTANT DECISION TO THE MEDICAL PROFESSION, GLASGOW.

This was an action brought by an assignee or mandatory, for a surgeon in town against a husband, for payment of an account for medicine and attendance on his wife. The defence was non-liability, in respect that, for about three years previous to the contraction of the account, the parties had lived separately (the wife having, since that period, as was alleged, been living in open adultery), that he had inhibited her, and that he had been paying her an alimony suitable to his circumstances. The defender produced receipts from the wife to the amount of 15*l*., and it was not proved that she had received more than that sum from him during the whole time they had been living apart. On the other hand, it was admitted and proved for the pursuer, that, at the period of the surgeon's attendance, and subsequently, the defender had been calling on and cohabiting with his wife, and pleaded that this did away with the defence arising from the fact of separation; that the inhibition only applied to extravagant and unnecessary contractions; and that, as to the alimony paid, it was not sufficient to support her during the period of separation; and besides, that the circumstance of paying alimony did not affect the peculiar claim founded on. The Justices, however, held, that the surgeon was bound to proceed against the wife, and dismissed the action *in hoc statu*.

STATE OF GENERAL PRACTITIONERS IN THE COUNTRY.

To the Editors of the London Medical and Surgical Journal.

Gentlemen,—I take the liberty of addressing this to you, first, as editors of a most excellent work, the *London Medical and Surgical Journal*, and, secondly, as friends to Medical Reform, that the inroads now made in the Medical Profession may be entirely removed, and the General Practitioner may again hold that situation in life, which his forefathers held with so much credit to themselves,

in times that are past. I live, gentlemen, in a large market town in the west of England, where, forty years ago, there was no such thing as a druggist in the place; there are now now no less than four, and three out of the four visit patients, prescribe for them in their shops, bleed, draw teeth, and attend fractured limbs, depriving the regular medical practitioner of more than half of his practice. Now, gentlemen, not one of these has had any regular medical education whatever. One served his apprenticeship in this town to a general practitioner, went afterwards to Bristol, and becametassistant to an apothecary; he then came into this town, without attending either the London or any provincial medical schools, set up for himself as a druggist and apothecary, and is now in possession of freehold houses, and, by encroaching upon the practice of the general practitioner, is absolutely making more money in the year, by his so doing, than the general practitioner who has spent a little fortune in regularly attending the London hospitals. The second came here only as an assistant to a general practitioner, a few years ago, married a wife, and is now attending, when called upon, to all the duties of a general practitioner. The third is a new one, not having resided here more than twelve months, but who is now following in the steps of the other two, without any more pretensions to a medical education than either of the others. The consequence, now, gentlemen, is that the whole of the practice of three of us is not equal to what was formerly done by one, when druggists were unknown in this town; and if something is not done, the regular practitioner must yield the palm to the uneducated druggist. I am sorry thus, gentlemen, to trouble you with this, but knowing that your wish to see the regular practitioner righted is becoming more and more evident to the medical profession, I trust any further apology will be unnecessary.

I am, Gentlemen,

Yours, most respectfully,

R. Bailey, Surgeon.

West Gloucestershire,
January, 1834.

P. S.—I am a very constant reader and admirer of your valuable Journal, and therefore shall look forward with pleasure to your noticing this communication in a future number.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, February 1st, 1834.

Dr. Gregory, President, in the Chair.

Diseases of the Heart.

The preliminary business having been transacted,

A member related a case of disease of the heart, which was considered aneurism of the aorta. In addition to the symptoms generally present, there was a violent, and periodical pain in the pyloric region of the stomach. On examination of the body after death, there was found fluid in the cavity of the pleura, hypertrophy of the heart, adhesion of the pericardium, and ossification of the mitral valves, but nothing which, in his opinion, accounted satisfactorily for the pain in the epigastrium.

Dr. Johnson said that a great many cases were considered aneurism of the aorta, when nothing more than hypertrophy was found after death; it was only where a specific pulsation was felt in the upper part of the chest, and where absorption of the ribs had taken place, that he in general made up his mind as to the existence of aneurism of this part.

The gentleman who had related the case said, that Dr. Elliotson (by whom it had been considered aneurism) had stated that there was much difficulty in distinguishing this aortic disease; but, from the sounds elicited by the stethoscope, he had, in this instance, certainly considered it as a case of this nature. He had mentioned the case, as he was anxious to know if the pain in the stomach in such cases had been observed by other gentlemen.

Mr. Smith mentioned a somewhat similar instance, marked by symptoms of dropsy in the chest, and violent pain in the stomach, with general anasarca; extensive ossification of the mitral valves was found. (A preparation, exhibiting this diseased state of the valves, was exhibited to the Society.) He wished to know if Dr. Johnson had met with many specimens of disease of the valves.

Dr. Johnson said that he did not think that disease of the mitral valves was so rare as was sometimes supposed. He had been consulted in the case of a young gentleman,

who had a most extraordinary enlargement of the heart; the pulsation was very violent, and the bruit de soufflet was heard with the greatest distinctness; the sound of the blood rushing through the heart was also very evident. Some time since he became universally dropsical; the urine was scanty, and he was troubled with dyspnœa to a great extent; he appeared at the point of death, but by the use of elaterium and mercury, so as to affect the gums, the fluid has been repeatedly carried off, with the exception of some small quantity in the chest, and he has been so much relieved, that to casual observers he really now appears in good health. With respect to the pain in the stomach mentioned, he did not think that it was a common symptom in diseased heart, but it was probable that the close connexion of the pericardium with the tendinous portion of the diaphragm was the cause. Frequently there were pains in various parts of the body in organic disease of the heart, which could not be accounted for, for instance, in the shoulder or over the os pubis; it was, he thought, therefore better, in estimating the general symptoms of a disease, to consider such as were not usually found as merely accidental. In treating this disease, he had found that no remedy had proved so useful as keeping the system under the influence of mercury for some weeks.

Dr. Gregory had met with a case, where a gentleman, much accustomed to boxing and other violent exercises, had over exerted himself; he was seized with violent pain in the biceps muscle of the arm, which became greatly enlarged, and very painful. He (Dr. Gregory) considered that in the same way hypertrophy of the heart was to be attributed to increase of size from increased action rather than to any other cause.

Mr. Costello believed, that the enlargement mentioned in the muscle was not very uncommon, and was caused by its escape from the sheath; at the same time he acknowledged the justice of the conclusion drawn by Dr Gregory.

Mr. Hunt thought it strange that it should be supposed, that the increased action of the heart would cause increase in the substance of that organ. Those who were accustomed to examine cases of this kind must have found the fibres lax, and diminished rather than increased in size.

Mr. Smith did not think that it was the substance of the heart which was affected in metastasis of rheumatism to that part; it appeared to him, that, as it was generally in rheumatism of the fibrous structures that this metastasis took place, it also was the fibrous structure of the pericardium which was affected.

Mr. Hunt differed from the last speaker as to the part affected. He had never found the pericardium, in inflammatory rheumatism, in the least degree connected with the inflammation. It was, in his opinion, rather in the interstitial than the muscular substance of the heart that the disease was found to be situated.

Dr. Aldis imagined metastasis to be an extension along the fibrous structure. He then spoke as to the efficacy of bleeding in this form of complaint, and stated, that, in some cases combined with dropsy at St. George's Hospital, tinct. of cantharides had been used with benefit.

Dr. Stewart wished to know, if Mr. Costello, who had made some experiments upon the blood in cases similar to those under consideration, had ever given iodine after mercury; he himself had with much advantage used this remedy, and had nearly come to the conclusion, that as blood-letting formed the ground work for other remedies, so mercury formed the foundation for the use of iodine; he merely, however, mentioned this as a hint for further experiments, for he was not prepared to state positively that such was the fact.

Dr. Johnson had found the conjunction of these two remedies advantageous; there were very few diseases in which iodine was useful, where small doses of mercury might not also be given with advantage.

A patient, on whom Mr. Costello had successfully performed the operation of lithotrity, was exhibited to the Society.

Notice was then given, that on Saturday next Mr. Costello would bring forward the subject of Torsion of Arteries, after which the meeting separated.

MEDICAL SOCIETY OF LONDON.

Monday, Febuary 3, 1834.

W. KINGDON, Esq., President, in the Chair.

Distension of the Gall Bladder from Obstruction in the Duct—Use and Abuse of Tea and Coffee.

IN continuance of the debate at the last meet-

ing on deleterious rice, some remarks were made by Dr. Tytler and some other members on the subject, after which

Mr. Jones exhibited to the society an enlarged gall bladder, taken by him from a boy, æt. 9, who died comatose. Upon examination, this viscus was found extending into the right iliac region, and contained about three quarters of a pint of bile; the duct was impervious, but the obstruction appeared to be caused by enlarged glands pressing upon it, for on its being removed from the body, the biliary secretion flowed through it with facility; the circumstance of glands, causing obstruction, was not, however, peculiar to these ducts, for the passage of fluids through other channels was sometimes impeded by the same cause; he had observed this in the veins of the thigh in scrofulous subjects, and had noticed that frequently only the one side of the body was affected.

Mr. Kingdon remarked, that sometimes the passage through much larger tubes than the ductus communis choledochus was closed by this kind of pressure, for a case had fallen under his observation, where the colon was tied down by the mesocolon, which, together with some enlarged glands, rendered it quite impervious.

Mr. Cole then read a paper on the symptoms and noxious effects produced by the excessive use of the infusion of tea and coffee. He stated that when either of these were taken in large quantities, they acted in the first instance as decided, and powerful stimulants, acting principally upon the sanguiferous and nervous systems, banishing the necessity for sleep, and producing feelings of exhilaration; this state was, however, quickly followed by palpitations of the heart, irregular and oppressed respiration, and distressing sensations in the region of the præcordia; the pulse became irregular and feeble, the extremities cold, and pains and gnawing sensations in the stomach were felt; attacks of syncope rapidly succeeded; a desire for sleep now made its appearance, but the slumbers of the patient were troubled and uneasy, and spasmodic action of the limbs took place. It appears that those, who had once suffered from the use of these vegetable substances, were only relieved by abstaining entirely from them; he had observed that green tea excited a more powerful effect than either the other kind or coffee, the latter of which was the next in order in its powers; from the observation of the symptoms caused by these articles of common use, it became a question whether their introduction into this country was not the cause of some of the diseases of the heart now so commonly found. Twenty-two cases, proving the injurious and deleterious effects of the articles under consideration, were attached to this paper, some of the most important of which were read to the meeting.

One or two members, from their own experience, testified to the truth of the preceding observations, after which the Society separated.

THE
London Medical & Surgical Journal
Saturday, February 8, 1834.

MEDICAL JOURNALISM.—NOTICE OF PARLIAMENTARY INQUIRY.

It is generally the policy of a journal to set itself up as the advocate of this or that party; and, by a devoted attachment to its interests, by respecting or lauding its prejudices, by denying or palliating its defects, and, above all, by heaping opprobrium upon the antagonist faction, to earn an interested support. Of the nature of this exaggerated advocacy in state politics, the public is so well aware, that none but the most violent adopt the opinions, or credit the unauthorised statements of a newspaper on either side; and yet the rational inquirer may form a very tolerable estimate of the real facts, or a very just opinion upon them, after consulting such discordant authorities. We knew an excellent gentleman, who used to say, he found the Court Circular of great value in forming a correct judgment of the state of Foreign Politics.

Even in medical journalism this spirit of party, with its usual consequences, is strongly predominant; and, although it is our main object, in common with our weekly contemporaries, to place before the profession an early account of the most

recent observations, and the most instructive lectures, (and, as to our success herein, we fear no comparison;) still, in our strictures upon the condition of the profession, in the material points of education, of rank, and of legal right,—we are conscious there is a wide difference between us and our two contemporaries. To what party, then, do we attach ourselves? Between Scylla and Charybdis, is it possible to steer a straight-forward course? It would be idle for us to dictate to others, how we may have succeeded in our efforts on the agitated subject of medical reform:—but of our motives and objects we are the best judges. We neither labour to uphold an insolent aristocracy, founded upon pretensions foreign to medical science; nor do we assert the claims of every man just qualified to pass the lightest of our medical examinations, to be ranked, upon such an estimate of professional acquirements, on a level with the *dignitaries* of the profession. We are desirous to abolish all artificial distinctions of practitioners: and, in order to entitle every practitioner in medicine to assume the same legal rank, we require an uniform education from every member of the profession. Let the general practitioner be in future a *physician*, or a *doctor*, if the name rejoices him more, but let him also have the physician's education.

"What!" some adroit sophist who pretends to the patronage of the general practitioners will exclaim; "What! you libel the general practitioners: you insist upon the inadequacy of their examination!"—A word or two will silence for ever this crafty insinuation. In the first place, we talk not of the *present* race of general practitioners.—Their rights are vested by law; and, if we could, we would not injure one of them through the temptation of any public good in prospect.—So much for the *least* qualified member of the profession, who has already just acquired a right to practise. But, again, we are well assured that amongst the present race of medical practitioners are to be found many men of varied and profound experience in medicine, who, by long and close application, and with every facility for extensive practice which their peculiar situation affords, have acquired that better education, which no curriculum, however improved, can guarantee to a student. On such persons who have already acquired the practical honours of their profession—many of them men of first-rate talent—we would willingly bestow at once the legal dignity of the profession. They have more than supplied the deficiencies of early education: we mean—let us not be misunderstood—the education which is *demanded;* for, without doubt, many have exceeded the legal bounds through pure shame of tampering with life, upon the modicum of knowledge at present required at the Halls of Lincoln's-Inn-Fields, or Blackfriars. These respectable practitioners, whose studies have kept pace with the advance of medical science, are unanimous in desiring a reform of the system of medical education; as none are better judges of the solemn responsibility of a medical adviser, whose deeds, whether for good or evil, are worked in secrecy. The public can form but a very inaccurate judgment of his success or failure. We mean not, then, to libel the present race of general practitioners, in advocating the necessity of an enlarged education for the future. The charge would be too ridiculous, were there not a selfish motive at the bottom, which makes it as disgusting as it is unfair.—The rights of all must be preserved—their true rank must be accorded to many. But there is

nothing to prevent our guarding against the occurrence of the mischiefs admitted to exist, by the introduction of a general and simple plan of elementary education, to be pursued by every student who hereafter seeks a diploma to practise.

We believe we have the full concurrence of the respectable portion of the general practitioners in other opinions commonly advocated in this Journal, touching that part of the profession: and that they are most anxiously desirous to be placed in "a position," to use the words of a cutting contemporary, "which would render professional trickery a less tempting adjunct to medical practice." It is moonshine to talk of the respectability of trade.—Who ever doubted it? The question is, are two situations compatible?—A public contractor is a very lucrative, and, for aught we know to the contrary, a very respectable office: and yet the law says he shall not sit in Parliament, because of the danger of temptation. Such regulations may be libels on human nature; and in the same sense are we libellers, in advocating the necessity of separating the duties of a medical practitioner called upon to advise, from his interests as a vender of medicine, profiting by their sale,—and, as is frequently the case, looking to that profit for the remuneration of his advice!

The general practitioner has a great advantage, both in the way of emolument, and of early practice, over the physician, by the smallness of his charges—John Bull loves small charges. Some say he would not pay for the advice;—he expects that gratis, and he pays for the pill. We cannot—we do not believe, he is so senseless; or if he is so narrow-minded, it is the duty of the enlightened to eradicate the vulgar prejudice. Perhaps the transition to a more reasonable state of things cannot be instantaneous, or ever perfect. But the feeling, if any such there be, exists, we believe, in the lower classes of the community only; and we are certain the middle classes would receive with satisfaction, the tidings that professional visits were, for the future, to be paid for at a moderate rate; and we see no reason to limit the scale. There is, after all, a principle of justice, and the services of a medical man are felt so sensibly, that he may, on the average, trust to the gratitude of his patient that they will reward him according to their means; but, at the same time, the law should recognise his right to recover a proper remuneration, without the humbug of the *honorarium quiddam*.

We have touched upon some of the leading doctrines of this Journal, by which we desire to be distinguished; while we do not disregard the co-operation of others upon purposes of public utility. The time is at hand when principles are to be tried. Mr. Warburton has given earnest that he will, at an early opportunity, redeem his pledge of instituting a parliamentary inquiry into the state of the profession. The honourable member gave notice, on the first day of the meeting of Parliament, that he would, on an early occasion, move for a committee to inquire into the state of the medical and anatomical schools. The first blow is half the battle. It has broken down the guard of the Corporations;—they are stunned; they are minuted; they may give a convulsive struggle, but the victory is sure.

Reviews.

The Principles and Practice of Obstetric Medicine, in a Series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children. Illustrated by numerous Plates. By D. D. Davis, M.D., M.R.S.L., Professor of Midwifery

in the University of Lon[illegible]n, &c. 4to. Part xxviii. London, Feb[illegible] 1834.

We have frequently expr[illegible]ed our high approval of this valuable [illegible]roduction, and are happy to observe, tha[illegible]e number before us is one of the best we [illegible]ve seen. It is devoted to disorganisations [illegible]d polypi of the uterus, and is enriched [illegible] the result of the author's great experien[illegible] and that of others. The learned Prof[illegible]r has long enjoyed the most extensive [illegible]ortunities of treating diseases of women, and his acquaintance with continental [illegible]rks on the subject is evidently very exten[illegible]. One so qualified cannot fail to exe[illegible] a work of sterling value. This production, considering its value and cheapness, deserves encouragement, and we understand as a large circulation, which it well merits.

A Series of Anatomical Plates, in Lithography, with References and Physiological Comments, illustrating the Structure of the different parts of the Human Body. Edited by Jones Quain, M.D., Professor of Anatomy in the University of London. J. Taylor. Folio. Plates 6 and 7.

This truly excellent work appears regularly, and continues to gain a rapid circulation. There are few more competent to execute it, than the eloquent and justly popular editor. We should strongly advise our junior friends to possess it, both on account of its moderate price, and its extreme value. The work is highly creditable to Professor Quain and to the institution to which he belongs.

On the Influence of Minute Doses of Mercury, combined with Appropriate Treatment of various Diseases, in restoring the functions of Health, and the principles on which it depends. By A. P. Wilson Philip, M.D., F.R.S. London, 1834. 12mo. H. Renshaw.

The object of this little work is to prove the great efficacy of minute doses of mercury in chronic diseases. The celebrated author assures us, that his observations are the result of thirty years' experience. He commences with a description of the modus operandi of mercury; and makes many instructive statements, proving that the liver is much more frequently the cause of dyspeptic and other complaints than is generally imagined. He maintains that the quantity of mercury, given in this country, is ten times greater than that from which its most beneficial effects would accrue. He alludes to the mischief done by excessive salivation, and the immense benefit derived from the small quantity prescribed by Mr. Abernethy. Dr. Philip successfully proves, that small doses, even the one-twelfth or one-twentieth of a grain, will be prescribed with the greatest benefit. His account of the action of mercury on the body will be perused with advantage by every class of our readers.

A Synopsis of Systematic Botany, as connected with the Plants admitted into the Pharmacopœias of London, Edinburgh, and Dublin; accompanied by a Planisphere, showing at one View the Class and Order of the Medical Genera according to Linnæus and Jussieu. By Thomas Castle, M.D., F.L.S., &c. &c. 4to. pp. 18. London 1833. E. Cox, Borough.

There is no science, perhaps, so diligently cultivated by a large portion of the community, as that of botany. The great facilities for its investigation render it more peculiarly attractive than any other branch of Natural Philosophy. To the medical student it presents a field of interesting inquiry, and to him, at least, an acquaintance with those plants that are known to possess curative virtues is indispensably necessary; but it is greatly desirable that his attention and research should not end here. There are, undoubtedly, many plants whose sanative qualities have not been discovered, or sufficiently attended to. A diligent consideration and a studious investigation of the natural affinities and relationships of the vegetable tribes would contribute, in no small degree, towards supplying this desideratum; for it is generally admitted, that those plants which agree in structure, organisation, and mode of growth, are often found to correspond in their medical properties.

To eulogise the labours of the great Linnæus, which have received the homage of all civilised nations and ranks, would be superfluous; his Sexual System will probably never be surpassed in simplicity and comprehensiveness. It gives a clear, well-defined, and admirable outline of the family of Flora; at the same time, simple and grand, and generally harmonious; but there is a discrepancy in

some of the parts—the inevitable consequence of viewing the mighty panorama of nature in a single light, however luminous or broad that light may be. This defect has called forth the efforts of many talented individuals in order to find a remedy. The illustrious Swede himself was aware of this, and he accordingly framed his Natural System. To what degree he succeeded it is not our province to determine: it is, perhaps, more ingenious than practically useful; for, though founded on a consideration of several striking peculiarities, common to many individuals, it has not a few of the failings that attend his Artificial System, without the peculiar beauties of the latter.

Among Natural Methods, that of Jussieu holds a high rank, and deservedly so too. The system established by De Candolle seems to be the chief competitor with it for superiority; but that of Jussieu, as modified and improved by later botanists, offers greater advantages and facilities to the young botanist, on account of its less abstruse and less complicated character.

But these remarks were more immediately elicited by a work on Medical Botany, by Dr. Castle, entitled "A Synopsis," &c., which is well worth the attention of the inquiring student. It contains, in the first place, a Planisphere, elegantly conceived and neatly executed, exhibiting at once the class and order of every plant that enters the three Pharmacopœias, according to the Linnæan Sexual System, and the Natural Methods of Linnæus and Jussieu. To this is added a concise and luminous exposition of each system, showing the number of plants belonging to every order, their time of flowering, native country, and different synonyms. It comprises, in small compass, a large portion of information on the subject of which it treats, which must otherwise be sought for in ponderous volumes, with no small expenditure of time and patience; and, in conclusion, we recommend it as well calculated to serve as an auxiliary to the interesting and important science of which it gives a limited yet valuable sketch.

A Compendium of Osteology being a Systematic Treatise on the Bones of the Human Body, designed for the use of Students. To which is subjoined an Improved Method of Preparing Bones for Osteological Purposes. By GEORGE WITT, M.D., Physician to the General Infirmary, Bedford. 4to. 1834. Longman and Co.

The confused appearance of the numerous parts, described in an osteological lecture, is sufficient to deter any one from attempting to establish any thing like a regular method or order, in impressing them on the memory; the author of this compendium has attempted it, and we cannot but think it has been accomplished in the most perfect and complete manner, of which the nature of the subject admits; it is evident, also, throughout every page of the work, that the greatest pains and labour have been bestowed upon it, and in every respect it appears extremely well calculated to answer its purpose. It is stated in the preface, that the plan has stood the test of some years' experience, and we are glad that the author has thus satisfied himself and his pupils of its utility, previously to undertaking the cost and trouble of publishing such a work; it is neatly printed, and its price is moderate; probably it will be generally adopted as an anatomical class book, as it has already been spoken of in the highest terms by several lecturers on anatomy.

The parts of each bone are described consecutively, exactly as they are brought into view by holding the bone in a particular position, and turning it as upon a given axis; the description is arranged in a tabular form, and every point connected with each part is contained, generally, in a single line, so that the memory more readily and more perfectly retains the impression of parts thus *read off*, in this lucid order and succession; the advantages of this simple plan, it is said in the preface, can hardly be imagined without actual experiment.

A series of questions is added to each division of the book, and they are so studiously and carefully written as to comprise all that has been, or ought to have been, learned of the preceding subjects; they are indeed very cleverly contrived to *prove* the degree of success which has attended a student's labour.

The author has also directed his attention to the annoying difficulty and uncertainty which attend the preparation of bones; how imperfectly and unsuccessfully the process of maceration is generally conducted, is shown too

plainly in our museums; but it has at last been brought to satisfactory and successful principles; the bones thus prepared are perfectly white, and not a particle of grease is visible in any one of them. No secret has been made of his plan, and, at the request of his friends, the author has been induced to make it generally known by adding it in an appendix to his book; the directions are so minute and explicit, that we shall hope for the future to see none but the most perfectly prepared bones in our collections.

We deem it our duty to make so truly creditable and useful a work as much known as possible to our readers, and we are persuaded that both the junior and senior members of the profession will warmly approve the opinion we have given of its merits. It is an extremely valuable work to the student and teacher of anatomy.

French Hospital Reports.

HÔPITAL DU MIDI.

Serous Cyst in the Abdomen communicating with the Intestines.—Cyst of the same kind in the Scrotum.

A. B. was admitted into the hospital, under M. Ricord, for a tumour in the left testicle, which had existed eight months. It was about four inches long and three broad, and had, at its inferior part, a distinct hard portion, which corresponded in size to the healthy testicle. Apparently there was fluctuation in the part, and from this and other signs M. Ricord was inclined to believe that hydrocele was present; accordingly a puncture was made with a trocar, but no fluid escaped. A tumour, still more obscure in its character, existed in the abdomen, but, although the sensation of fluctuation was also evident, no fluid followed the introduction of a trocar; the opening, however, ulcerated, and from it sprouted a cancerous fungus. Suddenly the abdominal tumour disappeared, and the general symptoms, which had become serious, diminished in intensity. Amputation of the testicle was accordingly performed, but the patient sunk soon after the operation, and died.

The scrotal tumour consisted of a number of serous cysts, varying from the size of a pea to that of a walnut; one of these was as large as a hen's egg; the remainder of the tumour consisted of a cancerous structure. In the abdomen was found the tumour which was supposed gone, and which was an oval sac containing fluid; the intestine communicated with this sac by a round opening, at least two inches in diameter, with black looking ulcerated edges.

Œsophagus terminating in a Cul de Sac at the border of the second Dorsal Vertebræ.

An infant, strong, and well formed externally, was observed by Dr. Mondiere to pass a great quantity of mucus by the nostrils, and to emit a peculiar noise from the throat soon after birth. During the first night of its existence, it voided a great quantity of urine, and meconium, and these evacuations continued for the remainder of its life, which lasted only five days.

All the thoracic and abdominal viscera were in a healthy state, with the exception of the stomach and œsophagus. This last terminated in a cul de sac, at the level of the second dorsal vertebræ; from this point, for the space of seven or eight lines below, the canal was replaced by a fibro-cellular chord, after which it again became normal. The great cul de sac of the stomach was entirely wanting, and in its situation was a large opening, of which the edges did not present either traces of ulceration or softening.

HÔTEL DIEU DE TROYES.

Leaves of the Birch Tree (Betula alba) in Chronic Rheumatism.

A. R. had been subject to frequent attacks of chronic rheumatism, which had left swelling and stiffness in his knees and feet; treatment of different kinds, such as baths, fumigations, &c., had been used without any success in removing these symptoms; the patient, having heard that the leaves of the birch tree had proved of service in some cases, procured a bag, sufficiently long to extend from the toes to the middle of the thighs, and having filled it with fresh birch leaves, completely free from humidity, inserted his feet and legs into the sack on going to bed, a profuse perspiration was caused, and the stiffness was thereby much relieved; encouraged by the success, he persevered in his remedy, and in a short time he was perfectly well. M. Augustein of Cologne,

to whom this was related, has since tried the same remedy, with perfect success, in cases where baths of different kinds had in vain been previously used.—*Rust's Magazine.*

Aneurism, with thinning of the right cavities of the Heart—membranous partition situated at the commencement of the Pulmonary Artery, and perforated in the centre —Hypertrophy of the Liver.

BY DR. FALLOT,

Chief Physician to the Belgian Army.

M. N., ætat. 63, residing in Brussels, but a German by birth, has been subject, since the cessation of the menstrual discharge, at the age of 47, to dyspnœa and shortness of breath. The heart beats tumultuously, but the pulse is regular, although hard and vibrating. In the right hypochondrium there is a hard tumour in the situation of the liver. The only remedy by which any relief is afforded is bleeding, which has been frequently practised. Towards the end of February, 1833, she was seized with violent pains in the region of the heart, and with frequent attacks of vertigo. Her respiration became more embarrassed, and she was unable to stand. Towards the month of June she became delirious, and on the 16th expired in great agony.

Autopsy.—The heart was found to weigh fourteen ounces and a quarter; by its excessive development it had pushed the mediastinum into the right cavity of the thorax. The right auricle and ventricle, and two venæ cavæ, were much enlarged; and, in consequence of the dilatation of the cavities on this side, the tricuspid valve did not near close the auriculo-ventricular opening. The walls, also, of this portion were softened and much thinned, but were covered by a thick lamina of coagulum, composed of different coloured strata, and partially enveloping the columnæ carneæ. In place of the semilunar valves of the pulmonary artery, a thick membrane attached to the circumference of the orifice of this artery was found: its concavity, which was directed towards the ventricle, was pierced at its centre with an opening about the size of a goose-quill. The free and attached borders were thicker than the rest of the membrane. The left cavities of the heart were of the natural size, and were perfectly healthy. The tissue of the lungs was much compressed by the enlargement of the heart, but was permeable to air. The tumour in the hypochondrium proved to be the liver greatly increased in size. This gland, and the whole system of abdominal veins were found gorged with blood.

Admission of Air into a Vein during an Operation, followed by death.

In operating on a patient for cancer of the breast, and induration of the glands in the axilla, Dr. Goulard, of Lyons, wounded a large vein, from which a little blood escaped. At the same instant convulsive movements of the extremities took place. Hiccup succeeded, and in a few minutes the woman expired. No examination of the body was made.

British Hospital Reports.

ST. THOMAS'S HOSPITAL.

Anæmia.

JOSEPH FLETCHER, æt. 44, admitted October 25th, 1832, under the care of Dr. Elliotson. Has been a clerk in a mercantile house, but, owing to some misfortune, is obliged to gain his livelihood by mangling; has lately lived in a cellar, the air of which is foul and unhealthy; was suffering from jaundice five months ago, and was a patient in St. Bartholomew's Hospital; appears at present to be convalescent from a severe attack; conjuctiva and countenance yellowish; bowels open; pain on pressing over the liver, which is enlarged; tongue white and moist; lips and gums quite pale; mouth clammy; on moving about feels sick, and complains of dizziness in the head; ankles œdematous; great weakness; slight brûit de soufflet; has great desire for acidulated food. Ordered acid. sulph. dilut. ♏ xx. Decoc. cinchon. ter die.

30th. Complains of throbbing in the head. Ordered ung. iodinæ regioni hepatis; hydr. submur .gr. ij, o. n.; lactis Oj, quotidie.

Nov. 2nd. Omitt. pilul. et mistura. Cap. ferri subcarb. ʒij, ter die. V.S. ad. ʒij. The bleeding ordered with the view of ascertaining the quality of the blood.

9th. The slightest force broke down the crassamentum, and the quantity of serum was great in proportion.

On the 6th, the subcarbonate of iron was increased to ʒij, every four hours.

13th. On the 9th he was ordered meat and a pint of porter daily. Is gaining strength; appetite improved; still complains of throbbing in the head; pulse 120, and sharp.

20th. Is troubled with hæmorrhoids, for which ung. gallæ comp. has been applied; appetite good; feels stronger; throbbing of head better; the icterode hue of the surface

still remains. Ordered lot. alumin. ano; lactis Oij, quotidie; vin. rubr. ℥iv, quotidie.

23rd. Is not so well; complains of great pain on pressing over the liver; pulse 100, small and sharp; thirsty.

24th. Is much worse; great pain on pressing over the region of the liver, as also over the loins; great thirst; continually moaning, and bewailing on his wretched condition; at times incoherent; has not passed any urine since early this morning, and that high coloured; pulse 124 very sharp; skin hot. Ordered to leave off his wine, iron ointment, and meat. Applic. empl. canth. regioni hepatis.

25th. Much worse; breathing difficult; delirious muttering.

27th. Died early this morning, and the post-mortem examination took place in the afternoon.

A small quantity of fluid was found under the dura mater; the brain bloodless, but in other respects healthy; the heart and lungs very pale, and the former very flaccid; the liver enlarged, but the structure appeared healthy, although bloodless, as were the whole of the viscera.

Elizabeth Watson, æt. 26, a servant, admitted Nov. 17th, under the care of Dr. Elliotson. Has been ill for the last five months; complains of palpitation of the heart, and fainting on taking the least exercise; swimming in the head, and headach; loud bellows sound; menstruated a fortnight ago, but very scantily; countenance pale and yellowish; ankles swollen; bowels open; tongue clean.—Ordered ferri carbon. 3ij., ter. die.

14th. States that there appears to be sparks of fire flying about her; is menstruating; the discharge pale and scanty; still great giddiness, &c.

24th. Has rather more colour, and less dizziness of the head; since the 19th has taken ℥ss of the ferri carb.

Dec. 3rd. Less palpitation of the heart; headach better: countenance not so pale.

10th. Menstruated on the 7th, the discharge redder; appetite better; œdema of legs less.

15th. Bellows sound not so loud as on her admittance; œdema of ankles entirely subsided; countenance and tongue have more colour.

18th. Bellows sound hardly perceptible even on lying down; no swimming or dizziness of the head.

19th. Discharged.

Elizabeth Holdsworth, æt. 23, dressmaker, admitted November 7th, under the care of Dr. Elliotson. Has been ill two months; complains of palpitation at times; swimming of the head; and also of bearing down pain in the inguinal region; bellows sound, with the pulse about the middle of sternum; has not menstruated for the last six weeks; the catamenia have always been irregular, and of a pale colour; appetite bad; tongue pale; conjunctiva blueish; bowels confined; pulse 80, soft; sense of suffocation. Ordered ferr. carbon. 3ij. ter. die.; extr. coloc. c. gr. v. o. n.

14th. No pain or dizziness of the head; menstruating; the discharge pale coloured.

22nd. Has been suffering from cramps in the legs. Ferri carb. increased to ℥ss on the 19th.

27th. Has more colour; appetite better; bowels open; bellows sound still continues.

Dec. 3rd. Has considerably more colour; the conjunctiva has lost its blueness.

10th. Menstruated on the 7th; the discharge redder; less bellows sound; appetite good; no œdema of legs.

15th. No swimming of the head; more colour in the face; bowels regular; but some bellows sound still continues.

19th. Discharged.

MIDDLESEX HOSPITAL.

Diseases of the Larynx.

Considerable attention has of late been directed to affections of the larynx and its neighbouring parts, while many of the important diseases have been omitted in the older authors. Numerous cases have recently found their way into the medical journals, where sudden death has occurred from disease going on in the respiratory tube. Sudden death has taken place, and acute inflammation been found involving the pharynx, larynx, and trachea, in other instances a small ulcer on the epiglottis has been detected; in others again there has been effusion in the sub-mucous cellular tissue; and the cases are not wanting where nothing morbid has been seen, In the latter, the cause of death is referred to spasm of the small muscles about the parts; but this spasm is not so readily accounted for. It is easy enough to explain why spasm should take place when inflammation, ulceration, or effusion exists, for here is something tangible which we cannot bring to our assistance when the whole apparatus is found healthy.

The theory of spasm, however, is objected to by some; yet where is the difficulty, when the subject is studied anatomically and physiologically? The glottis is possessed of a peculiar vitality, it is exquisitely sensible to any foreign matter, it acts harmoniously with every effort of respiration and inspiration, and is called into spasmodic action when a particle of food, however small, attempts to enter it.

Where, then, is the surprise that the larynx, apart endowed with a high degree of sensibility, and so actively engaged in the functions of respiration, should be the cause of death by spasmodic action? Such is the case; and the man dies as suddenly as though the medulla oblongata were divided.

It has been said that death is caused by the gradual narrowing of the passage, and consequent interruption of the oxygenation of the blood. This, doubtless, may be the case where

death is not sudden, but not at all applicable when it is so.

"*It* is not," as has been beautifully explained by Sir C. Bell, "that actual obstruction takes place if ulceration ensue, or the deposition even of coagulable lymph that causes death, but it is that the muscles are spasmodically excited."

The following case, as illustrative of the foregoing remarks, will be of interest to your readers:—

Isaac Clark, æt. 20, admitted into the hospital, Dec. 13, complaining of sore throat of three days' standing, swelling of the whole neck, throbbing of the temples, and general uneasiness; tongue white; skin hot; pulse frequent. Complains also of great difficulty in swallowing. Tonsils considerably swelled; no ulceration.

Hirudines xij. gutturi.
Pil. calomel. c. ant. 1 6tis.

14. Great relief from the leeches; feels altogether better. Has taken some bread and milk, and experienced less difficulty in swallowing. Rep. pil.

15. Throbbing of the temples; heat of skin greater; pulse full; no increase in the size of the tonsils; swallows with difficulty.

V.S. ad ℥ xij. Rep. pil.
Inhalat. vapor. aquæ calid.

16. Better this morning; no difficulty of breathing.

After the apothecary had gone round the hospital, he was suddenly summoned to this patient, whom he found in a state of suffocation.

After using the inhaler he seemed suddenly to choke, the face becoming livid, and breathing spasmodically. The jugular vein was opened, and the operation for laryngotomy performed by one of the surgeons, and artificial respiration attempted, but without any success. It was observed that the heart was pulsating strongly against the ribs when respiration had ceased for some time.

Post-mortem examination.—The only morbid appearances found were in the pharnyx, larynx, and lungs. The pharynx was thickened in its walls, the membrane around being soft and infiltrated. The left tonsil, on being incised, exuded white clear pus. The epiglottis on the upper surface was thicker than natural, soft, and infiltrated, and presenting the appearance termed œdema. This was also evident in the mucous membrane between the epiglottis and the rima glottidis, but not sufficient to cause obstruction. The other parts of the larynx perfectly healthy. No inflammation here or in the trachea. Lungs crepitant and healthy, but gorged with blood.

Thus it appears there was no evidence of inflammation in the larynx, save effusion in the cellular membrane; at least there was no redness or effusion of lymph. Inflammation must have existed in the pharynx from the pain during life, and the purulent secretion found after death. Therefore it must be said that the man died in consequence of the natural action of the part being altered, the integrity of which is necessary for every moment of existence.

WESTMINSTER HOSPITAL.

Fracture of the Neck of the Thigh Bone.

A WOMAN, æt. 60, of very robust frame, was admitted into the hospital some time since, having met with an accident, which occasioned the following symptoms. Immediately after she received the injury, she was completely deprived of the power of locomotion. There was a slight shortening of the broken limb (this is caused by the very powerful action of the muscles which draw up the lower part of the fracture), and the knee was somewhat curved. A crepitus was heard on making a rotatory motion, and there was eversion of the toes.

Mr. White, in calling the attention of the pupils to this case, remarked, that the position of the patient was unexceptionably excellent. The double inclined plane was the best machine in such cases, as it afforded most comfort to the patient, and permitted the posture to be easy. Mr. White added, that no hospital in London equalled the Westminster in their mode of adjusting fractures. They had arrived at a perfection in that branch of the profession which was universally allowed.

The perfect ease of position, and various other circumstances connected with the general health of this patient, almost permit us to expect a very favourable result to this case.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON.

Westminster Medical Society	Feb. 8,	8 P.M.
Medical Society of London	— 10,	8 P.M.
Royal Geographical Society	— 10,	9 P.M.
Zoological Society	— 11,	8½ P.M.
Medico-Botanical Society	— 11,	8 P.M.
Medico-Chirurgical Society	— 11,	8½ P.M.
Institution of Civil Engineers	— 11,	8 P.M.
Society of Arts	— 12,	7½ P.M.
Royal Society	— 13,	8½ P.M.
Society of Antiquaries	— 13,	8 P.M.
Royal Institution	— 14,	8½ P.M.

APOTHECARIES' HALL.

NAMES of gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, January 30th.

William Clapham	Thorney, Cambridgesh.
Isaac Abraham Franklin	Manchester.
Walker Golland	Manchester.
Trafford Holmes	London.
Clotworthy Lane Monck	Wickwar, Gloucestersh.
Hopkin Llewellyn Prichard	Glamorgansh.
George West	

BOOKS.

A SERIES of Anatomical Plates, in Lithography; with References and Physiological Comments, illustrating the Structure of the Human Body. Edited by JONES QUAIN, M.D., Professor of Anatomy in the University of London. Fasciculi VII., VIII. Folio. London: February, 1834. John Taylor.

The Principles and Practice of Obstetric Medicine, in a Series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children. Illustrated by numerous Plates. By D. D. DAVIS, M.D., M.R.S.L., Professor of Midwifery in the University of London, &c. Part XXVIII. London: February, 1834. John Taylor.

The Animal Kingdom, arranged according to its Organisation; serving as a Foundation for the Natural History of Animals, and an Introduction to Comparative Anatomy. By BARON CUVIER. With additional Notes, and illustrated by nearly 500 additional Plates. Part II. London: 1834. G. Henderson, Old Bailey.

A Treatise on the Circulation of the Blood. Part I. contains—An Explication of the Anomalies, Res inepta, &c. of the Present Doctrine. Part II. An Attempt to explain how the Circulation of the Blood is accomplished by Motive Powers, different to those which are supposed to effect that operation. By J. F. HANDLEY. London: 1834. Longman and Co.

CORRESPONDENTS.

A Friend.—We are always ready to insert provincial hospital reports.

Edinensis.—We shall notice the pamphlet on the decline of the Edinburgh School of Medicine, at our earliest convenience.

A Fellow of the Medical Society.—The petition of the Society is, we believe, ready for signatures.

D. H. M.—The lectures are acceptable; but as we are now giving elementary courses, it is necessary to continue them regularly. The space for our third lecture has many claimants, each of whom shall receive our best attention.

A. T.—Some of the papers sent would occupy our entire number, and a quarterly contemporary declines accepting them; we shall turn them to account when convenience admits. We take this opportunity of requesting our numerous contributors to keep their communications as concise as possible, for otherwise we cannot insert them; even the quarterly journals decline them.

Gracchus.—Many thanks for the information.

Mr. Dermott.—Our reply to a correspondent in our last, had no reference whatever to Mr. Dermott, and we must decline noticing his correspondence in another journal.

Mr. Salmon's reply to Dr. O'Beirne, in our next.

A Constant Friend will observe we have acted upon his suggestion.

Crito.—Who cares a bawbee about the squabbles?

E. M.—Many thanks for the extracts.

A Reformer.—It is the unanimous wish of all respectable general practitioners, that remuneration should be received in fees; that medicine should be supplied gratuitously, and prepared by the prescriber, to secure its efficacy, and that open shops with quack medicines should be abolished. This was the opinion expressed at the Westminster Medical Society on a late occasion. There is no doubt but this plan, long since urged by that talented and eminent general practitioner, Mr. Cooke, of Trinity-square, would increase the respectability of the profession. The junior members might keep open shops, without vending chemicals, or quack medicines, perfumery, &c., and they should do so on commencing their career, to secure a practice.

METEOROLOGICAL JOURNAL.

MONTH. Jan. 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
30		38	48	43	30·08	29·97	73	75	W.	S.W.	Foggy	Fine	Cloudy
31		47	49	34	29·91	29·94	80	77	S.W.	S.S.W.	Foggy	—	—
Feb.													
1	☾	38	44	33	29·89	29·89	75	75	S.	S.	Foggy	—	—
2		40	44	37	29·92	29·86	75	79	S.S.E.	S.W.	Fine	—	—
3		41	49	40	29·80	29·80	78	79	S.S.W.	S.S.W.	Foggy	—	Fine
4		44	47	42	29·65	29·64	79	80	S.	S.S.W.	—	—	—
5		46	50	41	29·59	29.59	81	82	S.	S.W.	Fine	—	—

The quantity of rain fallen, month of January, $\frac{99}{100}$ of an inch.

50, *High Holborn.* WILLIAM HARRIS and Co.

ALL Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 107. SATURDAY, FEBRUARY 15, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXVI., DELIVERED MARCH 27, 1833.

Gentlemen,—We now come to the consideration of the specific disease *melanosis*, or *black cancer*, as it is called by Baron Dupuytren, the *melanoma* of Professor Carswell, which is characterised by the formation of a brownish or deep black inorganic matter in various textures and cavities of the body, especially those lined by a serous membrane. The shades of its colour vary in different examples; sometimes presenting only a yellowish or light brown; sometimes a dark brown; and frequently the deepest black. It is to the celebrated pathologist Laennec, that we are indebted for the first published description of the disease; though Dupuytren maintains that he himself first brought it under the notice of the profession, in his Surgical Lectures, delivered prior to the time of Laennec's observations; and on this point a warm controversy arose between these eminent men.

The scientific arrangement of melanotic diseases, adopted by Professor Carswell, is, I think, most calculated to give you a correct idea of their principal varieties. He divides melanosis into the *true* and *spurious*; the first comprising those cases in which the formations or products depend on a change taking place in that process of secretion, whence the natural colour of certain parts of the body is derived; the second, comprehending cases in which either a carbonaceous matter has been introduced from without, or in which the appearances are owing to the action of chemical agents on the blood, or to the stagnation of the latter fluid.

According to Professor Carswell, the most frequent seat of *true melanosis* is the serous tissue, more especially where this constitutes the cellular element of organs. Here the melanotic matter is formed after the manner of *secretion*, accumulates in the cells of which the serous tissue is composed, and gradually acquires the form of tumours of various sizes. A similar mode of formation of this matter takes place much more conspicuously in loose cellular tissue, and particularly on extensive serous surfaces, like those of the pleura and peritoneum. There is another mode of formation pointed out by Dr. Carswell: the melanotic matter is deposited in the substance, or molecular structure of organs, after the manner of *nutrition*. And lastly, as he has further explained, the melanotic matter is formed in the blood, chiefly in the venous capillaries, and under circumstances which show that it must have been formed in these vessels.

The valuable researches of Dr. Carswell, respecting melanosis, bring before us not less than four modifications of the true form of the disease.

1. The *punctiform melanosis*, in which the black colouring matter appears in the shape of minute points or dots, either grouped together in a small space, or scattered irregularly over a considerable extent of surface. These appearances are most frequently exhibited in the liver, and, when a section is made of it, the surface seems as if it had been sprinkled with soot or coal dust.

2. Another modification of true melanosis is what Dr. Carswell has named the *tuberiform*, and it is by far the most common one. Sometimes the tumour is not larger than a millet seed, but occasionally it is equal in bulk to a child's head, or even of more considerable dimensions. Of this size, however, they are chiefly seen in the horse; for you will rarely meet with an instance in the human body of the tumour exceeding the size of an egg or an orange, and commonly it is much smaller. It is in the loose cellular and adipose tissues that melanotic tumours are disposed to attain extraordinary magnitude. Their great size seems to depend upon the agglomeration of numerous small tumours. It is observed, likewise, by Dr. Carswell, that when the tumour is single, it is always of a globular or ovoid shape; but in the contrary circumstance it is lobulated.

In compound tissues, he has found it to be most frequently a *single* tumour, and in the cellular and adipose tissues, *aggregated*. In the liver, however, he has noticed that single melanotic tumours of large size are more common than in any other organ of compound structure.

Then, gentlemen, it is worth your while to remember, that melanotic tumours may be either *encysted* or *without a cyst;* and that the encysted ones are chiefly met with in the cellular and adipose tissues. The *tuberiform* melanosis of Professor Carswell, however, is not confined to the cellular and adipose tissues, or parts abounding in them; but may occur on the surface of the peritoneum, or that of the pleura.

3. Then, gentlemen, a third modification of true melanosis is described by Dr. Carswell under the name of *stratiform* melanosis, which occurs only on the surface of serous membranes. In its first stage, the part seems merely stained with the melanotic matter; in the second, a distinct layer of this substance is deposited on the surface of the serous membrane. Its consistence is generally that of jelly; and, as it is enclosed either in a soft spongy cellular tissue, or fine transparent serous membrane of new formation, it has a pulpy feel, but is not removed by the finger or scalpel passed over it, unless some force is employed. In certain cases, it forms a black coating, in appearance very much like what is produced by Indian ink.

4. The *liquiform melanosis*, the last of Dr. Carswell's species of true melanosis, may occur in natural or accidental cavities, and also within a melanotic tumour itself, in consequence of what French pathologists describe as the *softening process* in the centre. The cavities of the pleura and peritoneum are the chief natural cavities, in which the *liquiform melanosis* presents itself, and here only in small quantity. What has been described as this form of melanosis in mucous cavities, seems to Dr. Carswell to be owing to the changed colour of the blood, either effused in such cavities, or contained in its proper vessels, and acted upon by some external chemical agent, consequently they are spurious cases. It is in ovarial cysts that you will meet with the best examples of *accidental cavities*, in which *liquiform melanosis* is sometimes seen. The *consistence* of melanosis is exceedingly diversified. In the large cavities, it is never solid; in the cellular and adipose tissues, one or two cells may contain liquid black matter; but in the dense texture of the cutis, the smallest tumour may, according to Dr. Carswell's description, be as hard as cartilage.

The *spurious forms of melanosis* depend upon the introduction of carbonaceous matter into the pulmonary tissue in the process of respiration, or upon the action of acids, or other chemical agents on the blood, situated in, or upon parts; or lastly, upon the simple stagnation of this fluid.

Melanosis frequently originates in the subcutaneous cellular tissue, or in the cellular and adipose membrane, behind the peritoneum.

The most striking example of its circumscribed existence in adipose tissue, is that specified by Dr. Carswell, namely, where the disease occurs in the *appendiculæ epiploicæ*, which are sometimes converted by it into a homogeneous solid mass of melanotic matter.

Melanosis may take place in various parts of the same individual, as the eye, the skin, the liver, the lungs, the heart, the pancreas, and the peritoneal covering of the viscera. In this respect, the disease has a resemblance to fungus hæmatodes.

On the table, gentlemen, you see preparations illustrating the appearances of melanosis in the liver and lungs; in one, the sooty appearance of the surface of the section of the liver is finely exemplified.

The bones are not often the seat of melanosis. In one example, described by Dr. Alison, the whole of the sternum, the anterior portion of the ribs, and a great part of the parietal and occipital bones were black, more brittle, and of a softer consistence than natural, but without enlargement or caries. The periosteum was but little changed. In the same case, the dura mater was stained black, and the pleura studded with very dark coloured tubercles.

One interesting fact, explained by Professor Carswell, is, that the fluid of melanosis may be found in natural or artificial cavities, *without its being the product of their secretion.* This happens when melanotic tumours perforate the sides of those cavities, and pour their fluid contents into them. This has been observed in the thorax and abdomen; and in one case, a melanotic tumour had perforated the right lateral ventricle of the brain, in which was found a considerable quantity of black fluid, which afterwards passed into the third and fourth ventricles, and thence into the theca vertebralis.

Melanosis of the brain is rare. Here is a specimen of a small melanotic formation on the cerebellum of a child, that lived only three days from its birth. No doubt, therefore, in this instance the disease must have commenced in the fœtus.

The matter of true melanosis has no smell, a circumstance by which the disease may always be known from the effects of gangrene.

With respect to the symptoms of melanosis in the living subject, the disease may at first produce little or no pain; but it is remarked, that a sallow complexion, excessive debility, and anasarca, frequently come on before its termination. In some instances, however, great general indisposition, and most severe pain in various parts of the body, were experienced from the first, and occasionally the patient is rapidly destroyed in the short space of three or four weeks. In common examples, I believe, it does not cause a vast deal of suffering, except when nerves are involved in it, or

compressed by it. The symptoms of melanosis in internal deep seated parts are very obscure. I attended a gentleman in the King's Bench, whose pulse was seldom more than thirty-two or thirty-six. He was obliged to sit up a great part of the night, as when he went to bed he was sure to be attacked with something like angina pectoris. His appetite was good, and the alvine evacuations denoted nothing very wrong about the digestive organs. One morning he was found lying upon his face, perfectly dead. On opening the body, we found ossification of the mitral valves, a small calculus in the pelvis of one of the kidneys, and the whole liver enormously enlarged, and converted into a melanotic mass, of a purplish-black ink colour.

The matter of melanosis is completely insensible; it is only an inorganic secretion, or deposit, sometimes produced in textures, or upon surfaces otherwise apparently healthy and natural; sometimes produced in parts affected with chronic inflammation; and sometimes coexistent in the same mass, with either scirrhus, cancer, or fungus hæmatodes; a point, in which the researches of Professor Carswell agree with those of the late Dr. Armstrong.

Melanosis is a more common disease in horses, than the human subject; but it is principally met with in those of a white or grey colour; a fact, corroborating the doctrine of its origin from constitutional peculiarity. As Professor Carswell remarks, the circumstance is also favourable to the theory, which ascribes the origin of melanosis to the accumulation in the blood of carbon, which is naturally employed to colour different parts of the body, as the hair, rete mucosum, and choroid coat of the eye.

From chemical analysis, it would seem, that the substance of melanosis consists of fibrin, a black colouring matter, a small quantity of albumen, chloruret of sodium, oxide of iron, water, subphosphate of lime, and a few other salts in small proportions; and it is the general opinion, that the melanotic matter is essentially composed of the constituent elements of the blood. The colouring matter seems also to be a highly carbonised principle.

We know of no remedy for melanosis. Its causes are as obscure as those of fungus hæmatodes, the disease perhaps most analogous to it. The only chance of benefit depends upon the early removal of the disease by operation, when the situation of the part affected will admit of it. An eye affected with melanosis has been extirpated, without any relapse having followed the operation at the end of two or three years. Melanotic tumours, formed under the tails of horses, have often been cut away with permanent success. These facts prove that melanosis is not always quite out of the reach of the efficacy of surgery.

Scrofula, or *struma*, commonly called the *king's evil*, from the superstitious notion formerly entertained, that it was curable by the royal touch, frequently presents itself in the form of glandular enlargements under the skin, swellings, whose progress is in general remarkably indolent, which soften very slowly, and at length frequently suppurate and burst, after which they remain a greater or lesser time as ulcers, and, after healing (which they do very tediously), often leave behind them callous irregular scars, incapable of obliteration.

Sometimes the disease occurs in the substance of the cutaneous texture, which it disfigures and alters in a most disgusting manner; and very often it attacks the ears, the eyes, the eyelids, the nostrils, and the lips, which it thickens and deforms in an extraordinary degree. In other examples, you will find it fixing upon organs more deeply situated, as the bones and joints, obstructing the organs for the conveyance of the lymph and chyle, or giving rise in the lungs, the peritoneum, and other parts, to those tubercular diseases, which in this climate, at least, are the greatest cause of mortality.

After what I have said, it is scarcely necessary for me to observe, that scrofula will not admit of a short satisfactory definition; and this, notwithstanding our familiar acquaintance with its usual seats, and its ordinary ravages and course. I may tell you, however, that it is characterised by a remarkable propensity to chronic inflammation of the lymphatic and mesenteric glands. The absorbent glands of the neck, and those under the jaws, are more frequently attacked by scrofula, than those of any other region in the body; and perhaps their being more exposed to vicissitudes of temperature, and to the irritation of porrigo, which is so common in children, may afford some explanation of this fact. Next, perhaps, the mesenteric glands are most frequently disorganised by it; and it is not unusual to find it affecting the glands in the groin, and even those in the axilla, and other situations. Indeed, I may say, that all the absorbent glands, in every part of the body, are liable to scrofulous disease.

Next, gentlemen, I may observe to you that scrofula always produces in the system a tendency to the formation of chronic abscesses, not merely in and about the absorbent glands, but in the general cellular tissue of the whole body.

As already mentioned, it likewise creates a disposition to the origin of tubercles in the lungs, liver, brain, spleen, and other internal organs. These tubercles are small, roundish, opaque masses, of a whitish, greyish, or yellow colour: when situated in the lungs, they sometimes gradually augment in size, until they are half an inch or more in diameter. More commonly, however, when they have become as large as a pea, they begin to soften in the centre, and thus communicate by one or more minute apertures with the neighbouring bronchiæ, or, remaining for a longer time closed, they are converted into collections of curdy half formed pus, termed *vomicæ*, which, sometimes uniting together, form large abscesses, and these, bursting into the bronchiæ,

often leave considerable cavities called *tubercular excavations.* The most frequent seats of scrofulous tubercles in adults, are, first, the lungs, and then the small intestines; but, in children, their most frequent situations are in the bronchial glands, the mesenteric glands, the spleen, the kidneys, and the intestines, in the order I have enumerated.

If you regard tubercular phthisis with me as a scrofulous disease, it will make a material difference in the comparitive estimate of the frequency of scrofula in children and grown up persons.

Scrofula is accompanied by a tendency to certain morbid changes in the spongy and cancellous texture of the bones, and also in the synovial membranes.

In the common language of surgery, gentlemen, we frequently say, that a person is scrofulous, though he may not have any visible disease about him, but merely certain appearances, usually regarded as emblems of a scrofulous constitution, or of a predisposition to scrofula. Thus, a fair complexion, light coloured hair, a fine thin delicate skin, exhibiting the minute ramifications of vessels, full-sized rather dilated pupils, and a remarkable whiteness of the albuginea of the eye, a tenderness of the edges of the eye-lids, a swelling of the upper lip, with some thickening of the alæ and tip of the nose, are known to denote a scrofulous constitution. In many instances the ends of the fingers are broad and clubbed, as the expression is, and the belly protuberant. Perhaps the doctrine of a fair complexion and light hair, being indications of a predisposition to scrofula, may have been carried too far, and certainly I should have been inclined to suspect, that it had arisen merely from the accidental circumstance of the greater number of children in this country being fair, and having light-coloured hair, had I not found it noticed by Alibert and other French pathologists, that scrofula is most frequently seen in France in the same description of children, where we know that dark complexions and dark eyes predominate.

You are not, however, to suppose, that a dark complexion is an absolute protection; for many scrofulous persons have dark skin and hair; and every surgeon of experience knows, how subject the African negro and other individuals of the dark races are to scrofula, when brought to this damp, cold, and variable climate.

It is frequently difficult, perhaps sometimes impossible, to draw with precision the line between scrofulous and some other diseases, because there is an insensible transition, or gradation, from one to the others. Yet certain forms of diseases present themselves daily, in which you can have no hesitation in pronouncing them to be scrofulous. Such are particular indolent swellings and abscesses of the lymphatic glands of the neck, certain diseases of the joints and spinal column, and various tubercular affections. Children are more liable to scrofula than grown-up persons, the period of life most exposed to its attack being from infancy to puberty. Nay, if tubercles are to be regarded as unequivocal effects of scrofula, as many of the best pathologists believe, the disease may commence in the fœtus; and you may see in my friend, Mr. Langstaff's Museum, portions of lung taken from a fœtal subject, and evidently containing completely formed tubercles in them.

As puberty approaches, the disposition to scrofula lessens, and those, who have suffered from it in their childhood, sometimes become free from it, and bid defiance to its further annoyance. Females are generally considered to be rather more subject to scrofula than males. The disease is well known to be neither infectious nor contagious, it is not communicable from one person to another by inoculation, nor through the atmosphere; and the idea, that scrofulous nurses may impart the disorder to children, is one that is at present universally renounced.

Scrofula may make its appearance in almost any texture of the body, and is not, as is sometimes conceived, peculiar to the lymphatic glands, though they are perhaps more susceptible of it, than any other parts. The glands of the neck and those of the mesentery undoubtedly come within this remark; and next to those organs, I may say, that the skin, the lungs, the eyes, the ears, and the spongy parts of the bones are most frequently the seats of scrofulous disease.

Scrofulous inflammation is generally remarkable for the slowness and indolence of its character. Its attack is always more insidious, and its progress much slower, than the invasion and advance of phlegmonous inflammation. The acute pain, the throbbing, the firm circumscribed swelling, the bright red colour, and the quickness of the changes which attend all simple healthy inflammations, may be said to be entirely absent from scrofulous inflammation, as it usually presents itself. Neither does scrofulous inflammation, when situated in a lymphatic gland, or any ordinary texture, commonly produce at first any febrile disturbance; yet, when scrofula makes progress, or attacks organs of great importance in the animal economy, or extends its ravages to the large joints, the degree of constitutional derangement and of hectic is often such as to form a state of considerable and urgent danger.

Scrofulous inflammation near the surface of the body often begins with a soft swelling of the part affected, which is frequently one of the lymphatic glands. The covering of the gland becomes slightly thickened, and the gland itself has a doughy feel. As the swelling increases, it becomes more elastic, or even communicates the sense of a fluctuation; and, in this stage, you will generally notice a degree of induration under and around the tumour, with a more or less red or livid discoloration of the skin. If a puncture be now

made in the swelling, a thin fluid, mixed with flakes of a curdy substance, composed of fibrin, will be discharged, but only in trivial quantity, and rarely in the shape of good pus. The edges of the puncture next inflame, and the opening becoming larger, in consequence of the ulcerative progress, a dark yellow or brown sloughy-looking substance may be seen within it; and betwixt this substance and the skin a probe may be passed freely all round the sore. Indeed, it may be said to be one of the characters of scrofulous abscesses, when formed near the surface of the body, always to detach the skin extensively from the subjacent parts. If the disease be allowed to take its own course, without being punctured, a part of the skin becomes very thin, and of a light purple-red colour, afterwards bursting and discharging a thin fluid like whey, with which flakes of fibrin, and occasionally pus, are also blended. The redness continues, the surrounding hardness remains, the ulcerative process advances, and the case is now converted into an open *scrofulous ulcer* or *sore*, which is generally not disposed to heal up in a favourable and expeditions way. The cavity and sides of many deep ulcers and abscesses, resulting from scrofula, are noticed by Mr. Wardrop to be covered with a tough, yellow, fibrinous incrustation, that produces an impediment to the formation of granulations; and he accounts for the usefulness of laying open scrofulous abscesses, partly on the principle of its promoting the separation of this extraneous incrustation within them. In Dr. Baillie's Morbid Anatomy, the substance, which I am speaking of, is particularly mentioned, as presenting itself in scrofulous abscesses.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE.

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE VIII.

Diseases of the Small Intestines.

GENTLEMEN,—At my last lecture I was engaged in the consideration of disease of the small intestine: let us now resume the subject. You remember I mentioned to you that most of our knowledge of the inflammatory affections of the small intestine refers to the ileum, and that, in point of fact, we know little or nothing of disease of the jejunum. This, however, is not of much importance, as, of all the parts of the digestive tube, the jejunum is the least liable to disease, and is seldom or never engaged without the co-existence of disease in the ileum or duodenum. You recollect I drew your attention strongly to the extreme frequency of inflammation in the lower third of the ileum, and the importance which it derives from this as well as from its insidious latency. I showed that it was one of the most common secondary lesions in typhus fever, and a frequent cause of death. This cannot be impressed too much upon your minds,—it is a point of pathology on which the best informed medical men are agreed. It may also, and very often does, occur as a pure idiopathic affection, without being preceded or superinduced by that morbid state of the whole economy to which we give the name of fever. I said it was extremely common in children; that here it was in many instances mistaken for worms, or bilious, or remittent fever; that it constantly occurred during the progress of tabes mesenterica, and often appeared to have the initiative. I alluded to the discussion which has arisen as to the question whether disease begins in the glands or mucous membrane, and stated that such discussions are useless, as it is impossible to separate the two affections in diagnosis or treatment, and practical medicine gains nothing by the distinction.

With respect to the symptoms of ileitis, I observed that they were those of a general affection of the digestive tube, the phenomena which indicate irritation at its upper and lower part being absent. That if you abstract from symptoms of a general affection of the intestinal canal, the vomiting and desire for cold drinks which characterise inflammation of the upper part, and the diarrhœa and tenesmus which denote disease of the lower part, you will have the diagnostic marks of an ileitis. At our last meeting I showed you some preparations illustrative of this disease; I intended to have exhibited others of the same kind to day, but regret I cannot lay my hands on them at present. Allow me to rehearse the symptoms of ileitis once more. Thirst, without desire for cold drinks; absence of vomiting, and of the characteristic symptoms of inflammation of the colon and rectum; early tympanitis, generally on the second day of the disease; absence of pain, but existence of tenderness on pressure between the umbilicus and the crest of the ileum; pointed tongue, of a dirty white on the upper surface, and red at the sides and tip; contracted features; quick, small pulse; fever, and, what I forgot to mention in my last lecture, scanty high-coloured urine, a very constant symptom, so much so, that I have known this disease mistaken for an affection of the kidney, and the patient treated accordingly. I must add, that the patient died, that the kidney was found perfectly healthy, the ileum in a state of violent inflammation, and the suppression of urine to be referred to this cause alone.

I drew your attention at my last lecture to the increased pulsation of the abdominal aorta and its immediate branches, and stated that I looked upon this as a direct sign of abdominal inflammation. I do not mean to say that every case of increased action of the great

abdominal arteries is significant of ileitis or intestinal inflammation. We see unusual pulsation of the abdominal aorta in hysterical females, and see it subside under the use of antispasmodics; we see it in painter's colic; we see it in cases of extreme emaciation; we see it in disease of the aorta, or of some of its first large branches. What I wish to draw your attention to is this: where we have this symptom in addition to other signs of inflammation of the digestive tube, it is of considerable value as a diagnostic.

You may remember I stated that ileitis, from being generally attended by fever of the continued type, has been frequently supposed to be simple continued fever, and that this was one of the consequences which resulted from the latency of the disease. Petit was the first who described this disease rightly. He described it under the name of entero-mesenteric fever, that is to say, fever depending on disease of the mesenteric glands and small intestine. The following is an outline of his description: "The attack comes on with debility, irregular fever, quick, small pulse, sunken countenance, perhaps some diarrhœa, a lustrous expression of the eye." I may remark here that the occurrence of diarrhœa without any evident affection of the great intestine, and *accompanied by fever*, is almost always a sign of ileitis. It too often happens that practitioners, as I before remarked, prescribe for names. In cases of pulmonary disease, if the patient has fever with copious expectoration, they say he is labouring under an attack of bronchitis; but in case of intestinal inflammation, accompanied by increased secretion, it is different; they merely say he has diarrhœa, and prescribe for it without connecting it with its proper cause. The general rule is, *that when you have diarrhœa with fever, there is inflammation of the digestive tube.*

In inflammation of the ileum the patient generally lies on his back, and avoids motion as much as he possibly can, his skin is dry and harsh; he is feverish; he has thirst, but little desire for cold drinks; he scarcely ever vomits; his alvine dejections are sometimes thin and purgative, sometimes figured and natural. But there is one circumstance which is of considerable importance in pointing out the amount of disease, even in cases where patients have consierable diarrhœa, and this is, that the diarrhœa is not sufficient to account for the extraordinary prostration. There must be some cause for the great reduction of vital power besides the mere diarrhœa, and I must state to you that there are few diseases which bring on such rapid prostration as inflammation of this portion of the digestive tube. In the advanced stage of this disease, the patients have cold skin, subsultus tendinum, petechiæ, involuntary discharge of urine and fæces, low delirium, coma, gangrenous ulcerations of the back, sinking of the powers of life, effusions into the head and chest, in fact all the symptoms which characterise the last stage of typhus. Generally speaking, the disease is more or less prolonged, and the patients die of exhaustion, but in some cases the approach of death is more sudden and formidable. Some of the ulcers pass deeply into the substance of the intestine, perforate all its coats in succession, the contents of the intestine escape into the peritoneum, and the patient is carried off by a rapid peritonitis.

Inflammation of the ileum is very frequently met with in children, and it is most important that you should be aware of the extreme frequency, as well as the symptoms of this disease, in those little creatures. There is one fact in pathology, which seems not to be generally acted on, that there is a class of diseases which are intra-uterine, and with which a child may be born. There are a great many cases of this kind on record, but still, I must confess, there is a great scope for investigation, and that our knowledge on this subject is imperfect. I believe that any one who has the opportunity of dissecting a great number of still-born children, or of those who die immediately after birth, would, by examining the state of the different cavities, and publishing the results of his examinations, earn for himself very great reputation. It is a well known fact that children may be born with hydrocephalus, with tubercles in the lungs, with acute inflammation of the stomach; nay more, children have been known to be born with chronic gastritis, and with old ulcerations in the ileum and colon. When children happen to be born with gastro-enteric disease, they are puny and weak; the fact of this occurrence is generally overlooked, the case is considered to be one of general debility, and hence most of those children are lost in consequence of their medical attendants being ignorant of the real nature of the disease. It is a very curious fact, too, that where enteric disease occurs in very young children, it is frequently met with without any accompanying fever, and this is a point of great importance. Here is a fact not generally known. A new-born infant has vomiting, swelled belly, contracted features, but at the same time he has cold skin and feeble pulse; he has no distinct symptoms of fever, and a puny and feeble state of constitution appears to be the prominent symptom. He dies, and, on opening the body, you find distinct traces of enteric inflammation. The younger the child is, the less will be the chance of fever occurring as a sign of enteric inflammation. It seldom happens that this takes place after dentition, but before it is very common.

Now, what are the circumstances which would enable us to recognise this disease in children who have passed the period of first dentition? If you find the child vomiting, thirsty, with swelled belly, hot skin, a tendency to diarrhœa, and an erythematous redness about the anus, you may be sure that there is disease of the digestive system; if the

child is restless, and you perceive that the symptoms of irritation of the head are coming on, you will be more certain, and in such cases pathology will inform you that the disease is chiefly in the ileum. In the advanced stage the diarrhœa is lessened, but the belly continues tympanitic, the child exhibits traces of long suffering, and the circumstance of the teeth not being developed gives it the appearance of premature old age, which cannot be mistaken by an experienced eye, and is a sign of long continued and extensive intestinal disease. In some cases, the child gets a common attack of diarrhœa; this is neglected, but after going on for two or three days, symptoms of fever begin to appear. Here we arrive at a practical rule. Where a child has diarrhœa, and after labouring under this for a few days, gets an attack of fever, you may be almost sure that it is a case of enteritis, and that you will be acting wisely in treating it as such. In the opinion of many well informed practitioners, that form of fever, which has been called infantile remittent, is only an example of this disease. In proof of this fact, Dr. Marsh, my friend and predecessor in this school, in his paper on jaundice makes some excellent remarks on this subject. "There is yet one form of disease of very frequent occurrence, the seat of which is in the stomach and small intestines. That to which I allude, is the *infantile remittent fever*, or, as it is vulgarly termed, the *worm fever* of children. Its characteristic symptoms, if closely analysed, will be found all of them to point to the mucous surface as the original seat of morbid action."—*Dublin Hospital Reports*, vol. iii.

It would be well for medicine, if the valuable information conveyed in Dr. Marsh's paper was more universally diffused. I feel convinced that many children fall victims to mal-practice under circumstances of this kind. A child gets symptoms of diarrhœa, has irregular or bad appetite, and swelled belly, the disease is called worm fever; he gets a dose of calomel and jalap, and perhaps passes some worms; for when we come to speak of worms, we shall find that disease of the mucous surfaces is intimately connected with worms, and, in the opinion of one practitioner, worms may be the result of enteric inflammation. Well, some worms are passed; the purgative is again used; the child may not pass any more, or he may pass one or two in the week to encourage the practice. But all the symptoms of intestinal inflammation, the diarrhœa, the tympanitis, the thirst, the fever, are supposed to depend upon the presence of more worms, and these are to be evacuated by purgative medicine, and thus the affair goes on, until the child falls into tabes mesenterica, or gets sympathetic inflammation of the brain, and dies of hydrocephalus. I regret to add, that in many cases of this kind the head alone is opened; a little fluid is discovered in the ventricles of the brain, the doctor's diagnosis of the head is found to be correct, and all parties are satisfied. In cases of this kind, the early application of leeches to the belly, the regulation of diet, keeping the bowels gently open by enemata and mild counter-irritation, would have saved the patient. This is not mere theory, it is but a statement of facts, supported by the experience of practical men.

I wish to say a few words here with respect to tabes mesenterica. In a course of lectures like the present, it would be impossible to examine in detail the different forms of this disease; it will be as much as I can do to draw your attention to the general principles of its pathology and treatment. The term, tabes mesenterica, is employed to designate that species of consumption which depends upon disease of the mesenteric glands. The common idea formerly entertained with respect to this affection, and, I believe, still to a great extent, is, that the disease first commenced in the mucous glands, and from these extended to the lymphatic ganglia of the mesentery, which in their turn became enlarged, thickened, and less pervious, so that a sufficient share of nutriment cannot be absorbed, the consequence of which is, that the patient dies of atrophy and exhaustion. With such views of the case, the principles of treatment consisted in employing a class of medicines called deobstruent, the operation of which was supposed to be efficacious in removing this obstruction, this deposition in the substance of the mesenteric glands, and the enlargement by which it was accompanied. This was, and this, I am sorry to say, is the idea still entertained by many. What is the actual state of the science with respect to this disease? It is found that the glands are certainly changed in their structure, and that they are manifestly enlarged; but this is only a link in the chain of phenomena, for it has been proved, that in *the majority of cases the disease is ushered in by enteritis, and that the swelling of the glands is the result of disease, propagated along the course of the lymphatics from the mucous surface of the intestines to the mesenteric ganglia.*. This preparation, which I shall send round, will give you an idea of the actual state of the disease. Here is one of the glands which has been cut through; it exhibits the cheesy texture commonly observed in this disease, but you can perceive there are a number of lines running towards each of the glands; these are the engorged lymphatics, which you see correspond with ulcers on the mucous surface of the small intestine. That this is the true pathology of the disease will appear from the following circumstances: First, it has been proved, that the glands of the mesentery commonly become inflamed, enlarge, and even suppurate, in cases of inflammation of the mucous membrane of the intestinal canal in the adult. A patient gets enteric inflammation and dies; on dissection we find distinct marks of disease in the intestines, and, in addition to this, we find the

glands evidently diseased. Here is one fact. In the next place, it has been proved that, in a great many cases of tabes mesenterica, if you retrace the history of the disease, if you go back to its first and earliest phenomena, you will find that it began with the symptoms of what has been termed remittent fever, or that the patient had enteritis or diarrhœa, which afterwards became chronic, and that then the symptoms of tabes mesenterica began to appear. In the third place, you will find that, in a vast number of cases, where a fatal termination has occurred, if you pursue your dissection, and slit up the whole of the ileum, you will discover numerous old ulcerations of the mucous membrane, and find that the lymphatics, which correspond with these ulcerations, are in a state of manifest disease. Lastly, it has been observed, that the best treatment for tabes mesenterica, is that which is calculated to remove enteric inflammation, and that the old treatment, founded on the principle of removing obstruction, by the use of alkalies, absorbents, and solvents, is erroneous and false in the majority of cases. So that we have proof of the origin of this disease in intestinal inflammation, drawn from the occurrence of analogous affections in the adult, from the phenomena of the disease in its early stage, from morbid anatomy, and from treatment. I think there can be no doubt that, in most instances, it commences by intestinal inflammation. Of course a predisposition to disease of the glandular system will favour the occurrence. But is there no case in which the disease has commenced in the glands, and where the mucous membrane of the digestive tube is secondarily engaged? My answer to this question is, in a few cases we cannot prove that the disease commenced in the mucous membrane, and there is no reason why the glands of the mesenterica should not be liable to primary tuberculous or scrofulous deposition as well as those of any other part of the body; but, in a vast number of instances, the enlargement of the mesenteric glands is secondary, and resembles the inflammation of the inguinal glands, which results from chancre on the penis. I would advise you to consult the Commentaries on Pathological Propositions by Broussais. On this subject, also, Dr. Mackintosh's Practice of Physic.

There is one thing more connected with this disease, which is of considerable importance, and to which I shall briefly draw your attention, and this is, that this inflammation of the glands of Peyer and Brunner, this *dothin-enteritis*, as it has been called, is a very common cause of slow convalescence in fever. You will meet with cases of fever, which will go on to the 17th or 21st day, and then something like a crisis takes place; you expect that from this time forward the patient will get progressively better; but, in the course of a few days, you will be surprised to find no amendment, and that he is not gaining strength; you feel his pulse, and find it quick and small, his attendant informs you that he is restless at night, and when you ask him how he feels, he says he has no particular complaint, but that he is very weak, gets no sleep at night, and has no appetite. Under these circumstances you are anxious to find out what his disease is; you inquire into the state of the heart, lungs, and brain; you find no evidence of disease in any of these organs; you run over in your mind the symptoms present, the feverishness, quick pulse, want of appetite, restlessness, and finding some degree of abdominal tenderness and tympanitic swelling, you arrive at the conclusion, that the return of health and strength is impeded and delayed by the existence of a dothin-enteritis. The first person who discovered this fact was Dr. Cheyne. "In these cases," says he, "the distress of the patient often bore no proportion to the danger he was in; the former was very little, while the latter was extreme. The disease would proceed without violent symptoms; nay, a patient would seem to be recovering, although without any critical discharge; he would call for full or middle diet, and for days take his food regularly. The only circumstance in his situation which demanded attention was, that he regained neither flesh nor strength, and he expressed no desire to leave his bed. Then, his pulse again became quick and his tongue dry; and he would complain of dull pain and uneasiness in his belly, attended with soreness on pressure, and a degree of fulness in the upper part of the abdomen. Then came on a loose state of the bowels, and great weakness. Probably at the next visit the patient was lying on his back, with a pale sunken countenance, and a very quick pulse; his mind without energy. Then his stools (mucous) passed from him in bed, and the urine also. Perhaps a hiccup came on; next his breathing became frequent, in which case death was at no great distance."—In all these cases the mucous membrane and glands were found in a state of decided disease.

Now, what was the nature of this disease? It came on as a secondary affection during the course of fever, became more marked and intense, and finally destroyed the patient. I have seen very many cases of this disease. I give you this as a general rule:—when, after the apparent termination of a fever, your patient convalesces very slowly and imperfectly; when you find that he is becoming weak, that his pulse is quick, his belly tympanitic, his thirst still present, *and all this without evidence of disease in the respiratory, circulating, or nervous system*, you may suspect inflammation of the mucous glands of the digestive tube, which may terminate in deep ulcerations; and you will not be surprised if your patient should be carried off by rapid peritonitis, occasioned by an ulceration of all the coats of the intestine. I have witnessed many instances of the truth of this statement.

It has been objected to the doctrine, that

infantile remittent fever, and tabes mesenterica depend on inflammation of the mucous membrane of the digestive tube, because it has been found that purgatives are sometimes useful in the treatment of the disease; and those who bring forward this objection ask, "if purgatives give relief, how can it be intestinal inflammation?" Now, what are the real facts of the case? These cases, which have been relieved by purgatives, are cases in which purgative medicine has been given in the early stage, and has been productive of benefit; or, in other words, where the disease is only just commencing, and where its cause is proved to be the presence of irritating matter in the bowels. A physician is called to a case of this kind; he gives a purgative; a quantity of offending matter is evacuated, and the child gets better. You should act in the very same way, and have recourse to purgatives whenever you have reason to suspect the existence of irritating or indigestible matter in the bowels. You are to employ purgatives on the same principle as every one employs emetics, in cases where corrosive poison has been swallowed; but no one is inclined to think that he will be able to cure the disease by the continued use of emetics. But, unfortunately, persons do not attend to the actual state of the digestive tube; they go on prescribing purgative after purgative, until the irritation, which was originally produced only by indigestible matter, becomes exacerbated, and terminates in ulceration of the intestinal mucous surface, accompanied by all the symptoms of tabes mesenterica.

The treatment of this affection is both simple and easy, particularly when the patient applies to you at an early period. In the case of children, one of the first things you have to determine is, whether you shall have recourse to the employment of purgatives or not. If you happen to be called in at an early period, or if the patient has taken no purgatives, and there is reason to suspect a loaded state of the bowels, you will be right in employing some mild laxative. You cannot commence your treatment better than by prescribing some mild opening medicine, particularly when you discover that the patient has been taking indigestible improper food. This plan I think both reasonable and useful. You will frequently meet with cases in which all the bad symptoms will disappear after the use of a few laxatives. Here is a point on which the followers of Broussais erred. They declared that the exhibition of a single laxative would be to endanger the patient's life; and that the only treatment which could be relied upon consisted in the use of leeches, low diet, and cold water. But I think there is as much reason in giving a laxative to remove indigestible matter from the bowels, in a case of this kind, as there would be in giving an emetic in a case of gastritis produced by the presence of indigestible matter or corrosive poison in the stomach. But if, after having evacuated the bowels, the symptoms of intestinal irritation should continue, you are not to persist in the use of purgatives; change your hand and attack the symptoms of intestinal inflammation, which have now decidedly commenced.

We shall occupy ourselves, gentlemen, at the next lecture, in considering the treatment of this disease in the adult as well as children, and then go on to the disease of the large intestines.

CLINICAL LECTURES

DELIVERED

At the Meath Hospital, or County of Dublin Infirmary, Session 1833-34.

BY PHILIP CRAMPTON, M.D., F.R.S.,

Senior Surgeon to the Meath Hospital, Surgeon-General to the Forces in Ireland, &c., &c.

LECTURE V.

Fractures and Dislocations.

GENTLEMEN,—I beg to direct your attention for one moment to this preparation; I alluded to it in a former lecture, but was not able to lay my hands upon it until this morning. It furnishes a very good illustration of the mode in which union takes place in an oblique fracture of the tibia and fibula, where due attention is not paid to the coaptation, as it is termed, of the fractured pieces. It also illustrates a kind of fracture of frequent occurrence, but which is, I believe, often overlooked; and it is in all probability owing to such an oversight, that the deformity in this case is to be attributed. The fracture, which passes obliquely through the tibia at its lower extremity, is accompanied by a fracture which passes through the fibula within an inch of its upper extremity. It is easy to perceive how such a fracture may take place. If the lower extremity of the tibia and fibula be fixed, as when the foot passes through a hole in the floor, or is caught in a narrow drain, while the whole body falls outwards; and if there be any hard substance interposed between the fibula and the ground which supports the bone for a great part of its length, that part of the bone which is deprived of its support will give way at its weakest point, and that point is immediately below its head, for here it is slender and not covered by the extensors and abductors of the foot. Now if the surgeon, finding that the fibula is unbroken at the point corresponding with the fracture of the tibia, concludes that it has not been fractured at all, and least of all at its upper extremity, he will make a very serious mistake, and one which will materially affect the comfort of his patient and his own reputation. Having heard and observed that when the fibula is unbroken no shortening of the tibia can take place during its consolidation, he pays but little attention to the coaptation; and, when

he comes to examine the limb at the end of three or four weeks, he finds, to his infinite mortification, that the leg is, as in this preparation, two inches shorter than the unbroken one.

Here is another preparation exemplifying union by permanent callus, which has been completed; and you perceive accordingly that all the occasional callus has been removed. This preparation illustrates fracture of the neck of the thigh-bone, external to the capsular ligament; and you can see that the neck of the bone is driven into the cancellated structure of the shaft close to the greater trochanter.

I shall for the present close the subject of fractures by reporting progress on the cases to which I made reference on Monday; and first, with respect to the case of a woman in the accident ward with fracture of the fibula. The fracture in this case, which was situated one inch above the lower extremity of the fibula, and unaccompanied with any other complication but a partial dislocation of the foot, was produced by a violent twisting of the foot inwards. In such cases, you will recollect, the fracture is chiefly caused by the violent traction of the external lateral ligaments which pass from the extremity of the fibula to the os calcis. When the foot is turned inwards, these strong inelastic ligaments act in a direction nearly at right angles with the axis of the fibula; the ligaments or the bone then must yield, and the latter I believe invariably gives way, the action of the ligaments being aided considerably by the sharp edge of the astragalus, which, pressed from within outwards by the tibia, acts as a fulcrum against the fibula. The fibula is thus snapped across just about the point where its extremity joins its shaft; and when the patient attempts to bear on the limb, the astragalus turns outwards for want of its accustomed support, and away goes the foot. In our case the woman did not lay her weight upon the foot after the accident, and accordingly there was little or no displacement. The foot was placed in Dupuytren's apparatus for the space of twenty-five days; a figure of eight roller was then applied firmly round the ankle-joint instead of the splint and cushion; with this the limb was kept secure until consolidation was firmly established, and this day the woman is discharged cured. It will be be at least two months before she will be able to walk without lameness, in consequence of the length of time which ligamentous parts take in recovering their proper flexibility. The recovery of the strength of the joint after fracture of the fibula is considerably promoted by the salt-water douche and friction with some animal oil. Fresh goose-grease, the favourite remedy with the poor of this country, seems to answer the purpose very well.

With respect to the case of compound fracture of the tibia, I have only to say that it is going on as favourably as possible; no new abscesses have formed, and the discharge is diminishing daily, but there is not as yet any thing like consolidation. This process will not commence, or rather it will not proceed further than granulation, until all communication with the external air is cut off by the closing of the wound.

The compound fracture of the olecranon in the Male Accident Ward is still in a hazardous state. The patient's general health, however, holds up pretty well under the profuse discharge and irritation necessarily attendant on an open joint. You have seen that abscesses still continue to form about the joint. On Saturday I was obliged to open a larger one, which communicated with the cavity of the joint, as was apparent from the escape of synovia along with the pus. On that occasion I pointed out to you the peculiar characters which denoted this communication. Whenever you see an abscess in the neighbourhood of a joint, and find, on opening it, that a clear and nearly colourless fluid, like white of egg, escapes along with the pus, you may be sure that it is synovia, and that there is a communication between the abscess and the cavity of the joint. In cases like this a great deal of time must elapse before a cure can be accomplished, in consequence of the slow ulceration of the cartilages, and the subsequent formation of granulations on the ends of the exposed bones, by which the process of consolidation is to be established. Besides, the only mode in which an injury like this can be repaired is by anchylosis, a much more complicated process than that by which compound fractures, under ordinary circumstances, are united. The treatment here consisted in supporting the patient's strength by nutritious, but not stimulating food; we have put him on full diet, with a quart of bottled porter daily. As he has no perspirations, hectic fever, or diarrhœa, he does not require bark, mineral acid, or opium. The parts are kept steady by splints, the wounds are dressed with the Peruvian balsam, and the fore-arm is bent at nearly a right angle with the arm, in order that when anchylosis takes place, the limb may be in that form in which it is most usually employed, and in which it proves most serviceable. Under this treatment the man is going on as well as can be expected; to-day he is in a more favourable state than he has been since he entered the hospital. From lying long in bed he has got sloughing bed sores along the spine and on the sacrum. I have ordered him, therefore, to be placed on one of Dr. Arnott's water beds, and you will have an opportunity of observing the favourable consequences which will ensue from this change.

From the consideration of fractures we naturally proceed to *dislocations*; and, as we had an opportunity of reducing a dislocation of the humerus on Monday last, I shall make a few observations on the subject. The humerus may be dislocated in three directions: first, *downwards*, in which the head of the bone is

lodged in the axilla, and rests on the cervix of the scapula. Secondly, *forwards*, or, as the French surgeons term it, *inwards*, in which the head of the bone is lodged immediately below the clavicle and under the pectoral muscle; thirdly, *backwards*, in which the head of the bone is lodged on the dorsum of the scapula, beneath its spine, a little below the acromion process, as you see here. (*Dr. Crampton here exhibited some highly finished drawings illustrating the position of the head of the humerus in the different forms of dislocation.*) Upwards, it cannot be dislocated, as you perceive, without fracture of the acromion and coracoid processes.

I have had the good fortune to meet with two instances of dislocation, which I was enabled to examine accurately by dissection a few hours after the injury had been received: these were the dislocation downwards and the dislocation forwards. You will find, in the 7th and 8th numbers of the *Dublin Medical Journal*, a full account of these cases, with some remarks on the pathology of dislocation of the shoulder joint. (*Mr. Crampton here exhibited a drawing of the parts.*) Here is the dislocation downwards into the axilla. The man from whom this drawing was taken had his shoulder dislocated, and was killed nearly at the same moment by a wall falling on him while engaged in digging under the foundation of a house. On examining the body, eighteen hours after death, it was found that, in addition to an injury of the head which had proved fatal, the right humerus was dislocated into the axilla. Of this I made a careful dissection previously to reducing the dislocation, and was so fortunate as to obtain a drawing of the parts by an eminent artist. Here is the drawing (*showing it*), and it is an accurate representation of the state of the parts in a recent dislocation downwards. This and the other case of dislocation forwards are, I believe, with the exception of Sir Astley Cooper's case of dislocation downwards, the only cases on record which illustrate the actual state of the parts in a *recent* dislocation. Here is the capsular ligament, represented by this irregular margin, torn from the lower part of the neck of the humerus to the extent of more than half its circumference, the torn edge appearing like a crest over the head of the bone. You see the rent in it is so considerable that it would admit of the passage of a body much larger than the humerus, and consequently that it could offer no sort of resistance to the return of the head of the bone. The head of the bone, which you see has pushed the teres minor downwards, rests on the inferior costa of the scapula, or rather on its neck. Here is another lesion worthy of your attention; you perceive the injury which has been done to the articular muscles as they are called; the supra, and infra spinatus, and teres minor, are torn from the greater tubercle of the humerus, to which they were attached, and they have carried with them a portion of the tubercle itself. Here is another plate, it is an exceedingly good view of the dislocation forwards. The original preparation from which it was taken may be seen in the museum at Park-street. Here is the head of the bone lodged on the neck of the scapula, at the root of the coracoid process, but extending as far as the notch in the superior costa. It passed through a rent in the capsular ligament, above the tendon of the subscapularis, detaching this muscle from its connection with the inner face of the scapula, and pushing its fibres downwards. The supra and infra spinatus are very much on the stretch, but their fibres have received no injury. Now, remember this, in the dislocation downwards, the head of the bone passes *under* the lower edge of the subscapularis, or bursts through a portion of its fibres near to its lower margin, pushing the bulk of the muscle upwards, and detaching it to some extent from the inner surface of the scapula. When the dislocation takes place forwards, the head of the bone passes *over* the upper edge of the subscapularis, pushing its fibres downwards.

I have not had an opportunity of examining after death any case of the dislocation backwards, on the dorsum of the scapula, and I believe that it is very seldom seen under any circumstances. During the course of my professional life, I have met with only one instance; Sir A. Cooper, who has had vast experience in dislocations, has met but two, and Baron Dupuytren only one. The case which I witnessed occurred a good many years ago in the person of a gentleman named Gresson, from the county of Meath. This dislocation was reduced, not indeed by regular practitioners, but by the Messrs. Taylors, the celebrated bone setters, near Manchester. Mr. Richards, Mr. Colles, and myself attempted to reduce it by pulleys, but the dislocation was of two months' standing, and we were unsuccessful in the first effort; the gentleman got alarmed and dissatisfied, and, at the suggestion of a friend, went over to the Taylors, who got five men to pull away at the limb until the bone returned to its proper place. The length of time it was out must have added considerably to the difficulty of reduction, and this brings me to speak of another important point in the treatment of dislocations of the shoulder and other joints.

The great obstacle to the reduction of a recent dislocation is now, I believe, universally admitted to be muscular contraction, caused by the irritation excited in the muscles by their being thrown into constrained positions, an irritation which is further increased by the violence which they suffer during the process of reduction. In cases of old dislocation, there is a new difficulty superadded to this; here we not only have the resistance which depends on muscular contraction to deal with (for the muscles have now accommodated themselves to their new positions, and are almost incapable of being stretched), but we have also an obstacle to contend with, arising from the for-

mation of strong membranous adhesions. A new capsule of condensed cellular tissue has been organised, holding the head of the bone firmly in its situation, and presenting a very serious, and, after a certain period, an invincible obstacle to reduction. Even in so short a time as eighteen days, it appears a new capsule may be formed, as you will find in a case mentioned in Mr. H. Thompson's paper in the Medical Observations and Enquiries. In Mr. Thompson's case you will find not only that a new capsule was formed, but that the parts were so firmly bound together, that no force short of what would break the bone, would be sufficient to remove it from its position. In a case lately recorded by Sir A. Cooper, you will find that, even after death, the principal cause of resistance was found to depend upon the muscles, and that he was unable by his own strength (which is none of the least) to reduce the dislocation even in the dead subject. He was determined to know the reason of this, and divided the muscles one after another, cutting through the coraco-brachialis, teres major and minor; he next divided the deltoid muscle, and found that the supra spinatus, which was put on the stretch, was the great opponent to reduction.

Now I wish to make you understand this. In Mr. Thompson's case, as well as mine, the articular muscles were torn from their attachment to the lesser tubercle of the humerus. But in Sir A. Cooper's case these muscles had preserved their attachment to the tubercle unbroken, and he ascertained, as I have just stated, that the great difficulty, which he encountered in reducing the dislocation, arose from the tense state of the supra spinatus, which, in going to be inserted into the greater tubercle, passes over the upper surface of the head of the bone. Now here is a dry preparation of the shoulder joint; imagine this riband to be the supra spinatus, here is the tendon of it coming out from under the acromion to be inserted into this tubercle. One of the uses of this muscle, you know, is to assist in elevating the humerus, and to raise the capsular ligament, so as to prevent it from being nipped between the head of the humerus and the edge of the glenoid cavity when the arm is raised; its action also powerfully tends to prevent dislocation downwards into the axilla; here is the supra spinatus, stretched across, and dragging against the face of the glenoid cavity. Here is the lower lip of the glenoid cavity, over which the supra spinatus passes, and on which it acts as a fulcrum. The more tightly this muscle is drawn, the more firmly will the head of the humerus be pressed against the neck of the scapula, and the greater, consequently, will be the difficulty of reduction. The longer it remains unreduced, the more is the head of the bone drawn by the conjoint action of the subscapularis, teres major, pectoralis, and latissimus dorsi, under the ridge of the scapula. But if, while making extension, you press the head of the bone *downwards*, it will clear the brim of the glenoid cavity, and start into the socket by the mere traction of the muscles.

As the obstacle to the reduction of a recent dislocation is proved to depend on the contraction of the irritated and extended muscles, and not on any condition of the capsular ligament, the point to consider is, first, what mucles are chiefly concerned in keeping up this resistance, and, secondly, by what means you will elude their force. It would seem that the muscles which offer the greatest resistance are the articular muscles, when they retain their attachments to the head of the bone, together with the deltoid, pectoralis major, and latissimus dorsi. It is probable, however, that all the muscles proceeding from the scapula are more or less concerned.

One of the first principles, therefore, in the reduction of all dislocations, is to diminish this power of muscular contraction, as unless this is done, it is worse than useless to attempt to replace a dislocated bone by main force. There are many means of accomplishing this object. First, by bleeding, taking care to make a large opening in the vein, (not of the dislocated arm, of course,) and to keep the patient standing while the blood flows. The quantity of blood lost, the agitation produced by the novelty of his situation, and the pain that he suffers, make the patient so weak that he soon becomes faint, and in this state the force of muscular contraction almost entirely ceases, the power of resistance is completely overcome, and there is scarcely any effort necessary to accomplish reduction. The debility induced by bleeding may be increased to almost any extent by the administration of tartar emetic. One-eighth of a grain, given every half hour, will soon cause so much nausea, as to bring down the muscular strength of the most powerful man to the level of the weakest. The warm-bath is recommended with the same view, but it occupies a good deal of time; it cannot always be conveniently procured, and the patient is liable to catch cold after it, when exposed to the air (half naked) during the process of reduction.

This principle is chiefly applicable to cases where the bone has been out of its place for several hours or for some days. But if you happen to be on the spot immediately after an accident of this kind has occurred, it is seldom necessary to lose time in doing this; the patient has received a severe shock, the power of life, and consequently of muscular contraction, are reduced, and there is in general very little difficulty in effecting reduction. In the case of the man whose dislocation was reduced here on last Monday, venesection was performed because the patient was very muscular; the bone had been out of its place for nearly sixty hours, and ineffectual efforts had been made elsewhere to reduce it.

When you are once aware that the chief difficulty you experience in reducing a humerus arises from the contraction of the infra

and supra spinatus muscles, you consider how you may best overcome this obstacle, and you examine in what direction traction will be most efficient in liberating the head of the bone. By drawing the humerus in this direction (downwards), you will be acting very correctly, so far as the *direction* of the extending force is concerned; and when the extending force is sufficient to bring it over the brim of the glenoid cavity, the force of the muscles themselves will draw it into its natural situation. This is what occurs when you effect reduction by the heel in the axilla, but as you are acting directly against the contracted muscles, there must be a great waste of power. Here is the supra spinatus; this must be drawn downwards, over the face of the glenoid cavity, and lengthened, before you can expect to free the head of the bone from the lower lip of the glenoid cavity. Now what is the best mode of liberating the head of the bone? Raise the arm gradually upwards (in this way), observe as it ascends the head of the bone gets off the neck of the scapula, and approaches the convex slippery surface of the edge of the glenoid cavity; it now glides over this, and slips with velocity into its situation. (*Mr. Crampton here illustrated this, by showing the passage of the head of the humerus in a dry preparation of the bones of the shoulder-joint.*) You may have observed, that, in the dislocation of the humerus downward, which was reduced here on Saturday, without any other force than my own strength, this mode was adopted with success. You will, therefore, in all recent cases of this dislocation, first try this plan before you have recourse to any other; place your patient sitting on the ground, make a surgeon's knot (in this way) with a towel or silk handkerchief, and put it round the patient's wrist. If you fasten it round the arm the pressure will stimulate the muscles and increase the resistance; then stand upon a chair and raise the patient's arm, drawing it upwards with all your force, as if you wished to lift him off the ground. You will not pull the arm upwards alone, but also incline it obliquely forwards towards the patient's face. The great advantage of this mode of reduction is, that you often can effect it without assistance, it requires but little force in comparison with the other modes, and you saw that I was able to reduce the dislocation on Saturday by a force not sufficient to raise the man from the ground.

But if you are not able to accomplish the reduction in this way, there remains a very effectual method of doing so by means of a ladder, the mode of employing which will be easily understood by a reference to the plate in the eighth number of the Dublin Medical Journal. The great objection to the use of the pulleys is, that you do not know the extent of the force you apply, nor can you conveniently change its direction; besides, when the pulley is drawn tightly there is an uniform degree of tension, and there can be no motion employed to disengage the head of the bone, a very important thing in the reduction of old dislocations. When you employ the ladder, the patient is placed standing on the ground, with his legs through the rounds of the ladder, and a folded sheet, passed under the axilla, (to form the counter-extension) is held by two or three assistants, who stand upon a firm table; the foot of another assistant is placed on the lowest round of the ladder, to prevent its rising when the upper end is pressed down, while a third seizes the upper end of the ladder and slowly depresses it, until the surgeon, who stands astride of it, close to the patient, announces that the bone has returned to its socket. While the extension is in progress, the surgeon, from time to time, presses the upper part of the humerus downwards, to disengage it from the brim of the glenoid cavity. I do not know of any thing more useful than this, for, by pressing it downward, you liberate it from its confinement behind the edge of the glenoid cavity, and, once liberated, it snaps at once into the socket. Besides this, the surgeon, by standing astride of the ladder, has it in his power, by the pressure of his knee on either side, to give a lateral motion to the lever while extension is still in operation. You will, therefore, when you want to disengage the head of the bone, push it from you in this way, as if you wished to increase the dislocation, and thus homœopathically, as it were, accomplished your intended purpose.

There is another point connected with reduction, on which more stress is laid by the French surgeons than by us, and that is the taking the muscles by surprise. If you divert the patient's attention from the circumstances of reduction altogether, the muscles are as it were thrown off their guard, one of the principal impediments to reduction is in a great measure removed, and you obtain a most favourable opportunity for accomplishing your purpose. If you jump from a height of eight or ten feet, and are prepared for it, the muscles all act simultaneously, and you come down without any considerable shock, and with no injury. Yet if, in descending a stair-case, you miss but a single step, you may have the foot turned under you and get a fracture of the fibula, or perhaps break both bones of your leg. The ankle, or the leg, is as strong in one case as in the other, but the muscles are not prepared to direct the external force in the direction of the axis of the bone, it therefore pulls obliquely and the bone gives way. Now, when you attempt reduction without diverting the patient's attention from your proceedings, he unconsciously sets himself against you and opposes his force to yours; but if you can direct his attention completely from the reduction the case is quite otherwise. If you give a man, standing with his back to the fire, (as you no doubt have often done,) a slight blow with the side of your hand under the ham, the knee gives way, and you nearly throw him

down; but, if he be aware of your intention, he remains firm, and no force that you can apply will make the limb give way. Get your patient, then, into conversation when you are about to attempt the reduction of a dislocation; ask how he got the accident, and you will often succeed in diverting his attention, for this is a theme on which the generality of patients are very communicative, and, while he is deeply engaged in recounting all the minutiæ of his adventure, seize on the moment for proper extension, and you will often be able to employ it with decided effect. In the French hospitals it is very entertaining to hear the dialogue which takes place between the surgeon and the patient. I remember having seen Baron Dupuytren reduce a dislocation in a female, and it was most amusing to hear how ingeniously he irritated her by his abuse, and with what interest she repaid him. While she was pouring a torrent of abuse on him, and totally forgetful of the dislocation, M. Dupuytren gave her arm a sudden jerk over his own and reduced it at once.

The reduction of a recent dislocation forwards is in general easily effected. You have only to place your fore-arm under the axilla, and using the patient's arm as a lever, you press the elbow against the ribs, and the head of the bone is readily forced back into the glenoid cavity. Should this manœuvre fail, the gradual extension upwards, in the manner I have just described, will be sure to succeed. This however only applies to the recent or primary dislocation forwards. There is another form of this dislocation, which the French surgeons call *secondary*, in which they conceive that the head of the bone, which was first lodged in the axilla, is afterwards drawn by the contraction of the muscles under, or rather below the clavicle. There has been much controversy respecting primary and secondary dislocation forwards, but the case, which I have described this day, the preparation of which may be seen in the Museum at Park-street, sets the question at rest for ever.

There is, then, such a *primary* dislocation as dislocation forwards, but it is equally true, that the head of the bone, having escaped into the axilla, may be drawn upwards under the clavicle, constituting the secondary dislocation forwards of the French surgeons.

PROFESSORS LIZARS ON MEDICAL REFORM.

The first point to be decided is, for whose benefit is reform required?—Is it for the community, or for the medical profession? All reforms, whether political, borough, or medical, are intended for the good of the community; and hence it is evident, that that reform is necessary, which will ensure to the public relief from a state of disease in the most scientific, beneficial, and cheap manner.

The following is a simple and liberal reform, and does not interfere with the vested rights of the corporate bodies and medical institutions of the country, excepting *in futuro*, and only so far as regards their pecuniary emoluments, many, if not the whole, of which they have usurped the right to levy from time to time, and which are consequently gross impositions. Each of these institutions may still continue to enjoy their exclusive privileges in a modified degree, and be held in as high estimation as ever by the public, provided they exert themselves in a scientific manner, and not in the *levying of taxes*.

The Medical and Surgical Boards or Institutions have evinced considerable difficulties in deciding upon the amount of knowledge requisite to be possessed by aspirants to degrees and diplomas, as is evidenced by the yearly changes in their curriculums of study, and the tyrannical and absurd modes ordered to be pursued by the teachers to enforce attendance on their prelections. And it is doubtful whether some of these bodies have not been influenced by interested motives, in order either to fill their own coffers, or the pockets of their professors. This alone ought to disqualify such bodies from regulating the curriculum of study.

From all this it is evident that *examination* only can form the test of the fitness of the physician or surgeon, and the safeguard to the community; for any one with a retentive memory may prepare himself to answer the questions as at present constituted; and hence the encouragement given to grinding. And not a few instances might be adduced of young gentlemen, grossly ignorant in their profession, having passed the ordeal of examination.

Now that anatomy or dissection is legalised, such an examination can be pursued, as will enable the examinators to decide with greater certainty upon the abilities of the young men, who are to take upon themselves the important and responsible charge of the lives of their fellow creatures. This hitherto could not be done.

The examination might therefore be as follows:—

1st. Let the candidate enter a room in which there is a dead body, a case of scalpels, and a written proposition to him, to display the minute anatomy of the nerves, blood-

vessels, and muscles of the face and neck on the one side, and the surgical anatomy on the other side. Let him be left alone, and when this task has been performed, let him ring the bell, and the umpires or examinators enter, and decide whether he has executed the dissection scientifically. Let him next demonstrate what he has dissected, and also some of the important viscera, as the anatomy of the heart and lungs, or stomach, or liver, or kidney, with their functions. Let him then perform some of the operations of surgery, as the securing the superficial femoral artery, the amputation of a finger, fore-arm, and leg, and also demonstrate the parts concerned in these operations.

In order to test his general knowledge of the English language, for I can see little utility to the public what his acquaintance may be with either the dead or the other living languages, let him write down some of the physiological theories, as respiration or digestion; and the same test of writing should be kept in view in his chemical, botanical, and other examinations. And his concluding examination might be a written thesis, as, for example, on the blood, or electricity, germination, fever, or aneurism.

2ndly. Let him enter into a chemical laboratory, tell the names of several of the substances, compound some, and analyse others; for example, let him name some of the alkalies, and earths or metals, and their compounds; make hydrogen, nitrous ether, and carbonic acid, analyse and test arsenic, the mineral waters, &c.

3rdly. Make him now go to a botanic garden, or to the fields, and tell the names of a few of the medicinal plants, and their properties and doses.

4thly. He should next enter a pharmaceutical laboratory, name several of the medicines, and combine and analyse a few, also mention their doses and uses, and write some prescriptions.

5thly. A pathological museum may then be consulted, and he be desired to describe some of the preparations, and be interrogated on the healthy and diseased actions and structures of the organs affected.

6thly. The medical wards of an hospital may now be entered, and he be requested to examine some of the patients, tell their diseases, and prescribe for them; also the pathology, causes, prognosis, and treatment of them.

Let him do the same in the surgical wards.

The preceding examination ought to be conducted in public, by a quorum of examinators, about six in number, from the Colleges of Physicians and Surgeons, or from the general practitioners of the city, or town, all who at present possess a degree or diploma being eligible, and let one of the quorum of examinators be a teacher of that science, or branch of medicine which is under examination. If the general practitioners be considered the preferable, which is my own opinion, as there are many talented men of the army and navy, as also others, not belonging to the Colleges, and as this class of examinators would include the Colleges, the examinators might be appointed by the mayor, or provost, or chief magistrate of the town to which they belong, when a candidate signified his intention of submitting himself for their examination. The examinators, from whatever class they are chosen, ought to be elected by ballot, in order to secure impartiality, and give confidence to the candidate; and a new set of examinators should be elected monthly, to afford greater security and satisfaction to the candidates.

The fees for these examinations should be on the lowest possible scale consistent with the character and *status* of the profession, and the degree or diploma ought to be extended on unstamped parchment, as is the case with that of the College of Surgeons of Edinburgh. Government should set the example, by surrendering the paltry sum accruing annually from degrees of medicine. And the said degree or diploma, so meritoriously obtained, ought to qualify the candidate to practise or teach his profession in any part of his Majesty's dominions, and render him eligible for any situation in his profession, as that of physician or surgeon to any hospital or dispensary, and also be his passport for becoming a Fellow of any of the Colleges of Physicians, or Surgeons in England, Ireland, or Scotland.

If a parliamentary inquiry shall take place, and it shall be recommended that only one Faculty of Medicine and Surgery is necessary for each of the three kingdoms, each possessing equal privileges, then a quorum from such a body would do equally well. This Faculty would, in some measure, resemble that of the Fa-

culty of Physicians and Surgeons of Glasgow; and the sooner all distinction between physicians and surgeons is done away with, the better, as it only creates discontent and jealousy. It does not appear to be necessary to condense the different Colleges, or Faculties of Physic and Surgery, into one in Scotland; all that is essential for the good of the community is, that, whenever degrees or diplomas are granted, it is necessary that the means here pointed out for examination are attainable in the place where these are conferred; for the more rivalry the better for the teachers, the students, and the public.

By adopting the foregoing plan, there would exist no monopoly, as at present enjoyed by the Universities and some of the Colleges; and a young gentleman might study where and when he pleased; but he would be compelled to acquire such really useful medical knowledge as would qualify him most efficiently for the awful and responsible duties of practice. And this knowledge by being attainable at any school, and under any teacher, would be purchasable at a much cheaper rate than at present.

In the appointment of Professorships to Universities or Colleges, I would suggest a somewhat similar mode of testing the qualifications of the candidates. Thus: if it were a Professorship of Anatomy that was vacant,—let the candidates be put alone into a dissecting room, and display a portion of the human body, and, at a certain hour, retire, when the umpires chosen by ballot should enter and decide (the public being also admitted) which is the best dissection. Next demonstrate, in turn, their dissections, and also other parts of the *subject*, as the eye or brain. They might then describe the functions of the eye, illustrating these with optical diagrams, drawn at the time by themselves; and afterwards describe the organs and functions of respiration and circulation, with the different theories, from Harvey down to the present day.

A similar mode of testing the qualifications of a Professor of Chemistry, or any other science or branch of medicine, might be adopted.

Those who wish to practise as druggists, chemists, or apothecaries, might be examined only on chemistry, botany, and pharmacy, as pointed out in the second, third, and fourth clauses. But let any one who takes the degree or diploma of general practitioner, pursue the calling of chemist, druggist, or apothecary, if he pleases.

With regard to quacks and other impostors, I do not think we should interfere or legislate further than this, that there might be published a list of qualified practitioners in every town, and corrected annually, so as to guard the public against quacks; and it might be left to the public prosecutor, or to any private individual, in the event of his sustaining injury from the prescription or operation of an unlicensed practitioner, to sue for damages, and such penalties as the legislature might authorise. It ought also to be provided that no unlicensed person should be authorised to sue for, or recover, in any court in the kingdom, any sum for attendance or medicines supplied by him.

JOHN LIZARS,
Professor of Surgery to the Royal College of Surgeons, and Surgeon to the Royal Infirmary, Edinburgh.

Edinburgh, 38, *York-place*.
30th January, 1834.

Foreign Medicine.

Improved Shoe for Congenital Club Feet.

SIGNOR CHIESA has directed his efforts to improve upon the shoe, invented by Scarpa, and used by him in the treatment of this malady. The improved one serves either for the right or left foot, is capable of being employed in individuals of even 14 or 15 years of age, and also is available in distortions produced by rickets. That the shoe might be applied better, and embrace the foot more firmly, the form has been changed from a simple sandal to that of a common shoe, with a sole and upper part of leather, the latter being extremely pliant. The upper leather is supplied on its inside, at the part corresponding to the heel, with a pad, shaped like a reversed cone, which fixes the heel firmly in its place: the vertical steel spring remains, and can be moved from one side of the shoe to the other; on each side there are small flaps to restrain the spring, which might push the foot in the opposite direction. Different kinds of pads can be adapted to the shoe, for the purpose of suiting every kind of deformity, and the spring may be lengthened when required.—*Gazette Médicale.*

New Instruments forperforming the high Operation of Lithotomy.

M. Leroy d'Etiolle presented to the Academy of Medicine some improved instruments, with the intention of facilitating the operation of lithotomy performed above the pubis. The first of these instruments is a curved trocar, of which the point is flattened transversely, and which contains a hidden cutting blade on its concave surface. The second consists also of a curved trocar, furnished with a cutting blade, but the point of this is flattened laterally, and the canula is composed of two lateral halves, which can be separated by a peculiar mechanism. The third instrument resembles the forceps of Sir Astley Cooper, and is introduced closed into the bladder, as an ordinary sound, when there, the two branches, being expanded, raise and stretch the anterior walls. The fourth and last part of the apparatus is a double hook, which, being fastened, keeps the wound open by means of its two branches. M. Leroy d'Etiolle considers that the two great difficulties of avoiding the peritoneum and preventing the retraction or sinking down of the bladder, after the division of the latter, are overcome by the use of these instruments. He first divides the skin with an ordinary bistoury, and then pushes the first-mentioned trocar through the linea alba, about two inches above the symphisis, its concavity being towards the pubis. The aponeurosis being traversed, he withdraws the point, and directs the blunt end of the canula downwards towards the pubis, so as to avoid the peritoneum, then, by pressing on the instrument, the blade is made to open, and cuts the linea alba as low as the symphisis. Having proceeded thus far in the operation, and having opened the forceps introduced into the bladder, he plunges in his second trocar, the concavity being still directed dowwards, and having separated the two halves of the canula, which hold the edges of the wound apart, enlarges the aperture to a convenient size, by means of the blade situated in the instrument. Then, having attached the hooks and withdrawn the trocar, he proceeds to extract the stone.

The Immoveable Apparatus used by M. Larrey in the treatment of Fractures.

M. Bérard has lately published some remarks upon this apparatus, which he has almost entirely adopted for the treatment of fractures, and from which he has found the most signal benefit. Out of 24 cases of fractures, (principally of the leg), treated in this way, 18 have been cured without the least appearance of deformity; 3 terminated in a trifling deformity, or shortening, and three in death One of the cases, which terminated in deformity, was a fracture of the leg, accompanied by swelling and gangrenous phlyctenæ, the apparatus was applied for 50 days, but without any signs of union. In another of these cases there was oblique fracture of the femur, and the patient was so very intractable, that it became necessary to abandon the use of this apparatus, and to apply permanent extension, by which means union of the bone, with a shortening of four or five lines, was procured. In all the fatal cases, death was occasioned by circumstances which the apparatus neither could have occasioned nor prevented.

Thickening of the Bones of the Cranium in an Infant of 18 *months.*

M. Breschet lately attended an infant, which had been affected from its birth with convulsions, occurring at short intervals. Some time before its death these convulsions became continued and very violent, and the child died when 18 months old. It was supposed that pressure upon some part of the brain would be found, but this did not prove to be the fact, the whole of the bones of the cranium however, except at the base, had acquired such a density, that in some places they were not less than an inch in thickness; the anterior fontanelle was not effaced, and the bones of the face did not participate in this increased growth. M. Breschet stated, that he had seen cases of this kind in old persons, and even in adults, but that this was the first instance of its occurring in so young an infant, which had fallen under his observation.

Preparation of the Hibiscus Esculeutus.

A substance called Allahtaim du Harem à la Sultane Bahmia has been recently imported into France from the regions of the East. It is a powder similar in colour to café au lait, of a very savoury taste, and of an odour *sui generis;* the plant from which it is prepared is the hibiscus esculeutus, or *Sultane Bahmia,* which the people of the East, and of many

countries of the New World, commonly use for food, and which the women in the Antilles esteem as very delicious. From numerous experiments made at the Hôpital St. Louis, M. Biett considers this substance as particularly easy of digestion, especially in cases where there exists an extreme susceptibility following either gastro-enteritis or enteritis. M. Velpeau has made frequent use of it in persons disposed to pulmonary phthisis, to any of the irritations of the chest, to rheumatism, or to gastro-intestinal inflammations, &c. MM. Broussais, Baron Michel, and many other distinguished physicians agree entirely in the above opinion, and have had frequent opportunities of appreciating its utility during convalescence.

On the Influence of Weight upon the Circulation and upon Elevation of the diseased part, considered as a therapeutic agent.

From some experiments upon the effects of weight upon the circulation, Professor Gerdy, of the Hôpital St. Louis, has been led to apply the law of weight even to combat some kinds of disease. He found that ulcers of the legs, raised upon an inclined plane, were rendered pallid, secreted less pus, and became covered with a scab, under which they rapidly healed. The arm of a patient, which was severely contused and considerably swollen, was elevated upon an inclined plane, and retained in that situation, when the swelling diminished, and the patient rapidly recovered. In another case of the same kind, where there was considerable ecchymosis, a diminution of an inch of the swelling was obtained in a few hours. Favourable results have also been obtained in cases of cephalalgia, otitis, angina, &c.; and, by this method of treatment, M. Gerdy considers that the influence of this pressure is the cause of inflammation in the lungs generally being situated at the base.

Tables of the Operation of Lithotomy in the Hôpital des Incurables at Naples, during Thirteen Years.

BY SALVATORE DE RENZI, M.D. A NAPLES.

Years.	Operated on		Cures.	Deaths.	AGES.		
	Men.	Women.			Children.	Adults.	Aged.
1821	27	—	23	4	12	11	4
1822	28	—	26	2	12	12	4
1823	33	1	31	3	14	15	5
1824	35	2	32	5	15	16	6
1825	38	—	26	4	14	15	1
1826	35	2	32	5	17	17	2
1827	18	1	12	7	7	9	3
1828	25	—	19	6	10	14	1
1829	35	1	31	5	16	18	2
1830	32	3	29	6	15	17	3
1831	31	1	30	2	17	12	3
1832	22	—	17	5	14	6	2
1833	38	1	33	6	23	10	6
	389	12	341	60	185	174	42

(The above table has been verified by M. Dupuytren.)

From the preceding list it would appear that the proportion of deaths is about 1 in 7. Two of these operations were performed according to the plan recommended by Scarpa, whilst in all the other cases the lateral operation was the one adopted.

The sufferings of the different patients from the stone were dated from three months to sixteen years previous. The time in which the cures were obtained varied from ten days to a month.

In 1827 an epidemic fever prevailed, and thus accounted for more than a third part of the patients dying during that year.

In the bodies of those who died were found traces of long existing diseases, either in the kidneys, bladder, or intestines.

These statistics refer only to those who are operated on in the hospital, and are poor, badly nourished, and not well attended to; whilst the opulent are operated upon at their own houses.

Every surgeon has a right of operating in the hospital, one excepted, who has been considered incompetent. It is on this account that the proportion of deaths amount from one to seven; for those surgeons who have had much practice in this operation have only lost one out of twenty; and one of them, M. Petrunti, has lost only one out of twenty-five.—*Rue de Chiaja, No.* 120.

Table showing the Number of Deaf and Dumb Persons existing in 1830 *in the Principal States of Europe.*

BY E. SCHMATZ, OF DRESDEN.

States of Europe.	Total Population.	No. of Deaf and Dumb.
Portugal . .	3,000,000	1,950
Spain . . .	10,000,000	7,150
France . . .	32.000,000	20,800
Italy . . .	20,000,000	13,000
Switzerland .	2,000,000	4,000
Germany . .	41,223,000	31,657
Hungary . . .	9,444,000	6,139
Low Countries .	6,000,000	3,900
Denmark . .	1,800,000	1,260
Sweden and Norway	3,800,000	2,470
European Russia .	44,118,000	28,667
Poland . . .	5,700,000	2,405
Great Britain . .	21,000,000	13,650

Although there is not a great difference in the relative number of these unfortunate beings in the countries here named, yet the care which is taken of them is not the same in each. In many of these kingdoms scarcely any solicitude is felt for them, and no pains are bestowed on their education; consequently they are reduced to a perfect state of imbecility. In Germany there are 48 institutions set apart for their reception, in France 26, in England 11, and in Switzerland 5; but in most of the other countries there are not more than one or two receptacles of this kind. In Russia, where there are more than 28,000 deaf and dumb, there are only two institutions.—*Gazette Médicale.*

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, February 8th, 1834.

PROFESSOR BURNETT in the Chair.

Amenorrhœa—Torsion of Arteries—New Operation, "Refoulement" of Arteries.

A GENTLEMAN related a case in which menstruation had been absent for fifteen years, without producing any impairment of the general health.

Mr. Costello said he had met with a case in which this function was regularly performed for six months, when it then ceased for the same period.

Dr. Epps wished to inquire, whether, in the first case, there were not indications of chronic disease in some part of the body, as amenorrhœa was so frequently dependent on other affections.

The gentleman replied that he had felt the force of the remark, and had, therefore, carefully inquired into the state of the general health, but there was no symptom of disease.

The President now called on Mr. Costello for his description of M. Amussat's operation of torsion of arteries.

Mr. Costello then gave a history of the various methods, hitherto pursued of arresting hæmorrhage, and that all had repeatedly failed. He said that his friend, M. Amussat was led to the employment of torsion by accident, and after having made numerous experiments on dogs and horses, he ascertained that the operation was successful on all arteries, Mr. C. then described the operation. M. Amussat separates the artery from the cellular tissue for some distance, applies a forceps on the vessel near the heart, and another at the distal side. He excludes the blood from the portion of the vessel between the instruments, and divides the vessel between them, continuing the pressure with the instrument which is nearer the centre of the circulation. He then twists the artery several times. A spiral shaped head is formed on the extremity of the artery, composed of the cellular coat of the vessel, and there is a corresponding one formed in the retracted internal coats, which are ruptured by the twisting or torsion, and this is announced by a crack which is audible. M. Amussat had performed the operation on the spermatic artery, and next on the femoral, with perfect success. The superiority of this operation over the ligature is, the uniformity of the clot, and the practicability of the wound being treated by the first intention.

Mr. Costello then related another new operation by the same surgeon, termed "refoulement," which consists of steady pressure made with two rounded forceps, so as to divide the inner coats, which are then pushed back by the motion of the instrument, the consequence

of which is the effusion of lymph, and the obliteration of the canal.

Mr. Quain thought that torsion would be found extremely useful, particularly in those cases in which it was necessary to secure several vessels. He wished to inquire whether the clot had been seen when torsion was performed near a collateral branch, whether it was applicable to diseased arteries, and whether the refoulement had been performed on the living subject.

Mr. Costello replied, and said that clots had formed near collateral branches; he could not state whether the operation had been performed on diseased arteries, but he was able to inform the Society that refoulement had been repeatedly performed with success.

The President said that he should consider torsion a difficult operation on the vessels of an amputated stump, in which Mr. Costello concurred.

Mr. Griffiths, Dr. Epps, Mr. Hunt, and other gentlemen, made several observations.

The President observed that Mr. Costello would increase the obligations for which the Society were already indebted to him, by his performing experiments on some living animal before the meeting.

Mr. Costello said he should be happy to do so upon an early occasion.

The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

Monday, Febuary 10, 1834.

W. Kingdon, Esq., President, in the Chair.

Obliteration of the Medulla Spinalis, from the pressure of a Tumour, which communicated with a Cyst situated in the Thorax.

Mr. Roberts said, that a case of paralysis, of which he had made some mention to the Society about two years since, had terminated in death; and as the post mortem examination presented some curious appearances, he would, with the permission of the President, relate the sequel. It might be remembered, that in his previous notice, in which he had traced the case to 1831, he had stated that the patient, a young female, began to lose the use of her lower extremities about five years since, retaining, however, the power of sensation for some time after the complete loss of motion. Mr. Kingdon, who, with him very carefully examined her spine, had recommended the application of a moxa opposite the post superior spinous process of the ilium, as there appeared to be a little tenderness on pressure at that part of the canal; however, the loss of power over the lower extremities increased, in spite of all treatment, and finally her legs became quite paralysed. Incontinence of urine came on, but, by the use of tinct. lyttæ., she regained a degree of power over this organ, which, however, was lost again, if the remedy was omitted for only twenty-four hours. Notwithstanding these symptoms, her general health continued good, and the catamenia were quite regular; there was an ulcer situated at the lower part of the back, as large as a sixpence, and subsequently several others, of much larger size, were caused by pressure on the hips; others also made their appearance at the back of the knees, and even as low as the ankle. Latterly she could not be prevailed on to take medicine, but her bowels were kept in good order by glysters. She died last December, five years from the commencement of the disorder. An examination of the body was made, and the following appearances were observed. There were several large ulcers situated about the hips and parts of generation, and traces of others, which had granulated and healed, were found. The contents of the cranium appeared in a normal state, with the exception of a slight effusion beneath the arachnoid, and a trifling diminution in the size of the pons Varolii; the spine was deformed, and on opening this canal a tumour was discovered, situated between the tenth and eleventh dorsal vertebræ, which, pressing upon the medulla spinalis from the right side and from behind, had caused absorption of it at that part (*the preparations exhibiting these parts were sent round*); the tumour was situated external to the theca, and communicated with a cyst, which lay upon the diaphragm in the cavity of the thorax, but behind the pleura.

Several points worthy of inquiry arose from the consideration of this case. Probably the tumour had existed some time previous to the paralysis, and had been occasioned by the extravasation of blood, from the rupture of some small vessel, which blood had afterwards become partly organised, and partly absorbed. Another remarkable circumstance, was the occurrence of the loss of motion previous to

that of sensation, since the pressure from the tumour was situated on the posterior part of the medulla spinalis. It appeared also as if granulation and cicatrisation were independent of the brain, for the process of reparation went on in the sores situated on the sacrum, although there was complete division of the cord at one part. In the earlier part of the disease before the paralytic symptoms were fully developed, she went out of town, and partook of generous diet, and, on her return, found that there was entire loss of motion in her legs; plethora, induced probably by this increase in diet, might have caused more rapid growth in the tumour, which would account for the sudden aggravation in the paralytic symptoms.

Mr. Dendy made some remarks as to the practicability of trephining the spine in such patients, where the existence of such a cause of disease should be supposed to exist.

Mr. Kingdon said, that a careful examination, by pressing upon the spinous processes, had been practised, and the only place in which the least tenderness was apparent, was a little above the spinous processes of the sacrum.

Mr. Procter was of opininion that the treatment had prolonged the life of the patient, but nevertheless he questioned the utility of counter-irritation, and imagined that in cases of distortion of the spine, which had got well under the use of counter-irritation, the cure was not to be attributed to this remedy, but to the horizontal position having been constantly preserved, and strict attention having been paid to the health of the patient. A case of this kind had fallen under his notice, which had terminated in complete recovery, from maintaining this position for two years. He differed from Mr. Robarts in his remarks upon plethora, as he considered generous diet rather beneficial than otherwise, if restrained within due limits.

Mr. Kingdon said, with regard to plethora, it must be remembered, that this was not a case of diseased spine, but of a tumour situated in the canal.

Mr. Jones, in reference to the remarks on the circumstance of the pressure being from behind, whilst the anterior part of the medulla spinalis was first affected, thought that the pressure would be on that part pressed against the bone, which in this instance was the anterior portion of the chord; it was a common circumstance for the base of the brain to be affected, whilst the pressure was from above; another circumstance might also account for the commencement of pressure at the part alluded to, namely, that a reater degree of pressure was necessary to destroy the powers of sensation than those of motion.

Mr. Kingdon related a singular instance of the sudden restoration for a short period of the motive powers from an emotion of joy, in a patient who had suffered from shaking palsy for ten years.

Several observations fell from different members, upon the obscurity which existed as to the conveyance of nervous influence to and from the brain; and previous to the conclusion of the meeting, Dr. Uwins and Mr. Cole made some remark upon the pernicious influence of tea and coffee.

MEDICO-BOTANICAL SOCIETY OF LONDON.

Tuesday, February 12th, 1834.

Dr. Ryan in the Chair.

British Leaf—Spurious Tea.

Professor Burnett delivered a lecture on the detection of adulterated tea, or what is termed British leaf. He gave a minute botanical description of the various leaves detected in the spurious article, and stated that it was extremely easy to discover the adulteration. He described the anatomy of the genuine tea leaf, and that of the various substitutes for it, and clearly showed the complete dissimilarity. He illustrated the distinction by various drawings. He discovered that the leaves of the elm, the sloe, the apple, and the hawthorn, constituted the British substitute for tea. He presented several specimens of adulterated tea, and of the spurious article, and the similarity was so great, that few gentlemen in a numerous and crowded meeting could distinguish one from the other. He stated that several of the oldest examiners of tea at the India house, and others who were for thirty and forty years in the trade were totally unable to detect a mixture of tea and one-fifth of the British leaf, and that chemical analysis had also failed, because most of the constituents of the British leaves were similar to those of the genuine article imported from China. The botanist only was

able to detect the sophistication. He also stated emphatically, that the government was only anxious to protect the public from a gross fraud, in as much as three parts of tea and one of the adulterated article were sold as genuine; for example, a pound of black tea was sold for eight shillings, but if one-fourth of it was worth nothing, the buyer was cheated out of two shillings. The revenue derived from the sale of tea was about four millions annually, so that the country lost one million by the fraud under consideration. The government had no objection that persons should purchase the British leaf if they pleased, and use it in place of tea; but the fraud of vending a spurious article was not to be tolerated, more especially as it pressed most upon the poor and middle classes, who were most numerous, and the most likely to purchase the cheap article. There was a great prejudice against government prosecutions; but this was most unjust on the present occasion. The learned Professor analysed the whole of the evidence given before the late Lord Mayor (Sir Peter Laurie), and clearly proved that the Excise prosecution was very lenient, for instead of applying for an immense fine, such only was sought for as would cover the expenses.

The learned Professor next alluded to the evidence of the various medical, chemical, and botanical witnesses, about ten in number; and of these only one had tried this spurious article for a week. The individual who did so, was Dr. Birkbeck, who with his family had used it without any bad effects. The deleterious effects was not the question, but the imposition in substituting the spurious article for genuine tea. All the other witnesses had merely tasted it. He (the Professor) was on the continent when the early investigations took place at the Mansion House, and consequently was unacquainted with them. But he was requested to give his testimony, and he used every possible precaution to arrive at a correct conclusion. He mixed a portion of the spurious with the genuine article, without the knowledge of any of his family, but all pronounced the tea to be bad, or that the water poured on it had not been sufficiently boiled. One of his pupils declared that it was impossible the tea was genuine, and took the leaves out of the vessel to examine them. For himself, he felt nausea, and decidedly very different from what he experienced after the usual beverage. The learned Professor made many other interesting observations, and replied to many questions put to him by Dr. Sigmond, various members of the Society, and several visiters.

The time of adjournment having arrived, Dr. Sigmond announced that the Professor of Materia Medica would prosecute the subject at the next meeting, on the 25th inst., and he wished to observe, that tea would be ready immediately; and though the learned Professor had not analysed the specimen of the Chinese beverage about to be introduced, he could assure the Meeting it was genuine. (*Great laughter.*) The Society then adjourned.

MEDICAL REFORM CERTAIN—GLORIOUS TRIUMPH OVER THE CORRUPT CORPORATIONS.

The cause of humanity and of medical science has at length obtained the attention of the legislature, through the influence of that excellent and enlightened man, Mr. Warburton. On Tuesday last, 12th inst., he moved "for the appointment of a committee to inquire into the various branches of the medical profession. As he understood there was no opposition to his motion, he would not enter into details upon it." He added that complaints had been made from Dublin, Glasgow, Aberdeen, and various other places in the kingdom, against the medical and surgical corporations as they at present existed.

Colonel Wood opposed the motion, and designated the apothecaries' act, the poor man's act, and lauded it "because it prevented persons practising as surgeons." [What a pity it is to see men talking about a matter they do not understand. Every medical man knows that the apothecaries' act has no connexion whatever with the practice of surgery.]

Mr. Sinclair said the profession in Scotland were in favour of inquiry.

Mr. Gillon considered that the object of the apothecaries' act was to put money in the pockets of the Apothecaries' Company, and to create an objectionable monopoly.

Mr. Littleton bore testimony to the great anxiety which prevailed among the profession in Ireland on the question, and all were ready to acquiesce in any arrangement having for its object an equalisation of privileges among

the whole medical profession throughout the United Kingdom.

Mr. O'Dwyer thought it a great anomaly to have physicians re-examined by the Apothecaries' Company.

Mr. Ruthven hoped the interests of the Irish apothecaries, who were a most respectable body of men, would be protected.

Mr. Hume considered it highly absurd that regular surgeons were not allowed to dispense medicines in this country. He had dispensed medicines, and considered himself as competent to do so as any man in the land. It was highly necessary that surgeons should do so in small towns, where they were physicians, surgeons, and apothecaries. He should like to see the examination of medical men conducted in open court, as was the practice on the continent; but he was sorry to say that, with respect to medical science, this country was in a state of barbarism as compared with France.

Mr. Warburton could not agree with the gallant Colonel; it was notorious, that persons, licensed by the College of Surgeons and Apothecaries' Company, were re-examined by the Army and East India Boards, while graduates of the universities of Scotland and Ireland were exempted.

THE COMMITTEE WAS THEN APPOINTED.

The cause which we have so zealously advocated is now certain of success; and the equalisation or assimilation of the laws relating to the profession will be speedily effected.

We leave the medical corporations who have impeded the progress of science, and rendered it in a state of barbarism, to use the just language of Mr. Hume, as compared to France, to apostrophise a long farewell to all their greatness. They have thrown every obstacle in the path of zealous cultivators of medicine; they have refused them all patronage, and excluded them from all places of situation or emolument. They have given no encouragement whatever to induce men to make discoveries, but they and a clique of their relations have monopolised every thing. A Reformed House of Commons will soon teach them the important lesson,

"Patens omnibus scientia."

The following are the names of the Committee, appointed by the House of Commons, on the motion of Mr. Warburton on Tuesday, to "inquire into and consider of the laws, regulations, and usages regarding the education and practice of the various branches of the Medical Profession in the United Kingdom:"—Mr. Warburton, Lord Viscount Howick, the Lord Advocate, Mr. Littleton, Sir Robert Inglis, Mr. Goulburn, Mr. Shaw, Mr. Abercrombie, Mr. James Oswald, Mr. Bannerman, Mr. Andrew Johnston, Mr. Halford, Mr. Frankland Lewis, Mr. Hawes, Mr. O'Connell, Mr. Spring Rice, Sir Robert Peel, Mr. Hume, Mr. Clay, Mr. Robert Clive, Mr. Ewart, Mr. Peter, Mr. Strutt, Mr. Edward Romilly, Mr. Wolryche Whitmore, Mr. George Wood, Mr. Ord, Mr. Gillon, Mr. Sinclair, Mr. Baldwin, Lord Oxmantown, Mr. Serjeant Perrin, and Mr. Jephson. Power to send for persons, papers, and records. Five to be the quorum.

THE
London Medical & Surgical Journal
Saturday, February 15, 1834.

MEDICAL REFORM. — SELECT COMMITTEE APPOINTED.

WHEN, in the preceding number, we announced Mr. Warburton's notice of the motion which he made on Tuesday night last, we scrupulously used the very language attributed to the hon. member by the *Times*. A Committee to inquire into the state of the Anatomical and Medical *Schools*, which were the reported words of the hon. member, held out a delusive hope that the power of conferring degrees, and the ranks into which the profession is split, were matters too high or too prescriptive for the interference of the legislature. We have now the high satisfaction of finding that, whilst we gave the *letter*, we were not deceived in anticipating the *spirit* of the promised inquiry. A Select Committee was appointed last Tuesday, upon the motion of the hon. member, to inquire into the laws and regulations regarding the education and practice of the various branches of the medical profession in the United Kingdom. And, after all the vapouring of Sir Henry's organ, *confidens tumi-*

dusque; notwithstanding the potent influence of the President himself, and his insinuating address, the government gave no opposition to the motion—nay, an influential member of the ministry hazarded his belief in the prevailing desire for a measure, the most obnoxious to the President's dearest objects of all we have had the good fortune to advocate—equality of privileges. Colonel Wood was averse to the proposed Committee; his opposition, however, was as singular as the reasons he alleged for it. The honourable member called the Apothecaries' Act of 1815 the poor man's Act. The only reason we can discover in the hon. member's speech for this soubriquet is "the well-known fact, that paupers were regularly contracted for by parish authorities!" A well-known fact it is, and well is it known also, in what manner the contract is too often performed. But why this should entitle the Act to such a charitable name is beyond our powers of comprehension. Except the useless opposition of this hon. member, *inutile Lignum*, the motion met with undivided approbation. Mr. Littleton stated, that whilst he was lately in Ireland, several deputations from the medical profession had called upon him, upon the subject of the motion, in which they all took a deep interest; and he could safely say, that, though they might not be agreed as to what measures it would be best to adopt, they had invariably expressed themselves ready to acquiesce in any arrangement, having for its object an equalisation of privileges among the whole medical profession of the United Kingdom. To one of these deputations we alluded on a former occasion. Another hon. member, in conjunction with Mr. Hume, dilated upon the absurdity of the exclusive privilege claimed by the apothecaries of dispensing medicines, to the exclusion of the physician and surgeon; whilst they, at the same time, asserted a right of unlimited medical and surgical practice! Mr. Warburton, in fine, dwelt upon a topic often treated in this Journal,—he did not think that the certificate of the College of Surgeons, or of the Company of Apothecaries was, as regarded the holder of it, a proof of great proficiency in medical science. And the fact was, that medical practitioners, licensed by either of these bodies, were required, previous to entering into the medical department of the army and navy, or the East India Company's service, to undergo a strict examination. Such is a summary of the preliminary proceedings upon the first attempt to legislate for medicine upon general principles in this country. France has made various efforts during the last forty years to reform her medical institutions: Prussia, the last-beloved of the Gazette, has had three different codes of laws upon the subject in the same period. England has slept upon the barbarous institutions of the infancy of medicine in this country; and when she has meddled by partial legislation, she has but tangled the ill-woven web. She has now, however, the accumulated treasures of long experience, and the great exemplars of France and Prussia before her; and we doubt not she will place herself, by a strenuous regenerating effort, in her medical policy, as in her other civil institutions, at the head of the nations. For the names of the Committee we refer to another part of this Journal.

EDINBURGH UNIVERSITY.

A fortnight ago we noticed in this Journal a statement in a late publication *, to the effect that the University of

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* An Examination into the Causes of the

Edinburgh had no legal power to confer medical degrees. It would be singular indeed, if, after enjoying the reputation—on the fame of which it still supports itself—of having been one of the first medical schools in Europe, the application of a little law-craft should show it has been exercising all the while an unwarranted prerogative, in bestowing degrees in medicine upon its students, whilst the undoubted privilege belongs to places having but the shadow of a school of medicine. But, when it is recollected that there never has been any systematic legislation upon medicine in these countries, and that its public laws and charters, such as they are, with scarcely an exception, are two centuries old at least, it will excite no surprise that anomalies of all kinds should be encountered. These will be proper matters for consideration at the approaching investigation.

We must now call attention to some other statements in the same pamphlet, which have attracted a great deal of notice in Edinburgh. Great dissatisfaction has for a long time prevailed respecting some recent appointments to the medical chairs of the University, and touching its general management. The precise nature of the current allegations will be found at large in the pamphlet before us. It charges, first, that appointments have been latterly brought about by corrupt influences, party feelings, and mercantile barter and sale; and again, that, in order to ensure audiences and remuneration to unqualified professors, the students have been overwhelmed with new and unnecessary classes, attendance upon which, within the University, has been rendered imperative; and, thirdly, that the character of the examinations for degrees has been very bad, if not disgraceful to the University.

These matters within the walls have created a powerful party without, to whom the writer belongs, whose personal interests are obstructed by the monopoly of the University. The inefficiency of the public professors has raised up a body of private lecturers, unknown in the days of the Cullens, the Blacks, the Monros, and the Gregories. From a table at the end of the pamphlet, we have collected, that the extra-collegiate lecturers of the present year have nearly double the number of pupils belonging to the University classes.—The students, in fact, virtually elect their own teachers. Between these classes an irreconcilable hostility exists. The professors declare their lectures indispensable; the student finds them insufficient, and is compelled to pay his examiners, the professors, for his degree, and the private lecturers for his tuition, if, indeed, he has any cash remaining after the large drafts of the University. Not to mention the late liberal regulation of Oxford, in recognising private instruction, the mere competition of St. Andrews, where the same principle was adopted without the necessity of a degree in arts, would have soon thinned the Edinburgh University School, were she resolved to persevere in her present system. Her past course is now of little consequence, except as an item in the corporation abuses, which are soon to be detected and abated. Under better management she may again revive, and possess a school worthy of her former eminence. We are no believers in the necessity of an *aberration* of intellectual power —if we may use the expression.—The same generous and independent patronage of

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Declining Reputation of the Medical Faculty at the University of Edinburgh, and the origin of another class of Medical Professors commonly called Private Lecturers; with some Remarks on the History of the University of Edinburgh. Edinburgh: 1834.

talents, which produced her former distinguished professors, is sufficient to continue their race, without consoling ourselves for their disappearance, by imagining that the splendour of genius, like the sun, must set in one place, whilst it illuminates another with its rising brightness.

The abuse of patronage, the nepotism, the monopoly, the careless examinations, the dissensions, which are the subjects of this pamphlet, are but the counterparts of what we see daily in this metropolis. We refer for details to the pamphlet, which contains some judicious observations on medical reform.

French Hospital Reports.

HÔPITAL DE LA PITIE.

Strangulated Hernia, with Perforation of the Intestines.

— Duval, aged 40, had suffered from hernia for four years; about three weeks before his admission into the hospital, he was attacked with colic pains, flatulence, but neither vomiting or nausea; medicines were given to him, and the pains subsided. Fifteen days after this period, without any known cause, the tumour suddenly increased in bulk, and became hard, and painful; the abdominal pain returned, and he was seized with vomiting of a green matter, which soon, however, became stercoraceous, and occurred every quarter of an hour; he remained five days in this state, being under the care of an ignorant person, when he was admitted under the care of M. Delpeau, with all the preceding symptoms, and obstinate constipation of the bowels. The operation was determined on without delay, and was performed the same day in No. 7 ward (Saint Jean); the hernia was formed by a portion of intestine of a black colour, which was perforated by three small ulcerated openings, from which escaped, at first, a reddish-coloured fluid, but afterwards true fæcal matter. An appropriate mode of treatment was pursued, and with success, for although the intestine was so far advanced in a state of gangrene, no bad symptoms ensued, and twenty-five days after the operation, the patient was discharged well.

HOPITAL DES ENFANS MALADES.

Scarlatina simulating Rubeola at its commencement.

— Lebel, æt. 9, was attacked on the evening of the 5th of October, with cephalalgia, slight symptoms of fever, pain in the throat, and difficulty of deglutition; on the succeeding morning he had violent shivering fits, vomiting, and epistaxis, the febrile symptoms were much more intense, and he became delirious; during the night an eruption had appeared on the skin.

The child was admitted into the hospital on the 6th, and then presented the following symptoms, anæmia, cephalalgia, violent fever, pulse of 120; the skin covered with a number of small red points, between which it preserved its healthy colour, these spots were more numerous at the joints, than at any other part; the tongue was covered with a white coat, behind which were seen some of the papillæ very prominent; the amygdalæ were much swollen, and deglutition was performed with great labour; the pharynx appeared red, and inflamed; the voice was hoarse; his bowels had been constipated since the commencement of the attack, but there was neither nausea, nor vomiting; he had no cough nor was there coryza, or effusion from the eyes. Borax of honey, emollient clysters, and low diet were prescribed.

7th. The eruption of scarlatina is now well marked; upon the abdomen and the superior part of the thighs there is a great number of miliary vesicles; the febrile symptoms are much less violent, but the pain in the throat, and the difficulty of deglutition, still remain.

The eruption had nearly disappeared by the 10th, the febrile symptoms and pain in the throat had much abated; on the succeeding day the patient was declared convalescent.

Chronic Peritonitis—Ascites Tapped thirty times—Cure.

A vine-dresser, æt. 48, had for twenty-five years an enormous scrotal hernia, which incommoded him only on account of its weight; he had slight fluctuation in the abdomen, but no pain. M. Dubroca, of Barsac, who attended the man, considered that he had slight peri-

tonitis, and thought that it was probably occasioned by the scrotal hernia. Some time after he was seized with violent pains in the abdomen, which was enormously distended with fluid. The operation of paracentesis was practised, and a great quantity of fluid evacuated; mercurial frictions, the internal use of digitalis, and other diuretics were prescribed. At the end of two months the same operation was again performed, and again a large quantity of serum was evacuated. In the course of two years and four months from this time, he underwent the operation of tapping twenty-eight times, in all thirty; at the end of this period the fluid was no longer secreted, and six months from this time he was convalescent. He regained his flesh rapidly, and in fact the cure was perfect.

HÔSPICE DES ENFANS TROUVES DES BOURDEAUX.

General Ramollissement of the whole Cerebral Mass—Altered state of the left Lateral Lobe, in which the Lateral Ventricle communicated with the internal Auditory Canal.

Hippolyte Athénée, æt. 7, of a scrofulous constitution, and a lymphatic temperament, was brought to the hospital at the age of four years. At the time of his admission, there was found at the base of the left mastoid process a fistulous opening, from which flowed a great quantity of fœtid greyish coloured pus; the left side of the face was swollen, and appeared to be paralysed, and the eyelids of this side were everted. For some time before his death, the cellular membrane became infiltrated, and there was anasarca over the whole body to a great extent.

Autopsy.—A vertical section of the cranium was made, and it was then seen, that the parts in the neighbourhood of the petrous portion of the temporal bone were so extensively diseased, that it was impossible to recognize any structure; no traces were found of either the cavity of the tympanum, the small bones of the ear, labyrinth, vestibule, cochlea, or semi-circular canals; neither were there any vestiges of the acoustic nerve, but the orifice of the internal auditory foramen communicated directly with the left lateral ventricle, by means of a canal, formed in the substance of the brain, and through which the serum of the ventricle mingled easily with the purulent matter formed in the ear; the left lobe of the lung had contracted intimate adhesions with its membranes, throughout all its extent, and the whole cerebral mass was in a state of ramollissement, and bathed in serum.

Notwithstanding this extensive disease, the external ear was in a healthy state, and the canal was perfect; much serum was found in the cavities of the thorax and abdomen, but no other appearances of disease or alteration were found in either cavity.

HÔPITAL MILITAIRE D'INSTRUCTION D'ALGER.

Two cases of Chronic Angina tonsillaris, cured by making incisions in the Tonsils.

BY M. BAUDENS, D.M.P.

G***, a soldier, belonging to the 11th regiment of dragoons, ætat. 28, had for some years suffered under chronic angina tonsillaris, which obliged him very frequently to enter the hospital. Incision of the tonsils was proposed as a remedy, and on the 20th of May, he proceeded to perform the operation of incising the glands with a double edged bistoury. He first divided the left tonsil, which was the largest, from below upwards, and then changing the bistoury into his other hand, divided the other tonsil in a similar way; the amygdalæ bled freely, and a gargle of mallows was prescribed, for the purpose of favouring the flow of blood. Eight days after the operation, this man left the hospital perfectly well.

A boy, aged 12, was attacked with chronic angina tonsillaris; since the age of five he had suffered considerably from slight attacks of this nature, and his health had become much injured. The amygdalæ were much swollen, and deglutition was, from this cause, performed with great difficulty; when the boy uttered any cries or wept, the glands approached each other and threatened suffocation; his breathing during sleep was stertorous; some months previous a sister of this patient had died from the same complaint. A few days afterwards the same operation as in the preceding case was performed, but with more difficulty, on account of the intractability of the patient. In this case, as in the former, the incision of the amygdalæ was crowned with perfect success; in a few

days all the unpleasant symptoms disappeared, the glands diminished in size, and he was discharged perfectly well.

British Hospital Reports.

ST. THOMAS'S HOSPITAL.

Epilepsia et Paralysis.

Susan Bainbridge, æt. 34, admitted October 17th, 1833, into Mary's Ward, under the care of Dr. Elliotson. Has been ill three years; has lost the use of all her limbs; her speech partially, and also her hearing, after a fit, during which she was entirely insensible. States that she has been subject to headach from infancy, but which entirely disappeared when the paralysis came on. At one time she experiences a numbness, at another, a pricking sensation, in the fingers. Has had no catamenia for the last six months, but, previously, had always regained her speech perfectly at the time of menstruation. Pupils dilated; bowels confined; tongue tremulous. Thinks her illness was brought on by sleeping in a damp bed.

Abrad. capillitium. Ung. iodinæ mitius capiti bis die infricandum. Fiat setaceum per nucham. Hydr. submur. gr. v. o. n. Mist. sennæ comp. manè quotidie si opus sit.

24th. Is no better; has violent fits of tremor occasionally.

Nov. 5th. Mouth sore. Omitt. hydr. submur. Cont. unguentum.

12th. Much improved; can talk better; her answers less unconnected; tongue steadier. Ordered tinct. iodinæ ♏ x. Liq. potass. hydriod. ʒ j. ter die.

19th. Tinct. iodinæ, ♏ xv. Liq. potass. hydriod. ʒ ij. ter die.

24th. Is able to walk by laying hold of the table, &c. to support herself. Has a greater and more perfect power of speech. The tremor of the tongue and hands is considerably less.

Dec. 1st. Continues to improve, so much so, that she hopes to spend her Christmas at home.

18th. Still better; articulates more distinctly, and does not forget her subject as formerly.

30th. Much better; can hardly be persuaded to stop in the hospital, so desirous is she of going home, declaring that she is quite well. Requires but little assistance in walking.

Jan. 6th. Can hold her hands out before her for some time without their shaking. Can walk alone.

15th. Is so much better as to be able to walk up and down stairs, and wait upon the patients. Her tongue is nearly steady; can raise her hands to her mouth and hold them there for some time. Her countenance and eyes are much brighter and clearer than a fortnight ago.

21st. Is not so well; is suffering from anxiety on account of the indisposition of her little girl. Her tremor is greater.

Feb. 3rd. Is better; gradually improving. Continues her mixture and ointment.

Morbus Hepatitis.

Richard Barrett, æt. 33, admitted Oct. 11th, 1832; a ballast gatherer, comes from Cork, where he had been accustomed to drink large quantities of whiskey. During his residence in England has drunk a pint of rum and two gallons of porter daily. The liver is exceedingly large and hard, the right lobe reaching to the superior anterior spinous process of the ileum. Has a sensation of heat in his throat; also an unpleasant taste, especially after eating. Sour liquid rising into the mouth; great flatulency and giddiness; bowels not open for the last two days; great tenderness on pressure over the loins; tongue whitish; pulse 120, hard. Ordered

Ol. crotonis, ♏ ¼ quotidie.
Ung. iodinæ abdomini bis die infricand.
Liq. potassæ. hydriodatis ʒ ij. ter die. (Potass. hydriod. ʒ j. ad aq. distill. ℥ j.)
Hydrarg. submur. gr. ij. omni nocte.
Acid. hydroc. ♏ ij. ter die ex aquâ.—Diæta lactis.

13th. The food does not now turn sour on his stomach, neither has there been any rising of liquid in the throat.

16th. The dyspeptic symptoms have for the most part disappeared; bowels open four or five times daily; tongue much coated in the middle, and red at the tip; some pain in the abdomen. Omitt. ol. crotonis et ung. iodinæ. Ordered

Ung. iodinæ mitius abdom. infricand. bis die.
Liq. potassæ hydriod. ℥ ss. ter die.

19th. Much purged; stools whitish-yellow. Complains of griping. Ordered

Opii gr. j. omni nocte.

23rd. Is still very much griped and purged, and complains of tenesmus. Liver not so hard.—Omit. medicamenta. Ordered

Inf. catechu, ℥ jss. cum tinct. opii ♏ x. post sing. liquid. dejection.
Cont. opii, gr. j. o. n.
Enema amyli cum tinct. opii ♏ xl. vespere.

26th. Still complains of tenesmus and weakness; pulse 80, compressible; liver has greatly decreased. Ordered

Enema amyli, &c. quotidie.
Ung. iodinæ bis die infricand. abdom.
Liq. potass. hydriod. ʒ ij. ter die.

29th. Complaining of tenesmus, and also of the great diminution of his liver. Declares that it will all waste away if he should remain longer in the hospital.

Nov. 2nd. He left the hospital this morning by his own desire, for fear lest his liver should entirely disappear.

Remarks.—The above cases, together with those of *Induratio Pulmonis*, published in No. 105, are evidence of the powerful effects which iodine possesses over the general absorbent system.

It has appeared a mystery to some, that remedies should possess the power of causing the absorption of redundant, or newly-formed growths, such as bronchocele, &c., in preference to the general textures of the frame; but as it is an acknowledged law, that all new-formed parts or growths, not constituting an original portion of the body, are endued with an inferior degree of vitality to that of parts naturally appertaining to the animal machine, it follows that such parts would be the first to give way when the whole absorbent system has been roused under a remedy so powerful as iodine.

It would be wrong, undoubtedly, to suppose that the seton has been productive of no benefit in the striking case of Bainbridge; but, independent of this, there are many cases at the hospital under the care of Drs. Elliotson and Roots, illustrative of the benefit to be derived from the employment of iodine, such as paralysis, considered to arise from morbid growths in the brain, enlarged liver, spleen, &c., and in one case, now under the care of Dr. Elliotson, of enlargement of the ovarium. It may be observed, however, that this remedy, like mercury and all others, fails to reduce hypertrophy of the heart; nevertheless, it is frequently had recourse to in conjunction with mercury, as the most probable means of effecting so desirable an object.

Although it is so largely employed at this hospital, and that in considerable doses, and even to *saturation* of the system, we seldom, if ever, witness those direful effects which are said to follow its use by Dr. Gairdner and others, such as absorption of the testes, mammæ, &c. The only effects it is observed to produce are, occasionally, the symptoms of a mild gastritis, such as heat in the stomach and throat, but which, by a discontinuance of the remedy and low diet, easily subsides. The ointment, too, on delicate skins, at times produces considerable heat and irritation, and for which the milder one is then substituted.

In the weekly Medical Newspaper for the 30th of January, 1833, published at Berlin, is a paper by Dr. Kluge, on the effects of iodine in checking salivation from mercury. Several cases are there related, in which ptyalism speedily ceased under its administration. Dr. Graves, of Dublin, also has published an account of two cases, in which salivation was arrested by iodine. Whether further trial will corroborate the practice of these gentlemen remains to be proved, or whether there is any difference in the effects of iodine on the constitution, after salivation has been established, to that of its administration in conjunction with mercury, time must determine: but thus far we are assured; and that, from the great practice at this hospital, that mercury will cause salivation as rapidly (if not more so) in conjunction with iodine, as when it is administered alone.

ST. GEORGE'S HOSPITAL.

Apoplexy of the Retina.

Mary Ford, æt. 32, admitted Jan. 25th. Yesterday morning, without the occurrence of any known cause, she became suddenly so blind with the right eye as almost entirely to lose the power of vision. When she applied for relief the iris of the right eye was contracted, and its margin extremely irregular, acting very little, or not at all, on the admission of light. There is a slight degree of glaucoma present, and the conjunctiva is more vascular than natural. Pulse is full but not strong. Complains of headach; bowels regular. The menstrual discharge, which is near at hand, has always been regular, but very scanty in quantity, and dark coloured. She has been in the habit of losing blood several times in the year, but has latterly neglected to do so.

There is amaurosis of the left eye, with strabismus; she has lost the sight in it for four years. She has not been in the habit of viewing minute objects, or exposing her eyes to a strong light.

Cucurbit. cruent. ad ℥ xv. nuchæ.
Hydrarg. submuriat. gr. v. hâc nocte sumend.
Haustus sennæ cras primo mane sumend.

26th. She can see better since the cupping; pulse improved, more firm and strong.

℞. Hydrarg. submuriat. gr. ij.
Extract. opii, gr. ss. Bis in die sumend.
Repet. cucurbit. cruent ad ℥ x.
Emplast. cantharid. fronti applicand.

Three years since she had an attack of rheumatism, followed by some affection of the eye, which was most probably iritis.

29th. ℞. Mist. camphor. Decoct. aloes comp. āā ℥ vj. ter in die sumend.
Feb. 5th. Rep. empl. cantharid. fronti.
12th. Emplast. cantharid. nuchæ.
19th. Can see much better; the irides act more. She has had severe headach these four last days, with fluor albus.

Cataract of both Eyes.

William Wade, ætat. 70, a hackney-coachman, was admitted, under the care of Mr. Walker, with cataract of both eyes. He gives as the history of it, that about twelve months since he first found his vision impaired, and, after driving a long distance, or when exposed to severe weather, his eyes felt weak, and there appeared to be a cloud between him and his horses' heads. This indistinctness of seeing objects gradually increased until about six months since, when he could not see his horses' heads at all, and he was consequently obliged to give up his work entirely. The eyes have never been inflamed, and he suffers

no pain whatever in them or in his head. The vision of the left eye is completely darkened, but he can see sufficiently well with the right eye to find his way abroad; and he can see better in the shade than in a strong light. The cataract of the left eye is small, but completely fills up the pupil; is of an opaque yellow colour, but with some lighter streaks anteriorly, and seems firm and solid. In the right eye the opacity is not so extensive, and the lens appears of a larger size than on the left. The iris contracts readily on the admission of light; its colour and position are natural; the cornea is rather prominent, and the anterior chamber large.

Jan. 3rd. Lotio extracti belladonnæ oculo.

5th. Extract. belladonnæ supercilio nocte manèque applicand.—Omit. solutio.

19th. Ol. ricini, ℥ ss. statim sumendum.

26th. Mr. Walker operated on one eye today. A needle was passed through the cornea and anterior capsule of the eye to allow of the admission of the aqueous humour for the absorption of the margin of the lens.

Ol. ricini. ℥ ss. cras primo mane sumend.

28th. The anterior chamber of the eye is again filled up with fluid, but there has supervened no inflammation.

Feb. 9th. Mr. Walker intended to have performed the operation of extraction this morning, but postponed it in consequence of the patient complaining of some pain in the bowels, and vertigo following a dose of haustus sennæ.

℞. Misturæ camphoræ, ℥ j.
Tinct. hyoscyami, ♏ xii. Misce, fiat haustus 6tis horis sumend.
Extracti belladonnæ supercilio applic.

10th. Better this morning. The pupil of the eye is more dilated with the belladonna. The operation of extraction was performed by making an upper section of the cornea. Some slight difficulty occurred in consequence of the incision being somewhat oblique in direction. The lens was firm and yellow.

Vespere.—No pain whatever in the eye or the head.—Perstet in usu haustûs camphoræ et hyoscyami.

11th. Some pain and throbbing in the eye and temple; bowels not open; pulse full and hard.

V. S. ad ℥ xviij.

12th. Much relieved by the bleeding. Slept for four hours; some slight return of pain in the eye; bowels not open.

Hirudines xij. regioni temporali sinistro.

℞. Hydrarg. submur. Pulvis antimon. āā. gr. iv. horâ somni sumend.
Ol. ricini, ℥ss. cras primo mane sumend.

13th. No pain, but some soreness in the eye; bowels open.

℞. Hydrarg. submur. gr. iv. Pulvis Doveri, gr. viij. h. s. sumend.

14th. Slept well; some slight pain and soreness in the eye; bowels not open.

Hirudines viij. parti affect. applicand. Perstet in usu pulv. horâ somni sumend.
Ol. ricini, ℥ss cras primo mane sumend.
Jusculo bovini, Oj. quotidie sumend.
Lotio plumbi oculo applicand.

19th. Slight chemosis; pupil round, and but a small portion of the opaque capsule hangs over its lower edge into the anterior chamber.

℞. Pulvis Doveri gr. v. Hydrarg. c. cretâ, gr. ij. omni nocte horâ somni sumend.
Haustus effervescens quartis vel sextis horis sumend.

23rd. No pain, and very slight soreness; can distinguish features and objects slightly, but complains of much intolerance of light.

℞. Infusi. sarsæ alkalin. ℥ ij. ter in die sumend.
Repet. pulvis omni alternâ nocte.

26th. Mouth sore. He can distinguish the hands of a watch. No inflammation whatever.—Omitt. pulvis. Gargarisma a luminis.

WESTMINSTER HOSPITAL.

Compression of the Brain without bad consequences—Cure.

A very extraordinary case presented itself some time ago here in the person of a lad about twelve years of age, who met with a fall so violent as to cause an indentation in the cranium, about the junction of the frontal with the right parietal bone. The peculiarity of the case consists in the complete absence of any of the symptoms of compression of the brain. The boy suffered no ill effects whatever from the accident, nor were the constitutional functions in the least damaged. During his stay in the hospital, his head was shaved, and he was put on low diet. He was in a few days discharged, apparently in the most perfect health.

MIDDLESEX HOSPITAL.

Hæmatocele caused by the Kick of a Horse.

W. Williams, æt. 37, admitted January 18th, under Mr. Mayo. He had been kicked by a horse the day before in the groin and scrotum of the left side; the scrotum was immensely swollen and discoloured; there was no pain in the part, but a great deal across the loins, with nausea; he passed the urine freely and without pain. Spirit lotion applied to the part.

19th. Pain in the back less, and confined to the left side; considerable pain in the scrotum, the distension and discoloration being very great; it was evident that a quantity of blood was contained in the cellular membrane of the scrotum, but the state of the testes could not be determined. Two incisions were made to relieve the distension, one at the upper part,

the other at the lower and left side, of the scrotum; fomentations applied, and the scrotum supported; some blood gradually flowed from the lower incision, and the tension and pain were diminished.

20th. Much easier this morning; no pain in the loins, nor in the scrotum, unless pressed.

℞. Magnes. sulph. ℥j.
Liq. antim. tart. ♏xl.
Aq. menthæ pip. ℥iss.
Fiat haust. ter die sumendus.

25th. The pain and tension have been diminishing daily. It is now clear, that one part of the swelling arises from blood contained within the tunica vaginalis, the other and lower part, from blood effused into the cellular membrane of the scrotum.

Tunica vaginalis punctured, and eight ounces of blood, fluid and congealed, oozed out; this was followed by great relief.—Continue medicine.

February 1st. The tumour was again punctured, and ℥viij. more blood came away; this was followed by smart inflammation of the testis and cord, which was relieved by purging and the application of leeches to the groin.

In a few days' time he was so much better, that he left the hospital, the scrotum remaining swollen, but without much pain. He was directed to wear a suspensory bandage, to foment the part night and morning, and to return in case the pain increased.

Case of Varicose Veins successfully treated by the application of Caustic Issues.

Mary Walton, ætat. 39, admitted October 22, 1833, for a varicose state of the internal saphena vein, extending from the inner ankle to the middle of the thigh; the vein gradually enlarging from the ankle, and becoming, at the inner condyle, so much enlarged as to form a considerable projection, the vein being at least as large as a man's thumb, and exceedingly convoluted.

The disease came on about seven years ago, and soon afterwards an ulcer formed at the inner ankle, for which she received medical treatment; the ulcer remained open four months and then healed; the vein, however, increased in size, and has continued to do so to the time of her admission. The ulcer has repeatedly returned, never remaining healed more than two or three months at a time, but continuing open at least four.

The leg was at first bandaged for a short time, and then two large caustic issues were made across the course of the vein, one in the middle of the thigh, the other half way down the leg.

Nov. 22nd. Sloughs from the issues came away; the leg is very stiff and painful, the vein being swollen in size, but hard and distended, and exceedingly tender on pressure.

30th. Vein much swollen, and also less painful; the leg is still stiff, has become slightly contracted, and cannot be straightened without giving very great pain.

Ordered to endeavour to bring the leg gradually straighter, and to have another issue made across the vein just above the situation of the ulcer.

Dec. 16th. Able to straighten the leg entirely; veins not above a quarter the size they were previous to the application of the issues; no pain in the veins unless pressed upon, they however still feel quite hard.

25th. Issues just healed; veins less and softer.

From the time of the issues healing the leg has been rolled, and pledgets of lint dipped in equal parts of tincture of myrrh and lime-water applied to the situation of the issues.

She has now left the hospital experiencing no pain in the veins from pressure or otherwise. The vein is completely obliterated at the points where the issues were made; nevertheless, after standing, it is slightly distended, by the blood flowing into it from collateral communications; it is not more than one-sixth of its size at the time of her admission.

With respect to the application of caustic issues in these cases, causing phlebitis, Mr. Mayo stated, that he had now applied them in numerous cases, and with different degrees of severity, even to producing sloughing of the vein itself, but that in no case had the practice been followed by phlebitis. Mr. Mayo does not recommend this practice indiscriminately; the constitution and age of the patient, the number of nervous trunks affected, are the principal points which have to be considered, and upon which the expediency of the practice turns.

Fragilitas Ossium.

Richard Holman, æt. 41, admitted under Mr. Mayo, Dec. 5th, for fracture of both thighs occasioned by catching his toe against a projecting part of the pavement while walking leisurely along.

He has a large head, light hair, fair complexion, prominent large eyes, and a high narrow chest.

This patient in the year 1821 fractured the tibia and fibula of the left leg, by merely kicking his foot against some projecting substance.

In the year 1828, he broke his left thigh, by catching his toe as he was going up stairs, and again in the year 1830, treading on a bean shell, slipped down, and fractured his right thigh.

The thighs were bandaged up with Dessault's splints, which were removed Jan. 27th, and each thigh then done up with empl. saponis, three small deal splints, and bandages.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON.

Westminster Medical Society	Feb. 15,	8	P.M.
Royal Asiatic Society	— 15,	2	P.M.
Harveian Society	— 17,	8	P.M.
Medical Society of London	— 17,	8	P.M.
Phrenological Society	— 17,	8	P.M.
Institution of Civil Engineers	— 18,	8	P.M.
Horticultural Society	— 18,	1	P.M.
Linnæan Society	— 18,	8	P.M.
Royal Society of Literature	— 19,	3	P.M.
Society of Arts	— 19,	7½	P.M.
Royal Society	— 20,	8½	P.M.
Society of Antiquaries	— 20,	8	P.M.
Anniversary of the Geological Society	— 21,	1	P.M.
Royal Institution	— 21,	8½	P.M.

APOTHECARIES' HALL.

NAMES of gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, February 6th.

Samuel Holmden Amphlett	Birmingham.
William Henry Bishop	Cheltenham.
John Cockle	——
Bowden Bower Dakeyne	Macclesfield.
Frederick Clement Gray	Alton.
William Hall	London.
John Henry Verrall	Seaford.
William Walton	Handsworth.

BOOKS.

THE Anatomy and Surgery of Inguinal and Femoral Hernia. Illustrated by Plates coloured from Nature. By E. W. TUSON, Esq., F.L.S. Assistant Surgeon to the Middlesex Hospital. Folio. Five coloured Plates. London: 1834. J. Churchill.

This work admirably illustrates the anatomy and surgery of Hernia.

The Anatomy and Physiology of the Liver. By FRANCIS KIERNAN, Esq., late Teacher of Anatomy. (From the Philosophical Transactions.) 1833.

CORRESPONDENTS.

Dr. O'Beirne.—It is quite impossible for us to insert another long reply to Mr. Salmon at present, as we cannot allow a controversy of this kind to occupy several numbers of our Journal. Dr. O'Beirne's reply has already occupied eight pages of small type, or one-fourth part of one of our numbers; and were we to continue controversial articles of such length, we should exclude a mass of diversified matter, much more important and instructive to our readers. Mr. Salmon has claim, as a matter of right, to repel some extra-medical charges made by Dr. O'Beirne, which must be the last communication on the subject. On the matter in dispute we entertain our opinion expressed in our Journal of No. 97, Dec. 7.

Berolinensis.—The Prussian medical code has been grossly misrepresented in the article alluded to; more of this in our next.

Mr. R.—We shall be happy to receive such communications, and shall print them at our earliest convenience.

Mr. Wilkins.—The article has never reached us.

Medicus.—We shall insert the article on Vesical Medication in an early number.

Mr. Bacon's communication in our next.

METEOROLOGICAL JOURNAL.

MONTH. Feb. 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
6		44	46	36	29·80	29·85	82	80	W.S.W.	W.N.W.	Foggy	Cloudy	Fine
7		37	40	32	29·92	29·95	80	80	W.	W.	Foggy	Foggy	Foggy
8	☽	36	41	36	29·98	29·98	80	80	W.	S.	——	Fine	Cloudy
9		39	42	31	30·06	30·20	80	80	S.E.	S.S.E.	Fine	Foggy	Foggy
10		37	40	39	30·14	30·06	80	80	S.W.	S.W.	——	Fine	Cloudy
11		42	45	40	29·92	29·79	79	80	N.W.	W.S.W.	——	——	——
12		43	46	35	29·44	29·57	80	78	W.	W.	Rain	——	Fine

50, *High Holborn.* WILLIAM HARRIS and Co.

ALL Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 108. SATURDAY, FEBRUARY 22, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,
BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXVII., DELIVERED MARCH 28, 1833.

Gentlemen,—Let me next call your attention to *scrofulous abscesses*. I have mentioned, as one of the common effects of scrofula, a tendency to the formation of chronic abscesses in various parts of the body. Those occurring in the absorbent glands I have already described. A propensity to indolent suppuration you will see also exemplified in the discharges from the ears, so frequent in scrofulous subjects; and a similar disposition to chronic suppuration is manifested in the formation of large indolent collections of matter in the cellular tissue of different regions of the body, but, more especially, in the cellular membrane situated between the peritoneum and the muscles of the loins. These last cases are well known to surgeons under the name of *psoas*, or *lumbar abscesses*. I believe they deserve the appellation of *scrofulous* abscesses fully as much as those more common suppurations of the glands at the side of the neck and under the jaw. These chronic collections of matter, arising from scrofula, usually come on without much pain, and sometimes attain a considerable size before the patient's notice is attracted to them. However, if an opening be not made in them, they continue to increase in size, and at length they constitute truly formidable diseases from their mere extent. In this condition, they usually create a hectical disturbance of the system, and are attended with more or less pain and inconvenience.

Gentlemen, it is useful to recollect, that many scrofulous abscesses do not begin with disease of the soft parts, but with disease of the spongy parts of the bones. We know that lumbar abscesses are sometimes connected with such a cause; we know that the abscesses about joints are often induced in the same way, as well as those scrofulous suppurations which arise around the phalanges of the fingers, and within the tympanum of children.

I have described the lymphatic glands as most liable to scrofulous disease in persons under puberty; and in individuals past this period of life the lungs to tubercular affections, constituting the most fatal form of phthisis pulmonalis, which I regard as a scrofulous complaint.

Tubercles, or the tubercular formations, consisting of a greyish, semi-transparent, caseous, unorganised substance, are now generally admitted to be of a scrofulous nature; and though Dr. Abercrombie found, by chemical analysis, some differences between the constituent parts of scrofulous glands and pulmonary tubercles, Professor Carswell tells us, in his Illustrations of the Elementary Forms of Disease, that he has detected the tubercular deposit in abundance, both in the lymphatic glands and in those of the mesentery, when enlarged in consequence of scrofulous disease.

Now, you should understand, gentlemen, that the lymphatic glands are frequently affected only secondarily. Thus, in children who have porrigo, the irritation of that disease very often gives rise to glandular enlargements at the side of the neck, which may assume a scrofulous character. When the glands of the mesentery become the seat of scrofulous disease, it is often in consequence of a diseased state of the mucous membrane of the bowels. In the same manner you will find the glands under the jaw becoming enlarged, not only from porrigo, but from the irritation of catarrhs and common sore throats. Scrofulous swellings of the glands of the groin and arm-pit are often preceded by disease of the joints, or irritation in other parts of the limb.

With regard to the *predisposing causes* of scrofula, I may observe, gentlemen, that some peculiarity of constitution must be a predisposing cause of scrofula: this is a fact, of which no medical practitioners now entertain any doubt, though it may be difficult to define precisely what is the nature of such peculiarity. The appearances, which usually denote its existence, I have already described. I fully

coincide in the observation, that each individual has something peculiar to himself in his bodily organisation; that there are infinite varieties of natural organisation in the human species; and in individuals, who are distinguished by some of them, there is a greater or less susceptibility of particular forms of disease.

Much controversy has taken place on the question, whether scrofula be an *hereditary* disease or not; but, I believe, now that mutual explanations have been given, little or no differences of opinion remain on this point. All that is here meant by the expression *hereditary* is, that the children of scrofulous parents are more likely to suffer from scrofula than the offspring of persons who have always been perfectly free from that disease. That scrofula prevails a good deal in certain families, is the utmost extent to which it was ever designed to carry this doctrine. It was never intended to assert, that there were not exceptions to this general observation; and what man of experience and observation does not know, that the children of scrofulous parents frequently continue, as long as they live, entirely free from the disease? On the other hand, the most healthy parents sometimes have scrofulous children. If any further proof were required of children being occasionally brought into the world with a predisposition to scrofula, derived from their parents, we might, perhaps, find it in the fact of their being occasionally born with scrofulous tubercles already formed.

Amongst the *exciting causes* of scrofula are usually specified various circumstances tending to produce debility, or, at all events, to leave the system in a seriously disordered state;—such as fevers from contagion of a specific kind, like measles, scarlet fever, and small pox. Hence, previously to the introduction of vaccination, by which the evils of the small pox were so much diminished, it is in the recollection of many experienced practitioners still living, that scrofula prevailed even to a greater extent than at the present time.

Of late years, scrofula and many other diseases have been ascribed to disorder of the digestive functions, little trouble being taken to consider fairly, whether such disorder may not be rather the common effect or accompaniment of such diseases, than the cause of them. To say that there is always and essentially more or less disorder of the digestive organs in scrofula, and *primarily of no other important function*, as is sometimes maintained, seems a perfect absurdity, an hypothesis that could not be reconciled with the fact recorded by the very persons who broach it, namely, the occasional existence of scrofulous disease in the fœtus. While we find that, in a given number of children living together in the same atmosphere, under the same roof, feeding and sleeping together, and clothed exactly alike, only one or two become scrofulous, while all the others continue perfectly free from the disease, we must admit the impossibility of accounting for the production of scrofula by the hypothesis in question. We are again compelled to return to predisposition, and original kind of constitution, as a solution of the difficulty.

With the admission of a predisposition to the disease, some peculiar state or modification of the animal economy, original or acquired, and the essence of which at present eludes our investigations, various influences may become exciting causes of scrofula, and perhaps the operation of climate is the most powerful; for we find that scrofula is chiefly confined to countries which are remarkable for their damp, cold, and variable atmospheres, as Great Britain, Holland, and the northern parts of Germany and France. Persons living in the extremes of heat and cold, are much more rarely affected; but, no sooner do they come to this country, than they are even more liable to scrofula than other individuals.

Every surgeon is aware, gentlemen, of the great liability of children brought from the East or West Indies to scrofulous diseases, and of the African blacks and natives of the South Sea Islands to tubercles when they come to this climate. The monkey, also, a native of warm parts, is in a similar case.

Notwithstanding the general truth of this view of the comparative rarity of scrofula in hot or extremely cold countries, it is certain that the disease, and even this in its worse or tubercular forms, is a source of considerable mortality in Italy, Spain, Portugal, Minorca, Malta, and several other countries, whose shores are washed by the Mediterranean Sea. In these parts, indeed, tubercular phthisis is so prevalent and fatal, as to keep up the erroneous notion of its being a contagious disorder

In consequence of the influence of damp and cold in promoting scrofula, patients generally suffer more in one season of the year than another, their complaints being worse in the winter and spring, and better in the mild dry weather of summer and autumn.

Besides climate and atmospheric influence as an exciting cause of scrofula, we must reckon, as tending to produce the same effect, *where the constitutional predisposition, and the influence of climate are also in operation*, improper or insufficient diet, neglect of regular exercise, bad nursing, insufficient clothing, inattention to cleanliness, and the residence of children in badly ventilated, crowded dwellings. Hence the frequency of scrofula amongst the children who work for many hours crowded together in the unwholesome atmosphere of different manufactories, often badly fed, and deprived of that beneficial influence which due exercise in the open air would have upon their digestive, cutaneous, and muscular systems. Hence, also, one explanation of the reason why infants, as long as they continue at the breast, are less commonly attacked with scrofula than afterwards: their nutriment is what nature intended for them; and, while thus maintained under such maternal care, they are

in general also not exposed to damp and cold, but sufficiently protected from these influences on their constitutions. Were I to judge from the extent of scrofula which I notice amongst the children of the poor Irish brought to the Bloomsbury Dispensary, I should incline to the belief, that the various causes which I have specified may not only excite scrofula, when a predisposition to it exists, but even engender those peculiarities of constitution, without which the human system appears to be hardly susceptible of the disease.

Treatment.—Gentlemen, it is only necessary for me now to offer a few general observations on the treatment of scrofula, because the practice, which is applicable to some forms of the disease, is more conveniently brought under consideration in other lectures. Thus, I have already explained the mode of treating scrofulous joints, and the practice in scrofulous affections of the spine, thyroid gland, and breast, and the principles on which the psoas abscess ought to be treated, I shall mention in the future lectures.

When you remember the circumstances, which operate as the existing causes of scrofula, you must immediately see, that one of the chief means of obviating that morbid condition of the system, which accompanies scrofula, is the removal of the patient from the influence of such causes. If he be residing in a damp, cold, badly ventilated, crowded place, he should be immediately taken from it. If his diet be faulty in point either of quality, or quantity, it should be rectified. If his clothing be insufficient to protect him effectually from the influence of damp, and of sudden changes of the atmosphere, it should be improved and made warmer. If the patient be a child, kept in a sedentary state, working in some crowded manufactory for a great part of the twenty-four hours, it should be taken from such employ and place, and allowed to have the benefit of a salubrious air, and healthy exercise.

The doctrines of the late Mr. Abernethy make the principal indication in the treatment of scrofula to consist in aiming at the improvement of the state of the digestive functions. While I do not admit the truth of the theory that the origin of scrofula is essentially dependent on disorder of the digestive organs, I fully agree in the prudence of the advice that we should always endeavour to restore the natural and healthy functions of those important viscera, when in any respect deranged. This indication, in fact, had not been neglected by practitioners who lived half a century ago. Whoever compares the practice of Mr. Charles White in giving small doses of calomel, occasional purgatives, and the simple or compound decoction of sarsaparilla, with the blue pill, sarsaparilla, and laxative treatment, of Mr. Abernethy, will see no very material difference between them, especially when the stress which Mr. White laid upon attention to diet, clothing, avoidance of damp and cold, and the usefulness of good air and regular exercise, is taken into the account. Mr. Abernethy's practice consisted in giving five grains of the blue pill every night, and half a pint of the compound decoction of sarsaparilla twice a day; and, if no motion took place by a certain hour every day, some aperient medicine was administered.

The plan was followed up until the bowels became regular, and then, with the view of preventing a relapse, five grains of the compound calomel pill were given for an indefinite time. When acidity prevailed, small doses of the carbonate of soda were prescribed, and, when the stomach was weak, and the appetite bad, bark, steel, and the mineral acids were recommended.

A light nutritious diet is generally found to agree best with scrofulous patients; but it should not include wine and porter, unless the forms of disease, under which they are labouring, are attended with profuse suppuration and hectic debility.

Sometimes, gentlemen, when the tongue is foul, the breath bad, and the belly tumid, it is advisable to let the treatment commence with brisker purgatives, as jalap and scammony, or the compound powder of scammony, or James's powder and calomel. Such medicines may be given in proper doses at night, and their operation promoted with the senna mixture, or castor oil, on the following morning.

The bowels having thus been well opened, you may next employ milder medicines of the aperient and alterative kinds, as rhubarb and the subcarbonate of soda, to which a small quantity of mercury with chalk may be added.

Then, with such treatment may be combined, after a short time, the employment of tonic medicines, as the infusion of cascarilla, the sulphate of quinine, and other preparations of bark, or the infusion of calumba, with or without the tinctura ferri muriatis, or you may prescribe the compound infusion of gentian with the subcarbonate of soda; or else the compound decoction of sarsaparilla, with the diluted nitric or sulphuric acid. Those who believe in debility, as essentially conducive to the origin of scrofula, place their dependence on tonics, and especially bark, quinine, steel medicines, and cold sea-bathing. If the skin be dry, you may prescribe antimonials.

Mercury has sometimes been decried as decidedly injurious to scrofulous patients; but this is only a prejudice, apparently derived from old notions about debility. Mercury in small alterative doses is often beneficial, and in scrofulous ophthalmy, even the free use of it is one of the best means of removing the opaque substance sometimes effused in the cornea.

The fear of prescribing mercury to scrofulous patients has now, however, nearly subsided, and surgeons frequently prescribe, besides the preparations I have mentioned, the oxymuriate, 1 gr. of which is dissolved in an

oz. of the tincture of bark, and given in the dose of a teaspoonful, three or four times a-day.

All the foregoing plans are founded upon the aim of improving the health in general, and do not embrace the idea of combating scrofula with any specific.

Gentlemen, amongst the medicines which have attracted celebrity for their supposed specific virtues against scrofula, I have to mention to you conium, or hemlock, the muriate of lime, the carbonate of soda, and preparations of iodine. As for hemlock, it has now lost the reputation of being a specific, though sometimes prescribed in equal proportion with the compound calomel pill as a useful alterative.

The muriate of lime, I believe, is at present completely out of use and favour.

The carbonate and subcarbonate of soda are undoubtedly useful medicines, but not entitled to be regarded as possessing any specific power over the disease. They are often joined with rhubarb and a few grains of the hydrargyrum c. creta, or with rhubarb and cascarilla; which formulæ are sometimes beneficial as alterative medicines, but nothing more.

With respect to iodine, it is at present in considerable repute, and as employed by Dr. Lugol, Physician to the Hôpital St. Louis, at Paris, seems to possess great power over scrofulous diseases. For this purpose, Dr. Lugol employs certain preparations of iodine, some of which are intended for internal and others for external use. They are different from those which are employed in this country; more numerous, and if the report made to the Academy of Sciences by Serres, Magendie, and Duméril, can be credited, far more efficacious.

For internal use, Dr. Lugol prescribes iodine dissolved in distilled water by means of the hydriodate of potash. He has three solutions. of different degrees of strength.

No. 1 contains ¾ of a grain of iodine, 1½ grain of hydriodate of potash, in 8 oz. of distilled water.

No. 2 contains 1 grain of iodine, 2 grains of hydriodate of potash, in 8 oz. of distilled water.

No. 3 contains 1¼ grain of iodine, 2½ grains of hydriodate of potash, in 8 oz. of distilled water.

Children take these preparations readily when a little sugar is added to them, which should be done at the moment before they are taken, because if the sugar be put into the solution sooner, it changes the colour of the mixture, and destroys its activity.

Dr. Lugol begins with giving one-half of a grain of iodine in the twenty-four hours, and therefore lets the patient have two-thirds of No. 1 in two or three divided doses.

In a few days, the quantity is gradually increased to one grain a-day, and this dose is generally continued to the end of the treatment. In some instances Dr. L. has given one grain and a half in twenty-four hours, but this is the greatest quantity ever prescribed by him.

For making the above *iodine mineral waters*, as Dr. L. calls them, he employs a concentrated solution of iodine, composed of

℈j. of iodine,
℈ij. of hydriodate of potash, and
℥viij. of distilled water.

This concentrated solution is also itself prescribed in the dose of six drops twice a-day, gradually increased by two drops a-day every week, until the quantity amounts to thirty or thirty-six drops in twenty-four hours; to be taken in a little water sweetened with sugar, or syrup. The giving of iodine by drops he deems less exact than the use of the weaker solutions.

The *external use of iodine* may be either *local*, as when it is applied to scrofulous swellings, or to scrofulous eyes, or *general*, as when the whole body is bathed in a solution of iodine. Now, one principle, which Dr. Lugol insists upon, is, that all iodine applications not only have a specific effect on the part, but have an internal influence on the system, in consequence of absorption.

The *iodine ointments*, used by Lugol, are of four different strengths:—

No. 1 composed of
gr. xii. of iodine,
℈ iv. of hydr. of potash,
℥ ii. of lard.

No. 2.
gr. xviij. of iodine
℥ij. of hydr. of potash,
℥ij. of lard.

No. 3.
gr. xxi. of iodine,
℥iiss. of hydr. of potash,
℥ij. of lard.

No. 4.
gr. xxiv. of iodine,
℥iiss. of hydr. of potash,
℥ij. of lard.

These ointments should always be prepared fresh for use. Scrofulous glands, or joints, may be rubbed with them; and scrofulous ulcers and cutaneous affections dressed with them.

Ointment of proto-ioduret of mercury is another formula for external use, composed of

℈ij. of the proto-ioduret,
℥ij. of lard in No. 1,
℈iij. in No. 2, } to ℥ij. of lard.
℈iv. in No. 3, }

Dr. Lugol finds these preparations less irritating than the iodine ointment used for scrofulous cutaneous affections.

Lugol's *solution of iodine* for external use contains

gr. ij. of iodine,
gr. iv. of hydr. of potash,
in lb. j. of distilled water.

This he uses as a collyrium by means of an eye-glass, or syringes, also as an injection for

the nose, when there are scrofulous ulcerations of the mucous membrane, and for scrofulous fistulæ.

Dr. Lugol employs occasionally what he terms the *rubefacient iodine solution* made of

℥iv. of iodine,
℥j. of hydr. of potash, and
℥vj. of water.

With this he touches scrofulous ulcers, swellings, and cutaneous affections, when they require stimulation. In chronic inflammation of the eyes and eye-lids, he also applies it over the eye-lids and angle of the eye, by means of a bit of lint dipped in it.

The rubefacient iodine solution is also employed for diminishing the irregularities of the cicatrix of scrofulous disease.

Local iodine baths for the foot, hand, or chin, are made by adding a certain quantity of the rubefacient iodine solution to warm water in a tub, or wooden bowl.

When iodine is to be applied in the form of a poultice, this is made in a glazed earthen vessel, and, when sufficiently cool, the rubefacient iodine solution is added to it, and the quantity measured with a wooden spoon.

After puncturing indolent scrofulous abscesses, Dr. Lugol injects into their cavities, two or three times a day, an iodine solution. Then he rubs the skin over the abscess with the ointment of iodine, or that of the proto-ioduret of mercury.

Lugol's iodine caustic consists of

Iodine, ℥j.
Hydr. of potash, āā
Distilled water, ℥ij.

His *iodine baths* are made by dissolving ℥ij. or ℥iij. of iodine, with rather a larger proportion of hydriodate of potash, in a few ounces of distilled water, which are then put into the bath. Though rather less than one grain of iodine to about a pint and a half of water, its effect on the skin is very active and sometimes reddens it.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE IX.

Treatment of Ileitis.—Muco-Enteritis.

Gentlemen,—We shall be occupied to-day in considering the treatment of inflammation of the mucous membrane of the small intestine. You may recollect, that at my last lecture I spoke of the employment of laxatives in this disease, and mentioned that we are to employ laxatives in enteritis, on the same principle as emetics are used in cases where corrosive poison has been taken into the stomach. We are not to expect to be able to cure the disease by the use of laxatives, nor are we to have recourse to them in every case; we employ these remedies where we have decided evidence of the existence of offending matter in the bowels. We may meet with a case in the early stage under such circumstances, that the removal of the irritating matter by judicious purgation may completely relieve the patient, and this, I believe, is the foundation on which the superstruction of the British purgative practice in ileitis and tabes mesenterica was raised. It was concluded, that a laxative treatment, which had on many occasions succeeded in removing the first symptoms of the disease, would necessarily cure it in all stages and cases. This, I need not tell you, is wrong. Whenever you give purgatives or laxatives in enteritis, bear this in mind, that the effect which you have to produce is to be brought about at the least possible risk. If you can unload the bowels with a little castor oil or rhubarb, or some mild neutral salt, it is much better than to have recourse to calomel, or scammony, or colocynth. As a general rule, drastic purgatives must be avoided in inflammation of the mucous membrane of the intestines. The school of Broussais committed an error, on the one hand, by never admitting the use of laxatives, and British practitioners have been wrong, on the other hand, by giving too much purgative medicine. The error of the latter arose from looking always upon purgatives as antiphlogistics, which they are certainly, so far as they contribute to relieve inflammation by causing an increased secretion from the intestinal mucous surface. But this increase of secretion can be produced only by stimulating the organ to which they are applied; and hence, before they can become general antiphlogistics, they must, of necessity, be local stimulants. Further; if in a case of inflammation of the digestive tube you prescribe a purgative, and it fails in causing an increase of secretion, it will add considerably to the existing inflammation. It is, however, of very great importance that there should be no accumulation of offending matter in the bowels; and hence, when you find a degree of fulness in the belly, and the dejections scanty, you should always give a laxative, and follow it up by the administration of a narcotic. By using enemata, you can do a great deal of good, and this without any injury to the digestive tube; and I think they may be always employed with benefit in disease affecting the ileum. Recollect, gentlemen, what I wish to impress upon you respecting this part of the treatment is, that laxatives are to be employed in ileitis as one of the means of cure; but you are not to expect that a cure by the use of these alone will always be a matter of constant occurrence. It is true, that many cases presenting symptoms of enteritis, have, in the beginning, yielded to laxatives; but it is true also, that horrible mischief

has been done by their continued or indiscriminate employment.

A few observations now with respect to bleeding. There is in simple inflammation of the mucous membrane of the intestines this peculiarity,—it very seldom happens that it is necessary to use the lancet. The whole class of intestinal inflammations is so generally accompanied, even in the early period, with marked prostration and a typhoid condition of the whole system, that general bleeding is very seldom employed. But when the disease is recent, the constitution vigorous, the patient young, the skin intensely hot, and the pain violent, (a combination of circumstances which is not of very common occurrence) you may employ the lancet with safety and with great advantage to your patient. But what I wish to impress upon you is this,—you must not expect to cut short an attack of enteric inflammation by general bleeding. Over inflammations of mucous membranes in general, but particularly of the intestinal mucous surface, the lancet has comparatively but little direct power; it is in the inflammatory affections of parenchymatous tissues and serous membranes, that we generally observe the most brilliant and decided effects of venesection. Neither can you, as in parenchymatous inflammation, bleed a second and a third time with benefit. In cases of inflammation affecting the mucous membrane of the intestinal canal, you are to look upon venesection as a preparatory step to leeching. Where the pain is violent, the fever high, the attack recent, and the constitution strong, you will do well to bleed; but only bleed once, and then apply leeches in abundance over the suffering organ. There is nothing of more importance, nothing of such decided value, as bleeding by leeches in inflammation of the mucous membrane of the intestinal canal, and here we arrive at a fact, the explanation of which is involved in much obscurity. A patient is attacked with inflammation of the mucous membrane, and glands of the digestive tube, twelve or twenty leeches are applied to the integuments of the abdomen, and their application is followed by extraordinary relief. This is a very curious fact when we consider that between the place where we apply the leeches, and the tissue which is affected, there intervene skin, cellular membrane, superficial fascia, cellular membrane again, deep-seated fascia, muscular substance, cellular membrane again, two layers of peritoneum, and muscular substance enveloped in cellular tissue. Yet, notwithstanding this extraordinary succession of tissues, it is an undeniable fact, that the application of a dozen leeches to the surface of the belly will frequently cut short an intestinal inflammation, or materially diminish its intensity. Here is a fact, the explanation of which is extremely difficult; and I tell you candidly, I cannot explain it. The school of Broussais attempt to explain it as follows. They state that it is a constant law of the economy, that there is a strong sympathy between the internal parts and their respective integuments, but they do not say why this sympathy should exist. We frequently, however, observe facts confirmatory of this law; you are aware that it often happens that, in cases of the deep-seated muscular phlegmon mentioned by Mr. Crampton, in abscess of the liver, and in empyema, we have a swelling of the integuments, showing the existence of a sympathy between the integuments and the internal organs.

In treating a case of inflammation of the small intestine, I think you may generally commence with the application of twelve or eighteen leeches over the ileo-cœcal region. The ordinary result of this application is, that the pain and tympanitis are reduced, and the thirst diminished; but the patient still has fever, and you are to bear in mind that the mere subsidence of pain does not imply the removal of the disease. We may modify the character of an ileitis very considerably by a single application of leeches, but we are not on that account to expect that we shall be able to remove the disease entirely. In general it is necessary to apply them two or three times, lessening the number at each succeeding application, and taking care that they are applied in the proper place, that is midway between the umbilicus and the crest of the ileum. Many practitioners are afraid of employing leeches in the advanced stage of this affection, in consequence of the great debility which characterises the advanced stage of this, as well as inflammation of every other, part of the digestive tube. But though I am quite of opinion that the school of Broussais is wrong in using them at any period, still I think they may be employed even where the disease is advanced, *particularly if they have not been used before*, and I have frequently seen leeches applied with advantage as late as the twelfth day. I have employed them myself in the Meath Hospital, as late as the ninth and tenth days, with decided benefit. Many physicians on the continent are in the habit of treating inflammation of the digestive system by the application of leeches to the anus, and this is said to have a very good effect, and the number of leeches required is smaller. In disease of the great intestine accompanied by diarrhœa, tenesmus, and tormina, I think this is an excellent mode, but when the disease is in the upper part of the tube, I prefer applying them to the belly over the situation of the inflamed organ.

Now with respect to internal medicines. In this disease every thing that is administered should be given with the view of removing irritation, and for this purpose I know no better preparation than a combination of ipecacuanha and opium, as in Dover's powder. The exhibition of the compound powder of ipecacuanha is attended with decided advantage. You are all aware of the long established use of ipecacuanha and opium in

diseases of the intestinal canal, and I think there can be no doubt that they possess considerable utility. With this I generally combine some mild mercurial; the best you can employ is the hydrarg. cum cretâ. Give two or three grains of each every second or third hour, as the case may be, and you may continue this for several days. Where there is no diarrhœa, and the bowels have a tendency to be constipated, it will be necessary to order, every second or third day, a mild laxative, a little manna, or rhubarb, or some castor oil; you should insist on the daily use of enemata, and if they answer the purpose sufficiently I would advise you to be sparing of the use of laxatives by the mouth. In addition to these remedies, I am in the habit of giving a considerable quantity of gum Arabic, which appears to have an extraordinary efficacy in disease of the small intestine. I look upon it as peculiarly valuable in the diseases of children. The ordinary mode of prescribing it is to give a certain quantity of gum water. If this is insufficient, you should order half an ounce or an ounce of the gum to be dissolved in a pint or quart of water, which the patient is to use during the day. After the use of the hydrarg c. cretâ and Dover's powder, this has a decided value in the treatment of ileitis.

In this way, by leeching, mild laxatives, prescribing mercury with chalk, and compound powder of ipecacuanha with gum water, your patient begins to improve. The tenderness of the epigastrium disappears, the tongue begins to clean, the fever diminishes, the thirst goes off, and appetite returns. This is the favourable termination. When the patient is of a weak and delicate habit, it is of great importance to pay particular attention to supporting the strength, *even from an early period of the disease.* In such a case, after the first week, the physician who neglects the proper means of supporting his patient's strength does wrong, and it has been justly remarked, that a practitioner will be right in supporting the general strength, at the same time that he is employing local antiphlogistics. It is in steering clear between these two opposite dangers that the judicious practitioner is seen; he does not allow his patient to die of inanition, while at the same time he takes care to remove local inflammation. I have seen several experienced physicians prescribe leeches to the abdomen on the same day that they ordered the patient to have chicken broth, and even a little wine. There is nothing improper in this; an inexperienced practitioner, who has his eye merely on the local inflammation, is apt to fall into the error of overlooking the constitutional debility, and allowing it to steal upon him. He finds very little difference between the appearance of his patient this day and the next, and thinks the slight increase of debility undeserving of any attention. At last his patient begins to sink visibly, he gets alarmed and has recourse to stimulants, but it is now too late. Besides, there are several articles of diet which support strength, without increasing inflammation, as for instance, chicken broth, sago, arrow-root, strained rice, &c. These do no harm, and they prevent the patient from falling into a dangerous typhoid condition. Let us look at this in another point of view. Suppose you are called to a child who is said to have had an attack of worms, or bilious derangement, or that his bowels were costive, and purgatives were given, that the discharges were found to be bad, and more purgatives were administered; or suppose you are called to a child of a weak scrofulous habit, who has been taking large quantities of purgative medicine, for what has been termed *derangement of the bowels*, and you find the little sufferer with pale, shrunken face, a black circle round his eyes, cold extremities, rapid faltering pulse, great thirst, and evident symptoms of increased cerebral excitement; the little arms and hands are cold as death, but the belly burning, tympanitic, and very sensible to pressure, and when you compare the radial artery with the femoral, as it turns over the pubis, you will have some conception of the excited condition of the abdominal vessels; and in addition to this train of morbid phenomena, you find there is suppression of urine. Are you to attack these symptoms with antiphlogistic means? No; the first thing you are to do, is to prevent any further mischief, by totally inhibiting every kind of purgative medicine. You are next to consider carefully what the best line of treatment to be pursued is, for here you are under circumstances of difficulty, and have a great many prejudices to contend with. What I find generally to be most successful is this. I begin by taking proper steps to support the strength, ordering the patient to take chicken broth, arrow-root, or jelly; the extremities are to be wrapped up in warm flannel; and if the patient is sinking, and has his mouth and teeth crusted with dark sordes, a little wine, watching its effects. If it produces sleep, if the pulse comes down under its use, and the fever is not increased, it will do a great deal of good, and you can gradually increase the quantity. Always bear in mind, that there is a certain period in all inflammations, in which stimulants prove to be antiphlogistics, a circumstance which has been overlooked by the school of Broussais. So far with respect to constitutional treatment; but what will you do with local disease? The application of blisters is of decided use, nay, I have seen a few leeches very effective. Apply a blister to the abdomen, and dress it with mercurial ointment, at the same time, you may employ frictions with mercurial ointment: you will also swathe the belly with flannel, so as to keep up a comfortable temperature. In this way you will be able to do a great deal of good. You will also prescribe hydrarg. c. cretâ, with Dover's powder; and if the bowels are confined, emollient injections. By steadily pursuing this plan of treatment, you

will often rescue from imminent danger a case which would prove fatal under the purgative plan, and you will add greatly to your own reputation.

There is one form of this disease in which diarrhœa is a prominent symptom, where the purging is from the very commencement. On this form I am anxious that you should have clear ideas. In cases of this kind there is a copious discharge of fluid matter from the bowels. In the majority of cases, you may lay down this law, that where there is a decided irritation of any secreting organ, increased discharges from the surface of that organ give more or less relief. Suppose two cases of hepatitis; in the one we have no secretion of bile, in the other the secretion is copious; the latter is certainly most favourable. Again, suppose two cases of bronchitis; in one there is a copious expectoration, in the other it is extremely scanty; now every medical man knows that the former is more easily managed. The increased secretion of any organ in the early stage is to be looked upon as a relief to the inflammation. The practical inference to be deduced from this is, that we should be cautious in adopting any means of arresting this discharge, as it is one of the modes which nature employs in relieving the irritation of a suffering organ. Well, then, suppose you have a case of enteritis, and that on the first or second day diarrhœa sets in, what does the routine and systematic physician do? He gives chalk mixture and opium with tincture of kino and catechu, and what is the consequence? The belly becomes tympanitic; the pain is increased, and even peritonitis may supervene;—this is one result of the increase of inflammation; or the breathing becomes difficult, and the patient gets bronchitis or pneumonia. Diarrhœa occurring in the early period of this disease is not to be interfered with, except when it gets to such a height as to threaten the patient's life; and where it increases his sufferings by the frequency of the discharges. In the first week or fortnight, when there are only three or four discharges, or even five in the twenty-four hours, I believe it is better not to interfere by prescribing direct astringents; *but in the advanced period, when the powers of life are low, or the discharges very copious*, then the physician comes to the assistance of nature with just reason, and in such cases you should always interfere. The best mode of managing diarrhœa of this kind is to employ small, frequently repeated doses of Dover's powder, with anodyne injections. And here I may mention briefly, to such of you as have not seen them used, the best way of employing them. As these injections are used on a different principle from the common, the latter being intended to empty the great intestine and be discharged, the former to be retained, we are consequently to make the basis of our anodyne injection in such a manner, that it will not prove stimulant from its bulk, or from any irritating substance it may contain. Mucilage of starch, new milk, or linseed decoction may be used as the basis, and the quantity taken for one injection should never exceed three ounces. To this, for an adult, you add from fifteen to thirty drops of tincture of opium, for it is a curious fact connected with this subject, that opium given by the rectum has frequently been observed to exercise a much more powerful effect on the system than when an equal or even smaller quantity has been taken by the mouth. The rule then is, that when you first make trial of the remedy in this manner, feel your way cautiously, and if you find that your patient bears ten or fifteen drops, you can increase the quantity on repeating the enema. An eminent practitioner of this city thinks the narcotic effect of opium by the rectum much better marked than by the mouth, and I believe this to be true in many instances. I believe the administration of opium in this way requires a good deal of caution. I recollect the case of a man who had been for a considerable length of time in the habit of using laudanum in large quantities, and was, in fact, a regular opium eater. During an attack of illness he got an injection containing sixty drops of laudanum; this produced, in a very short time, symptoms of decided narcotism, from which the patient never recovered; in fact, he died with every appearance of being poisoned by opium. There is another fact with respect to this disease, which I would have you bear in mind, that, under certain circumstances, inflammation of the small intestine will produce a remarkable tolerance of opium. This applies not only to the advanced stage of enteritis, but also to many other forms of disease. Some time since I made a series of clinical experiments with the view of ascertaining the power which opium possesses in relieving inflammation, and the result has been, that in many cases where the powers of life are so low that we cannot have recourse to the lancet, or any kind of depletory measures, opium alone furnishes us with a powerful means of subduing inflammatory action. When we come to treat of peritonitis, I shall have occasion to speak of the good effects of very large doses of opium, particularly in that form of the disease which results from intestinal perforation. My first trials of this remedy were in affections of serous membranes, and to this I was led by some interesting clinical experiments made by Dr. Graves. I next tried it in diseases of mucous membranes, where antiphlogistics were inadmissible, and here, as in the former cases, I had many proofs of its great efficacy. I shall state the particulars of a very remarkable case. A young gentleman, a pupil of mine, and a member of the class at Park-street, of an irritable habit, was attacked with intense inflammation of the mucous membrane of the intestines. He had a high degree of fever, and his thirst was so insatiable, that for two days he never ceased calling for drink. His pulse was weak,

but rapid; his tongue red and pointed; respiration very much hurried; but the stethoscopic signs of disease of the lung were absent. His belly was exceedingly tender on pressure; and he had another remarkable symptom—constant smacking of the lips. The case, as you may perceive, was one of severe gastro-enteritis, and it was treated in the ordinary mode, by leeches, cold water, &c., but the disease showed great obstinacy, and at the end of a month the patient was evidently in a state of imminent danger. At this period a curious revulsion took place: the chest became engaged, and the patient got bronchitis. For this he was blistered, and took the decoct. polygalæ with large doses of carbonate of ammonia, under the use of which he recovered. The bronchitis disappeared, but was almost immediately replaced by symptoms of intense gastro-enteric inflammation, thirst, quick pulse, tympanitis, low delirium, and subsultus tendinum. In the course of two or three days diarrhœa came on, becoming more profuse as it advanced. The first day he had four discharges, the next eight, and thus it went on increasing until there was a constant discharge of thin fluid matter from the anus. The patient was quite run down, and on three different occasions his friends thought him dead. Having made an unsuccessful trial of various stimulants and astringents, I determined to try what might be expected from large doses of opium. The patient was dying, and it was necessary to do something instantly, which would be likely to arrest the diarrhœa. I ordered a grain of opium to be given every hour; on the first day he took twelve grains with apparent benefit, the next day he took six, the same quantity on the third day, and on the fourth the diarrhœa had so much diminished, and the young gentleman was so much better, that I thought it might be safely omitted. From this period my patient recovered rapidly. I would not bring forward this case in proof of the efficacy of opium if there were not many others of a similar kind; and I have no doubt that this was a cure effected by the use of opium in large doses. In the treatment of this disease by opium, there is one simple rule, by observing which you will be able to avoid all difficulties, and at the same time have a criterion to judge of the value of the opiate treatment. If the remedy produces the ordinary narcotic effects of such large doses on the system, *it will not do much good.* You begin, therefore, cautiously; and if, after the first or second dose, you find that decided narcotism is produced, or at least more than you would think the quantity given could have brought on, give it up,—it will be dangerous. But if he bears one, two, or three grains, or if, after having taken six or eight grains in the twenty-four hours, he appears to be improving, you may then persevere in the administration of opium, and it will be attended with decided advantage.

We have next to proceed to the consideration of the pathology and treatment of diarrhœa and dysentery; I shall, however, first exhibit a few preparations illustrative of the diseases of the small intestine. Here is a preparation of the affection called tabes mesenterica. You see here various masses of those cheesy glands which are generally supposed to be the result of original scrofulous deposition; but if you look along the folds of the intestine, you will see a vast number of engorged lymphatics running up directly to those glands, and you will perceive that these lymphatics correspond at their commencement with ulcerative disease of the intestinal mucous surface and glands. Here is an interesting preparation, exhibiting three distinct ulcers. In one of these you see the bright vascularity and turgescence of the areola, and the ulcerative process which has just begun in the centre. Close to this is another large ulcer, which has destroyed the texture of the gut down to its serous covering, through which you perceive the light is shining. The last is an example of perforating ulcer; all the coats of the intestine have been destroyed, and on turning the preparation you see evident marks of peritoneal inflammation. This preparation also exhibits one of the modes in which an ulcerative perforation of the intestine may terminate. Sometimes, at the very moment the ulcerative process has succeeded in destroying the last coat of the intestine, inflammation of the serous membrane in the immediate vicinity takes place, a quantity of lymph is poured out, and if the matter be not in great quantity, and the hole not too large, the opening is closed up by the effused lymph, and a stop is put to farther mischief. Again, by the effusion of lymph the ulcerated portion of the intestine may form an adhesion to another sound portion, the effused lymph does not permit the passage of the contents of the intestine into the peritoneum, but does not prevent them from getting into the sound portion by a continuance of the ulcerative process, and in this way we have another termination, in the formation of a false passage. Here is a good example of disease of the cœcum, here is an example of disease of the colon, and here is another with a vast number of ulcerations. Here is an interesting specimen of disease of the large intestine. The patient to whom it belonged died of phthisis;—look at it and you will see what extensive ravages have been made by the ulcerative process.

We come now to take up the subject of disease of the large intestine, which, as I find my time nearly past, I must reserve until our next meeting. I shall then speak of dysentery and diarrhœa, and shall draw your attention to some new and curious facts respecting the discharge of fatty matter from the bowels. In the last number of the Medico-Chirurgical Transactions, three separate papers have appeared on this subject from Dr. Elliotson, Dr. Bright, and Mr. Lloyd. Dr. Bright has brought forward several in-

teresting facts tending to show that discharges of fatty matter may be found to be indicative of certain forms of disease of the digestive tube and the neighbouring glands.

LECTURES

ON THE

PHYSICAL EDUCATION AND DISEASES OF INFANTS AND CHILDREN,

BY DR. RYAN,

At the Westminster Dispensary, 1833.

LECTURE XIV.

Development of the Nervous, or Cerebro-spinal System, and of the Intellectual Functions in Infancy.

GENTLEMEN,—In the preceding lectures I described the physiology and hygiene of the cutaneous, digestive, nutritive, and muscular systems in the economy of infants; and it now remains for me to notice that which has long been considered the most important of all, the development of the nervous, or cerebro-spinal system, and of the intellectual functions.

It is almost universally admitted by modern physiologists, that the brain and spinal marrow are first formed in the human embryo, and next appears the *punctum saliens*, or heart. The spinal marrow and bulb of the brain are the basis of the heart and blood-vessels. The younger the ovule, or embryo, the greater in proportion is the nervous apparatus. "It is this system," says M. Virey, "that eminently constitutes the animal, and particularly man, the most sensible and *cerebral* of beings; it is the nervous system which gives motion to all the economy, even to the acephalous fœtus; and the experiments of our regretted and ingenuous confrére Legallois have proved, that the action of the heart principally depends upon the influence of the spinal marrow. The new-born infant is extremely nervous, notwithstanding its soft texture, and though its external senses may be as yet inactive and imperfect, every thing is pain to this delicate and frail being, every thing violently agitates its organisation; the slightest impressions, a slight colic cause convulsions, frightful spasms, a mortal tetanus, especially in warm climates. No disease of infants is free from nervous symptoms, as the great Boerhaave remarked. The large head, the excessive irritability of fibre, the perpetual mobility of the infant, make it to pass suddenly from tears to laughter, from one affection to another; this *impressionability* very well demonstrates the prodigious dominion of the nervous apparatus in the first period of its existence. All conspire in its organisation with the most perfect energy, both in the adult and in the aged, hence that intense life, that feverish and rapid growth, and hence the frequent want of sleep and nourishment.

"It is important, nevertheless, that it is not alone in the brain, but in the great sympathetic nerve, that the greatest infantile energy exists. The brain is almost fluid, receives slightly some fugitive impressions, it does not form as yet any thought, and if it slightly direct some volition, or some feeble muscular motions, these appear to be merely instinctive, automatic, or dependent on the sensibility of each organ. Hence the new being almost sleeps constantly, because its brain is in a state of collapse, or inactivity. But the internal functions of digestion, on the contrary, of assimilation, are extremely active, and are incessantly aroused by the latter part of the nervous system, which presides over this internal life.

"It follows from this, that the first natural impulsions of a new-born infant are not reflections, or the product of sensations acquired by the external senses, but that they emanate from instinct, that interior stimulation, which leads every being to its conservation, without the necessity of thought, will, or judgment. It is this expression of the organs, it is this voice of the body, that cries in the bowels of the infant, makes it search for the nipple, and suck it; that impels the newly yeaned lamb to recognise its mother in a large flock; it is this instinct of conformation that teaches the kid to butt with its head, as if it already had horns, or, in other words, the innate ideas of horns; it is this same instinct which directs animals to distinguish among herbs, the most wholesome for their nourishment."—Dict. des Sciences Médicales, art. ENFANS.

The new-born infant has no idea of external objects, it has no ideas, thoughts, memory, judgment, desires, or passions; its intellectual or moral life is entirely "null and void." Some writers have asserted, that about the fortieth day the infant commences to establish a correspondence between itself and surrounding objects, and that, until this age, its senses are dull, and can only exert a feeble action; but that then they awake, and become the instruments proper for sensations, and the generation of ideas. This observation is certainly incorrect, for I have repeatedly seen infants, a few minutes after birth, fix their eyes intently upon a lighted candle, or the fire, and even on the drapery of the bed, or the walls of the chamber. Ideas must therefore commence before the period just stated, and must depend upon the perfection of the development of the body and the senses. As the development of the body differs very much in different infants, it appears to me to be impossible, to fix the period at which the senses of vision, audition, olfaction, gustation, and touch are first exerted.

Sooner or later the innate power of perception is established, the understanding is developed, the will, or volition, is manifested, and reason becomes apparent at a later period.

At an undefined time the infant recognises the smiles of its mother, or, as a favourite poet of old has it,—

"Incipe, parve puer, risu cognoscere matrem."

This, then, is unquestionably, or at least perhaps, the first sign of intellect, for this smile marks the perception of what is pleasing; it is peculiar to the human species only.

According to Professor Capuron, we should commence the moral education of man when he is in his cradle, when his natural flexibility enables us to form his mind and his heart. Infancy is the age of imitation, the infant sucks with the milk, good as well as bad impressions, and the habits that it contracts, are extremely difficult to be destroyed in after life, as they are deeply rooted. The virtues and vices of man depend on the nurse, who was their first institutor.

The education of the senses is the first object which ought to occupy us, for without these, continues M. Capuron, there are no ideas, no judgment, no intellect, in a word, no man. The senses of vision, hearing, and touch are those that transmit most of the impressions of the mind. The new-born infant cannot distinguish appearances from realities. All that he sees, all that he hears are applied to the retina and the tympanum. He then employs his hand to examine all that he understands; the sense of touch gradually developes, comes to the aid of vision and hearing, it enables infants to learn the form, solidity, temperature, and dimensions of objects.

We observe the infant exerting its hands soon after birth, and at first unable to grasp or hold objects. The primary duty of the nurse, is to forewarn it against the errors and illusions of the senses. She should make it apprehend, above all things, to mistrust first impressions, and not to judge of objects until after they have been well considered; and this is the true mode to render it less presumptuous afterwards, and less subject to prejudice. The infant which is extremely delicate and mobile, or nervous, readily takes alarm, and is frightened at the slightest thing. It therefore requires the greatest possible precaution in its management.

It should be accustomed very gradually, almost insensibly, to look on various objects, to touch, and examine them. It first views them, then touches them, and, finally, is not afraid of them.

It is necessary to expose it to a proper light, as it naturally abhors darkness, and is frightened, or alarmed to tears when left in profound obscurity. It should be taught or inspired with a just regard or notion of every thing which is hurtful to it, as fire, the blaze of a candle, dangerous situations, certain articles of furniture, certain animals, &c.

At an early age, generally from the sixth to the twelfth month, the infant attempts to use its organ of speech; it pronounces the vowel *a*, and some of the labial consonants, which are the first that escape from the infantile lips all over the world; and the words *pa* and *ma*, or *papa* and *mamma*, are expressed in all languages. At first, all the words the infant expresses are by imitation, but it does not comprehend their meaning. The words *pa*, *da*, and *ma*, are so often repeated to it, that it soon comprehends their reference to its parents.

The faculty of imitation, which an infant possesses in an eminent degree, is one of the chief means of its instruction; in fact, it imitates and counterfeits all that it sees. It therefore follows, that the actions and expressions of those, who direct it, should be calculated to improve its mind and body.

Perception and memory are admirable with most infants, who perceive with astonishing rapidity the various objects which surround them, and the impressions made become so profound, that they often subsist or continue even to old age. But infants have not the power of comparison or judgment well developed, because these faculties require a great concourse of ideas, to compare and examine their resemblances and differences; the infant is too delicate, too inconstant, too little susceptible of long attention and cool reflections, which are necessary for correct judgment and perfect reason. It directs its attention to physical objects, to things which act on its senses. Every thing which it sees vividly excites its curiosity. The avidity which it displays, and the velocity of its movements, excite the action of the heart and arteries, accelerate the circulation of the blood for the support of every organ, and largely conduce to the growth of the body, and the preservation of health. The vehemence of these movements rouse emotions of vivacity, gaiety, &c. The sensations are the first scintillations of the hitherto dormant mind. The most material senses have most activity in infancy, such as taste and touch. The first is apparent in the great appetite of early age, for almost all infants are gluttons; the second, or touch, gives exact ideas of all surrounding objects.

The imagination of the infant is gradually and slowly developed; and hence it cannot be delirious or maniacal, though it may be almost rendered an idiot by harsh treatment. All rude impressions and severe pains depress the nervous system (the seat of the mind), as we observe those unfortunate infants who are inhumanly subjected to severe chastisements, dejected by long-continued fears.

The infant soon distinguishes between those things that please and gratify it, and those that shock or hurt it. As a general rule, it ought to be refused every thing hurtful to it. Every thing which incommodes or displeases it ought to be avoided. This precept also holds good with respect to love and aversion, pleasure and pain, joy and sadness, and to all those movements, more or less tumultuous, which have such powerful influence on the

moral and physical states of man. The passions, in general, are only the affections of the soul, depraved or carried to excess; and hence it follows, that restraining and moderating them on their developement are most essential. The mind of the infant has been compared to soft wax, which readily receives an impression, and to a twig, which readily bends when young, but resists when old. This was an ancient proverb, and beautifully expressed by one of our poets,—

" 'Tis education makes the human mind,
Just as the twig is bent, the tree's inclined."

Parents and others who have the management of children, should, with vigilance and without severity, fix the character and inclinations of their precious little charges, while they are young and easily managed.

" How profitable is it," says M. Capuron, " to give an infant, at an early age, an agreeable physiognomy, a noble mien, to inspire it with soft prepossessing manners,—in fine, to render it gay without heedlessness, lively without petulance, an enemy to mendacity, and a friend to truth. After some years, or months, and perhaps a very short time, it will be necessary to have recourse to violence and rigour, to correct those errors which a good example would have prevented."

From the preceding statements it appears evident, that the physical education of infants ought to commence immediately after birth, and demands great attention. The infant soon perceives surrounding objects, and the first impressions made on its temper by nurses have influence long after they are forgotten. Care should, therefore, be taken not to suffer the infant to be dull, and, after a certain age, not to exhaust its senses by constant excitement. Nature obviates fatigue by inducing rest and repose. She is so careful of the infant, that its exertions need seldom be interrupted, unless when they are likely to prove injurious. Infants should be allowed to examine all things within their reach, unless such as are dangerous, so as to enable them to acquire knowledge by their own experience. All dangerous things should be put out of reach, instead of cautioning an infant against them, for he does not know the reason of such prohibitions, and, from his curiosity, seldom obeys them.

The first words a child learns are the terms applied to parents, and then the names of things, and these are easily associated with the objects themselves. It would be foreign to my present purpose of lecturing on the physical education of children, to consider the source of simple and compound ideas, or enter on the abstruse subject of metaphysics, for we must be content, at present, with the hygiene of infancy. I may, however, observe, that an infant acquires knowledge, by its attention being directed from particular to general ideas.

The greatest caution should be observed in selecting nurses and nursery maids, as stated in a former lecture, because the language, manners, vulgar tricks, lying, cunning, blasphemy, and obscenity, learned by children from servants, disgust and shock every well bred and enlightened individual.

It is morally impossible to depend upon the veracity of mercenary nurses or servants, in their management of, and intercourse with, children. A large sized volume might be written in illustration of the validity of this position. There is no one so competent to superintend the rearing of an infant as an affectionate and experienced mother. A woman who is a mother can alone nurse an infant properly; young and inexperienced nursery maids greatly mismanage children. A negligent, passionate servant injures the temper and health of the child, and will not take the trouble to distinguish between the roar of pain and passion; and if the nurse is ill-tempered or careless, her unfortunate foster child will be neglected, and be in a constant state of fretfulness and ill health. On the contrary, an affectionate, cheerful, and careful nurse will render the child lively and good tempered, and secure to it good health. A stupid, slovenly woman is not fit to have the care of a child. The practice of " shaking and roaring at children " is highly dangerous; while frightening or hurting them has frequently brought on convulsions, and often immediate death. Fears, cruelty, or chastisements, are totally unnecessary in the management of children. We should by mildness, persuasion, and promises of reward for good conduct, moderate and suppress passion, pevishness, fretfulness, vanity, pride, and ambition, and inculcate the practice of probity and virtue. It is an admirable plan to excite the emulation. We should not follow the advice of M. Rousseau to teach truth by falsehood. Honesty is the best policy in education. It is requisite to be exact in requiring obedience, or we soon cannot obtain it, either by persuasion or authority. Children should be taught to admire truth, and feel ashamed of falsehood.

The physical education of early infancy is principally conducted in the nursery, and therefore the regulation of this apartment deserves attention.

The nursery is generally situated on the upper floor in these countries; and should be perfectly dry; the windows tight, and the bed or cot situated at some distance from the door, more especially when this opens on the staircase, so as to prevent the bad effects of cold draughts. There should be a lattice door at the head of the stairs, with the laths placed perpendicular or across each other, so that the child cannot climb upon them. The windows should have cross-bars about five inches from each other, and shutters, so as to darken the apartment when it is necessary to exclude the light. When there is an open stove or fire, it should be surrounded with a high wire fender; and this is preferable to a close stove, which often

inflicts severe burns. If a lamp or candle be used at night, which is seldom necessary, it should be placed near the stove or fire-place, so that the smoke may escape, for were this to mix with the air of the chamber, it would be very prejudicial to respiration. The floor should be carpeted, especially in cold weather, and the carpet should be shaken at least once a week to free it from dust, which would be raised in the air by exercise, and excite irritation in the throat, or coughing.

The principal furniture of a nursery consists of a bed, cot, a few chairs, and a table, with fire-irons, and basin stand. Mattrasses are preferable to feather beds, which are much too warm for children, cause disturbed sleep, profuse perspiration, and relaxation of the whole body. Children should sleep in separate beds when practicable, and have sufficient, but not too much bed clothes. I have already mentioned the importance of putting children to bed at an early hour, at seven or eight o'clock, as they generally awake at day-light, and the nurse should be by the bed by day.

It is a bad practice to allow the child to take much fluid or drink before bed hour, as this leads to the inconvenient habit of wetting the bed. This habit is caused by the excessive irritability of the bladder in some children, and it is cruel to punish them for it. The best mode of preventing it is, to diminish the quantity of drink of an evening, and to administer a proper dose of laudanum, according to the age and strength of the child. I have repeatedly prevented this habit in children from the age of five to eleven years, by this plan of treatment.

The nursery should be properly ventilated every day, and the floor kept dry, and the ordinary domestic pursuits, as washing, ironing, &c., expose the child to danger, and consequently should not be performed in it.

This apartment should never contain any furniture that the child could spoil, or hurt itself with; it ought to be provided with the means of amusement, as pieces of wood of various sizes, to build up and pull down houses, castles, &c., wheels, carts to carry playthings, "backgammon tables, battledore and shuttlecock, a rocking-horse, slates, pencils, dissected maps, &c.,&c." (Dewees); things which excite children to exert their own powers of imitation. Many eminent writers have recommended toys and playthings (Edgeworth, Dewees, &c.), while M. Rousseau wrote an express chapter on dolls.

All sharp-pointed instruments, pieces of stick, swords, &c., should be excluded, as wounds have been inflicted by these on children, which caused tetanus, convulsions, and blindness of both eyes. It is also important to caution children against running on the floor without shoes, as they may tread on pins, needles, nails, &c.; and against falling on their playthings. There is an old prejudice that dogs, but especially cats, should be excluded from the nursery, as they are supposed to "suck the child's breath," or in other words to stop its respiration, and cause suffocation. There is no truth in this opinion; but if a cat or dog lay on the chest or abdomen of the infant, respiration might be so much impeded as to induce congestion of the brain, and suffocation.

A child breaks his playthings, not from love of mischief, but from a hatred of idleness; he wishes to see what these are made of, and how they are made, and whether he can put them together after he has separated their parts. All this curiosity is perfectly innocent, and it is a pity that his love of knowledge and spirit of activity, should be repressed by reprehension or correction. An infant is impelled by that desire of novelty, inherent in our nature. It was observed from an early age,—

"Natura hominum, novitatis avida."

Childen ought to have toys on which they can exercise their senses or their imagination, their imitative or inventive powers. It is wrong to lecture a child for having broken his toys, until, as Miss Edgeworth graphically observes, in her Practical Education, "the contrite corners of his mouth are drawn down, his wide eyes filled with tears, and without knowing what he means, promises never to be so silly any more. The future safety of his worthless playthings is thus purchased at the expense of his understanding, perhaps of his infant integrity, for children seldom scrupulously adhere to promises which they have made to escape impending punishment."

It is scarcely necessary to mention, that all small toys, pieces of money, or such things as might be swallowed, should be withheld from children.

Such are the principal precepts with respect to the furniture and management of the nursery.

It is to be recollected, that young children are not endowed with perfect reason, and are solely guided by instinct; and that, if they do wrong, it is without reflection, and by the impulse of desire. It is therefore manifest, that they are not responsible beings, and consequently it is cruel to inflict corporal punishments upon them for their inevitable errors. They are most properly held irresponsible by law, and by all enlightened individuals. I cannot agree with some philosophers, who argue against this conclusion, that as many of the inferior animals, dogs, monkeys, cats, &c., punish their young, so should parents. In answer, it may be urged, that these animals are not endowed with reason.

When we consider the delicacy of the infantile body and constitution, we cannot but be shocked on seeing severe blows inflicted on the infantile head, a part so liable to fatal diseases; and on different other parts, all easily injured. Every feeling of humanity is roused, on witnessing the barbarous brutality of some parents and pedagogues towards defenceless children; and every medical practitioner must shudder at the fatal results.

Corporal chastisments, say moralists, degrade the character, render the infant timid, dull, servile, and incapable of courage and of virtue; so that it refrains from bad conduct on account of fear only, and will commit errors as often as it hopes to escape with impunity.

It is the opinion of M. Virey, and almost all who have written on the physical education of children, that corporal chastisements may be almost entirely dispensed with.

The worst consequences will be induced when infants are constantly crying, such as rupture, cough, inflammation of the lungs and brain, water in the head, general debility, emaciation or wasting of the body. Those who have the care of infants should pacify them when out of temper by walking, motion, and fixing their attention on such objects as please them. It is cruel and barbarous to scold, threaten, violently shake, or beat them. They should be pleased and gratified, their attempts to speak, their little cooing or "crowing" songs encouraged, and every effort employed to keep them in good humour. When properly managed, remonstrance or correction is seldom necessary. Children should be ruled by love, affection, and kindness, and not by harshness or insensibility. But too much indulgence is injudicious. Irritation or anger should be suppressed by mildness and benevolence. Love, affection, patience, and mildness are the only rational means of managing and correcting the errors or faults of children.

The mode of educating children, so soon as they have sufficient reason, which is generally adopted and recommended by the members of our profession, is to impress and encourage self-love and emulation, which nature has implanted in all our species. They should be taught to love their parents, nurses, and each other; applauded for their good, and reproved for their bad actions; and clearly shown the impropriety of the latter. They should be informed of the difference between justice and injustice, weakness and strength, and the rights of each other. They ought to comprehend from the cradle, what is right and good, as well as justice, paternal authority, the nature of an equitable rule of conduct, their duties to all, and most particularly to their Creator.

The management or education of the intellectual faculties belongs to the domains of medicine and metaphysics. Two points on this important subject deserve attention. The first, that man is naturally averse to labour, unless its object be pleasure or desire; and the second, that it is as extremely injurious to excite the brain by premature study, as it is the muscles by premature exercise. It is indispensable to health and a good constitution, that children of a tender age should be properly managed with respect to diet, clothing, exercise in the open air, and repose; because, without due attention to these requisites, neither mind nor body will be properly developed.

MR. SALMON'S REPLY TO DR. O'BEIRNE.

PATHOLOGY AND DISEASES OF THE RECTUM.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—My observations on Dr. O'Beirne's last letter shall be as brief as his accusations and numerous misstatements will permit. He commences—"*Mr. Salmon's reply is a general one, embracing a variety of points, calculated to divert the mind from the subject of organic stricture, upon which we are mainly at issue, and which we had mutually agreed to leave to the decision of two distinguished members of the profession;*" thus insinuating that I had introduced new matter for controversy. Now a reference to my letter of November the 30th will prove that I confined my answer to such points only as Dr. O'Beirne had advanced; my reply therefore was not a general one in the sense he implies, though it was a general, and, I think I may add, from the discomfiture he manifests, a satisfactory one to all his positions.

I will endeavour to make my present letter alike conclusive to all unprejudiced persons. *Imprimis*, I must express my regret that he has again compelled me to exculpate myself from charges conveyed in so sophistical a manner, that they carry with them the appearance of truth, though, as I shall presently show, they possess not the smallest portion of that inestimable principle. I am accused of a "*positive breach of contract;*" a simple narrative of facts will convey a full and unequivocal refutation of this accusation. In my letter, published in your Journal of the 20th April, I undertook to prove, by preparations in my possession, the existence of "permanent stricture in the lower part of the rectum," and offered to show those to any members of our profession. Dr. O'Beirne in substance answered, that if either of his friends, Mr. Guthrie or Mr. Bransby Cooper, would confirm what I had said, he would believe it, retract his opinions, and admit, what he has in his last letter again denied, the existence of that disease. Considering the point was of importance to science, I complied with Dr. O'Beirne's challenge, and, as I before stated, immediately wrote to Mr. Cooper; I however thought proper to ask Dr. Blundell to meet him. Both of these gentlemen politely acceded to my request, and an appointment was made to inspect the preparations. Dr. Blundell and Mr. Cooper did not, however, meet, at least not with my knowledge, the former gentlemen being behind his appointment. I had selected for their inspection fifteen preparations of stricture of the rectum only. Mr. Cooper took a cursory view of those, and left, saying, he supposed he should see or hear from Dr. Blundell. Upon this

gentleman's arrival, he also inspected the preparations, and desired certain ones which he selected to be sent to his residence. I heard nothing more, directly or indirectly, of Mr. Cooper, till I wrote to him for his opinion a day or two before the date of the first of his letters herewith published; neither did I hear from Dr. Blundell till the day before I wrote my reply to Mr. Oldknow, which appeared in the *Lancet* of November the 16th, when I read a rough copy of what Dr. Blundell had formed as his opinion. His final judgment I only received, as our letters show, on the 30th November. From these facts it is clear that Dr. O'Beirne and I never "*mutually agreed to leave the matter to the decision*" of Dr. Blundell and Mr. Cooper, for the former gentleman was not mentioned; nor would he have ever been heard of in the affair till the publication of my last letter, had not Dr. O'Beirne been apprized of his having inspected the specimens by Mr. Cooper. I further "*submit to the profession,*" that had I chosen to obtain the opinion of fifty individuals upon the character of the preparations, I was at perfect liberty to do so; neither could such a course injure Dr. O'Beirne, as those persons could only testify from ocular demonstration of a matter of fact, the confirmation or refutation of which ought to be his first consideration. He complains of the time which elapsed before the decision was made public. Now for such delay I apologised, stating "the truth is, I have not had the documents necessary to complete the answer till very lately, (which fact a reference to the accompanying correspondence confirms,) added to which, my leisure has been completely occupied by the affairs relative to my resignation at the General Dispensary." After that explanation, it was anything but kind in Dr. O'Beirne to state that there was a "hitch somewhere." He proceeds—"*I had the favourable documents* (Dr. Blundell's and Mr. Cooper's decisions) *so early as the middle of November;*" but he was too scrupulous, it appears, to expose my ignorance, by giving them publicity. Favourable, however, as he would lead us to suppose he thought them, we nevertheless find him writing to Mr. Cooper, and suggesting the "*necessity of slitting the preparations marked* A *and* B *their whole length, before either he or Dr. Blundell could come to a* FINAL *decision. But it* would (*not it* does) *appear that Mr. Cooper was 'prevented from making this fair and considerate proposal by a step which Mr. Salmon had taken in the mean time, namely, requesting Mr. Stanley and Dr. Ryan to inspect his preparations.'*" The extreme modesty of Dr. O'Beirne's proposition every Curator of Anatomical Preparations will fully appreciate; and it was no wonder that a gentleman, of the correct feeling Mr. Bransby Cooper is known to possess, abstained from making it. Unfortunately, however, for the Doctor, it so happens that the preparations have been slit open, so as to exhibit their diseased condition, ever since they were put up; nevertheless, the reason assigned by him why they were not so mutilated is contradicted by Mr. Cooper's correspondence, which clearly proves, that the final decision of Dr. Blundell and the former gentlemen were in Dr. O'Beirne's possession many, many days before his destructive proposition was requested to be made. From the manner in which he speaks of the reason I assigned for requesting Mr. Stanley and Dr. Ryan's judgment, your readers would gather that I meant the words "finding they disagreed so materially" to apply to some matter of conversation between Dr. Blundell and Mr. Cooper, though Dr. O'Beirne must have known that the words were used in reference to their recorded opinions, as my letters to the latter of these two gentlemen likewise illustrate; and as to Dr. O'Beirne's assertion, that those documents "*perfectly agree, the merest tyro in the profession* (to repeat his classical and elegant language) *has only to compare both in order to be convinced that they are as widely different as light from darkness.*" I should forget the respect due to myself and your readers, even more than my opponent has done, were I to notice the paragraph wherein he charges me with not "*being over squeamish or punctilious in availing myself of advantages,*" which exist only in his imagination.

He next proceeds to illustrate "*the exact nature and practical bearing*" of our controversy, which of course no one, "*except his friend, Mr. Cooper,*" has fully understood; and to explain his own peculiar views, so as to "*succeed in placing the whole subject in a clearer, fuller, and much more useful points of view, than the plan*" of his work "*admitted.*" Here we have a clear admission that his book, published for the avowed purpose of proving and promulgating his "*new views,*" is so unsatisfactory, even to its author, that he feels it necessary to illustrate his ideas on one of its most important points, by an explanatory letter to a weekly periodical. In furtherance of this illustration, he gives "*the received ideas of the morbid conditions constituting organic and permanent stricture;*" not, however, by quoting my opinion on the subject, but those "*of the latest writer.*" Here I forbear making any further remark, except that I account it both uncourteous and unfair to condemn or detract from the opinions of any individual, either publicly or in private, with whom I am not controversially engaged. Had Dr. O'Beirne extracted the morbid anatomy of the rectum from my work, the originality of his notions would have vanished into thin air; for he must have shown that I speak of circumscribed, partial and general thickening of the rectum, yet remark upon the healthy condition of its mucous tunic, in contra-distinction to all authors who had preceded me. Dr. O'Beirne next misapplies my words, making it appear that I disavowed the

existence of permanent stricture any where *but* in the lower part of the bowel. Now he must have been aware, that the words he has quoted were used in reply to *his* denying the existence of permanent contraction below the union of the colon and rectum, "a latitude of opinion," which, to use my former language, even "I had not given Dr. O'Beirne credit for, since I merely contended" (that is in my controversy with him) "for permanent stricture in the lower part of the rectum."

He proceeds to say, that Mr. Salmon admits "*that distinct thickened and shelf-like projections are exceedingly unusual in the two upper thirds of the rectum.*" Now I did not admit any such thing, but I did infer it, and I now maintain that such is the fact, because, as I before said, "a uniform thickening," but not shelf-like projections, is the common morbid appearances of stricture in the two upper thirds of the bowel. Dr. O'Beirne's reasoning against circular stricture, resulting from a redundancy of the circular fibres, is singularly scientific, since from it we are to infer, that because the action of the circular and longitudinal fibres is "*simultaneous relaxtion and contraction,*" the preponderating power of the former set of fibres is of no avail; and this too is asserted in the face of his own friend's decision, who says "the specimen of distinct thread-like construction, which I saw producing the distinct circular contraction" was "spasmodic." Now, is it not clear, if such an effect can be produced from spasm, this, or the causes which gave rise to it, continuing, the contraction would become permanent. Dr. O'Beirne asks "*are the statements just referred to sustained by the evidence of pathological anatomy,*" and, in proof that such is not the case, writes "*I shall now state both the morbid changes I have not observed, and those which I have observed, except* AT THE UPPER EXTREMITY *I observed no partial thickening of the parietes of the intestines.*" Yet a little further on we find him admitting, as appearances which he has observed, "*all that great portion of the rectum above its pouch thickened in its parietes and contracted in its cavity.*" Thus have his researches into the morbid anatomy of the rectum led him not only to contradict himself, but also fully to confirm my published opinions on that subject.

We are next favoured with a lengthened dissertation upon his "*new views,*" the "*practical bearing*" of which he proceeds to show, also to prove the "*unscientific and dangerous nature of a practice evidently suggested by the erroneous notion of stricture,*" to wit, the division of the disease when situated near to the anus, an operation which he is kind enough to say is "*recommended,*" among others, by "*Mr. Salmon.*" A short extract from the chapter in my work, which treats of the division of stricture, will show how carefully he has perused, and how clearly he has comprehended, my observations on this subject:—"Taking into consideration the danger consequent upon hæmorrhage, the probability of inflammation, and the distressing irritation which arises from the necessity of keeping the divided portions of the gut separated during the healing process, the division of a stricture may always be accounted a dangerous, and, in many cases, an equally useless operation. There are few instances where it can be attempted consistently with utility and safety." I then assign my reasons why I would not perform the operation, and direct "the reader's attention to the distinction between that kind of obstruction which is produced from the formation of adventitious bands or septa in the rectum, and stricture of the gut itself," the former of which, I state, "may be freely divided without any apprehension of danger." Having described the manner of performing the operation, I terminate my remarks by stating that "upon the whole the operation is not of a description to induce me to recommend its performance, such at least is the result of my experience; under the most favourable issue, I do not think it likely to be productive of that degree of success, which may be considered a compensation for so hazardous and painful an expedient *."

Few of your readers would, I should suppose, be deceived by the plausible manner in which Dr. O'Beirne makes it appear that because I deny "*shelf-like projections*" as a common appearance in the "*two upper thirds of the rectum,*" that I deny the existence of stricture at those parts. Quite the contrary, as the sense of my writings, unperverted, demonstrates; wherein I say, that "the most common situation of contraction, in such cases as have fallen under my observation, is between five and six inches from the anus." Next in frequency I have discovered the disease at the junction of the rectum with the colon; but the appearance of these obstructions will not be shelf-like projections (except at the angles of the bowel), but one uniform thickening of its parietes.

Although I am satisfied no one who is acquainted with the morbid anatomy of the rectum is likely to be led away by Dr. O'Beirne's argumentative attempts to prove the concordance of Mr. Cooper's judgment with that of Drs. Blundell and Ryan, and Mr. Stanley, I must not omit showing the clever manner in which he "*most gratuitously*" attempts to maintain this position, by ascribing to me opinions I have never entertained. He asks, "*are such appearances on the external surface of the bowel the natural consequence of organic stricture?*" (alluding to the remarks of Drs. Blundell, Ryan, and Mr. Stanley.) My reply is, yes; and further, there are proofs of the fact. The Doctor says "no." "*Even my opponent admits that this form of the disease is produced*

* Salmon on the Rectum. Fourth edition, page 66.

by the deposition of new matter between the mucous and muscular coats, and that this new matter, instead of approximating, separates these coats from each other, and consequently opposes the formation of anything like an indentation on the external surface of the gut." Now what do I really say upon circular stricture of the rectum, within reach of the finger, the point upon which we are here at issue? "We sometimes find bands of a firm consistence extending from side to side, forming septa across the bowel; these septa are most commonly situated toward the inferior part of the gut. Then again we find the intestine contracted in a circular form, being dilated, immediately above the contracted part, by the perpetual lodgment of fæces, in the form of an hour-glass. This is by far the most formidable kind of simple contraction, as well as the most difficult of alleviation. But the peculiar and morbid change, generally found in cases of confirmed stricture, appears to be the result of considerable thickening of the bowel, from deposition in the cellular tissue which connects the muscular and mucous coats *."

I will not comment any further upon these "*similar*" opinions than to add, that Dr. O'Beirne has a happy knack of noticing what may by possibility be distorted in his favour, and of carefully avoiding what satisfactorily refutes his positions. Thus we find that of Mr. Cooper's decision of the spasmodic annular stricture (fully proved by Drs. Blundell and Ryan, and Mr. Stanley, to be a case of permanent obstruction) he says "*Mr. Cooper, in a letter to me, states that the contraction is evidently not the change of structure.*" What, I would ask, have your readers to do with Mr. Cooper's private correspondence with Dr. O'Beirne; it is the former gentleman's recorded opinion they are to be guided by. Then again he says, "*Mr. Stanley, under the head of second specimen, from a male, is less accurate in his account of this preparation,*" thus taking for granted that it was the same Dr. Blundell described under Preparation B, which it was not, but a second case of circular stricture within reach of the finger; had Dr. O'Beirne read the description with the slightest attention, he must have seen this. He likewise carefully avoid salluding to the conclusion of Dr. Ryan's judgment. "From these and the other preparations, I am perfectly convinced of the existence of stricture in every part of the rectum." So also of Mr. Stanley's judgment of the 3rd case. He assumes it to have been one of thickening from fistulæ; unfortunately, however, I can attest to the contrary, having attended the patient, from whom the preparation was taken, nearly two years before any fistulæ occurred, with circular stricture, which disease I have reason to suppose was produced from the extreme cold to which he was subjected while with the expedition to the North Pole, of which expedition he was one of the officers.

I have thus, I believe, exposed the fallacy of Dr. O'Beirne's arguments, shown the untenability of his positions, as well as, I trust, satisfactorily refuted his accusations; the performance of this disagreeable task has caused me some pain, but the personalities, to which my opponent descended, left me no alternative, and I have endeavoured "*to perform it in as respectful and moderate a manner as the circumstances will permit.*" And now, convinced that your readers, like myself, must be pretty well tired of this controversy, I beg leave to decline extending it under *any circumstances whatsoever*. Gratefully thanking you for the space you have accorded me in the pages of your valuable Journal,

I remain, Gentlemen,
Your very obedient servant,
FREDERICK SALMON.

12, *Old Broad-street,*
Feb. 6th, 1834.

CORRESPONDENCE,

Between Mr. Bransby B. Cooper and Mr. Salmon.

No. I.

MY DEAR SIR,—I waited for Dr. Blundell's account of your preparations until I was tired, and as I did not like to keep Dr. O'Beirne so long in suspense, I wrote him my opinion of your preparations which I saw, and have since sent him the paper Dr. Blundell enclosed to me. I kept no copy of my own opinions, respecting how far I considered your preparations held out, or rather demonstrated, your views of stricture of the rectum, but I know that it went against yours, and in favour of Dr. O'Beirne's ideas upon the subject; but I will write to O'Beirne immediately, that I may forward to you my precise words, as written under the first impression, or, if the delay be inconvenient to you, I will write the substance again.

Yours very truly,
BRANSBY B. COOPER.

[No day or date, but received Nov. 20, 1833. F. S.]

No. II.

12, *Old Broad-street, Nov. 20th*, 1833.

MY DEAR SIR,—I regret that you should have sent your decision to Dr. O'Beirne without my knowledge, and confess I think that, in a question so deeply involving the interests of the community, our profession, and my character, you ought not to have done so without first apprising me of your intention. Neither does it appear to me that the reason you assign for having written to your friend, to wit, Dr. Blundell's delay, alters the circumstances of the case, since, had you communicated with me, such delay would have been satisfactorily accounted for.

This proceeding is, however, of minor im-

* Salmon on the Rectum. Fourth edition, page 22.

portance compared with the decision you state you have given upon the various preparations of stricture of the rectum submitted to your inspection, and which I must now, in justice to myself, lay before two or three other experienced morbid anatomists, notwithstanding the clear, decisive, and uncontrovertible statement Dr. Blundell forwarded to you of them, and which fully illustrates the fact I publicly pledged myself to confirm. Meanwhile, oblige me by immediately writing to Dr. O'Beirne for a copy of your opinion, with the view of my giving it publicity, in conjunction with that of Dr. Blundell, and those of others whom I may hereafter request to inspect the preparations. Apologising for giving you so much trouble, I am, dear sir,

Yours faithfully,
FRED. SALMON.

Bransby B. Cooper, Esq.

No. III.

MY DEAR SIR,—As it was impossible that you and Dr. O'Beirne could simultaneously receive the opinion I had formed of your preparations, in reference to the point in dispute between you, I cannot see why he had not the same right to have it first as you seem to claim to yourself.

Yours truly,
BRANSBY B. COOPER.

[No day or date, but received Nov. 22, 1833.—F. S.]

No. IV.

MY DEAR SIR,—Being pressed for my reply to Dr. O'Beirne, I cannot any longer delay it for the purpose of adding, as I could have wished, the opinion, which, you stated in your first note to me, you had forwarded to that gentleman, and which I rather expected would have arrived from Dublin ere this. I must therefore, in justice to Dr. O'Beirne, publish our correspondence as illustrative of your decision.

You appear to have mistaken the sense of my last letter; I only meant that I thought a copy of your opinion should have been forwarded to me as well as to Dr. O'Beirne. This, however, as it seems, could not be done, since you omitted to take a copy of it.

I am, dear sir,
Yours very faithfully,
FRED. SALMON.

12, *Old Broad-street, Nov. 30th*, 1833.
Bransby B. Cooper, Esq.

No. V.

MY DEAR SIR,—On inclosing you this opinion on the subject of your controversy with Dr. O'Beirne, I must leave it to yourselves to place the issue before the profession; and, believe me, that, in giving my opinion, I am actuated only by a desire to elicit truth.

I have to apologise for not having sent this to you earlier, but I have wished to have met Dr. Blundell at your house, and have taken the preparations out of the bottles to examine them more closely. I do not, however, like to withhold my decision longer, although I should still wish to meet Dr. Blundell with you.

Yours very truly,
BRANSBY B. COOPER.

New-street, Sunday,
[*Dec.* 1, added by F. S.]

No. VI.

MY DEAR SIR,—I have this moment, while at dinner, received your letter, inclosing an opinion respecting the preparations. I am unable to say any more, as your servant is waiting, than that I have sent my answer to Dr. O'Beirne, to the *Medical Journal*, also a letter to you, last night, which fully explains why I did so. Am I to understand that the opinion I now receive is the copy of what you sent to Dublin to Dr. O Beirne? Be so good as to reply to this question; also, say whether you wish the communication I have just received forwarded to the medical periodicals, in which my reply to your friend is to appear. I think if I send it before Tuesday morning it may be added.

Yours very truly,
FRED. SALMON.

Sunday, Dec. 1, *quarter past* 6.

No. VII.

MY DEAR SIR,—With respect to my opinion of your preparations, which I have sent to you, you are at liberty to do with it as you please. It is what I wrote immediately upon seeing your collection, and you would have had it long since had not Dr. Blundell been so tedious in his delay. I therefore sent it to Dr. O'Beirne, and now to you, as it was first written.

Why you should write a letter to me through the public journals, when there is a twopenny post, is best known to yourself.

I am, yours truly,
BRANSBY B. COOPER.

New-street, Monday morning.

No. VIII.

MY DEAR SIR,—I suppose you could not have received my note posted on Saturday night when you forwarded yours to me of this morning, or, if you had, you have again sadly misunderstood the sense of it. I have addressed no letter to you through the press; all I have done is, to forward our correspondence, relative to your judgment of the preparations, as a matter of satisfaction to Dr. O'Beirne, and the profession, an omission of which would have rendered my answer to that gentleman incomplete. I will send and stop (if possible) the publication of your correspondence; also request that the opinion I yesterday received from you may be inserted in its stead.

I am, my dear Sir, with good feeling,
Yours, very truly,
Dec. 2nd, 1833. FRED. SALMON.
Bransby B. Cooper, Esq.

No. IX.

My Dear Sir,—I am sorry to be under the necessity of publishing the correspondence which passed between us relative to my controversy with Dr. O'Beirne, but the accusations he has thought proper to make affecting my character, not only for consistency but even common propriety towards you and himself, have, in my judgment, as well as in that of my friends, rendered this step absolutely necessary. I am the more surprised at the course Dr. O'Beirne has taken, since he implicates you by stating, that he had the "favourable documents," containing the opinions of yourself and Dr. Blundell, "so early as the middle of last November;" but that instead of "taking any advantage of Mr. Salmon," he (Dr. O'Beirne) wrote to Mr. Cooper, "and submitted to him the necessity of slitting the preparations marked A and B their whole length, before either he or Dr. Blundell could fairly come to a final decision." Dr. O'Beirne then adds, "that it would appear that Mr. Cooper *was prevented from making this fair and considerate proposal, or interfering further in the affair, by the step Mr. Salmon had taken in the* MEANTIME—namely, requesting Mr. Stanley and Dr. Ryan to inspect his preparations, and give their opinion on the contested points." Now, the fact is, as you, I feel assured, will readily admit, that your's as well as Dr. Blundell's opinion were formed and forwarded to Dr. O'Beirne some days before I wrote to you, stating that I should request the judgment of some other individuals, which step I took, as our letters prove, because you were unable to forward me your decision on the preparations, having taken no copy of what you had sent to Dr. O'Beirne, but which you added was in his favour.

You will likewise remember that our correspondence was gone to the printers, with my answer to your friend, when the copy of your judgment, which you had sent for to Dublin, reached me, and that I stopped the press to alter my manuscript, so as to make it consistent with that judgment, and to substitute it for your letters.

Be so good as to give me a few lines in reply, stating whether the foregoing is not a correct representation of the facts of the case, which if you would do, at your earliest convenience, I shall be obliged, so that I may be enabled to give your reply publicity in the Journal of Saturday next.

In conclusion, I repeat my unfeigned regret for the course Dr. O'Beirne has compelled me to pursue, and I beg to assure you of the sincere respect and esteem of

Yours very faithfully,
Fred. Salmon.

12, *Old Broad-street,*
Feb. 4th, 1834.

Bransby B. Cooper, Esq.

No. X.

My Dear Sir,—If you think it necessary, you are perfectly welcome to publish the correspondence between us, relative to the controversy between yourself and Dr. O'Beirne.

Yours, truly,
Bransby B. Cooper.

2, *New-street, Feb. 5th,* 1834.

Frederick Salmon, Esq.

Mr. Salmon to Dr. Blundell.

My Dear Sir,—I request you will be so good as to give the bearer (if it is ready), or if not, send me, by Monday morning's first post, your opinion on the preparations. I am to send it to the printers by ten o'clock on that day. Mr. Bransby Cooper has sent the one you wrote for him away to Dr. O'Beirne, so that I have no means of saving you this additional trouble.

I am, my dear Sir,
Yours, &c.
Fred. Salmon.

12, *Old Broad-street,*
Nov. 30th, 1833.

Dr. Blundell in reply.

My Dear Salmon,—Excuse haste, J. B.
[Opinion returned in my note.—F. S.]

[Having thus, in justice to Mr. Salmon, inserted the foregoing documents, we must decline publishing any further communications on a subject, the bearings of which, however interesting it may be, our readers must, we feel assured, ere this be fully acquainted with. We entertain the most sincere respect for both parties, yet we are constrained to admit that, in our opinion, the Doctor is no match for his opponent; who has not only ably proved his original position, but evinced, by his clear and concise letters, a practical knowledge of the matters which originated or have emanated from this controversy.—Eds.]

STRICTURE OF THE RECTUM.

To the Editors of the London Medical and Surgical Journal.

[Press of matter excluded this communication in our last.—Eds.]

Gentlemen,—I have read in the pages of your Journal the controversy between Mr. Salmon and Dr. O'Beirne, wherein the latter gentleman unequivocally denies the existence of a circular stricture of the rectum within reach of the finger. As the subject is highly interesting, and most important to medical men, I am induced to trouble you with the particulars of a case, at the present time under my care, corresponding precisely to the views entertained by Mr. Salmon, and, as it bears

upon the point in dispute, you will perhaps give it insertion in your Journal. First let me refer to a passage in your publication of the 1st of February, wherein he writes:—"A surgeon, upon examining the rectum per anum, feels that the pouch of the intestine is so open that he can roll his finger freely about in it, and that, on pushing his finger higher up in the direction of the bowel, its point enters a narrow opening or ring. But what idea does he form of the nature of the ring? The most natural that can be; that it is formed by an opening in the centre of a septum thrown across the cavity of a gut, which he supposes to be always in a dilated and open state."

Now, this description does not correspond with the case under my care, for, upon passing the finger about two inches up the rectum, its further passage is obstructed by a distinct hard ring, the opening through which *was* so small as not to admit the passing of a middling size glyster pipe without the greatest difficulty, and if any force were employed it gave rise to severe pain. Can this be an opening in the centre of a septum, thrown across the cavity of a gut? A gentleman, about 18 months ago, began to complain of pain in the rectum upon passing his motions, continuing for a short time after each evacuation; the bowels were acted upon from three to six times in the 24 hours; the motions were loose and occasionally tinged with blood; a continual oozing from the anus of bloody mucus, yet the general health good.

About nine months back the pain, in passing the motions, became very acute; the bowels were moved six or eight times a-day, the fæces passing with difficulty; a continual bloody purulent discharge from the anus; and the general health become very much impaired. Mr. Salmon's opinion upon the case was requested, who, after a careful examination, pronounced it to be circular stricture of the rectum, within reach of the finger, with ulceration of the mucous membrane immediately above the contraction. My patient was called into the country, which prevented his following the plan of treatment advised, and the disease continued to make a gradual but destructive progress. In November last he was unable to leave his bed, the bowels being acted upon from 20 to 30 times a-day; he also felt a constant inclination to evacuate them, and the discharge of matter from the anus increased; the situation of my patient at this time was most deplorable. A most distinguished surgeon now saw the case, whose opinion was, that there was a distinct hardened ring about two inches from the anus, not admitting the end of the finger. This gentleman was not decided as to the stricture being of a scirrhous nature, but he yet thought it was a hopeless case. Soon afterwards Mr. Salmon, having accidentally heard that my patient was in a hopeless condition, with a zeal highly creditable, expressed a desire to examine the rectum again, as he was satisfied there was simple circular stricture of the rectum within reach of the finger, and suggested a plan of treatment, consisting of alteratives, narcotics to the rectum, and dilatation of the stricture; the result has been most satisfactory, the health is improving; the bowels are not acted upon more than four or five times a-day; the stricture has become so far dilated as to admit my passing the rectum plug No. 5 without much pain, or difficulty, though to do this eight weeks back would have been impossible, for the aperture would barely admit the plug No. 1, added to which the pain in attempting was acute in the extreme. By inserting these simple facts you will do an act of justice to the profession, and oblige your constant reader,

SAMUEL BACON.

41, *Frederick-place, Hampstead Road, February 10th*, 1834.

CURIOUS INQUIRY ON FŒTICIDE.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—It is from the conviction that the objects of your Journal are the investigation of facts, and the advancement of the views of science, that I presume to trespass upon your columns.

The importance which the practice of medicine attaches to a knowledge of jurisprudence, and the responsibility conferred upon medical men by the laws of the country, in deciding, by their evidence and views, on the legal guilt or innocence of persons charged with the crime of human destruction, urges us to use all means for acquiring every particle of information, which relates to the death or corporal injury of any individual being.

The subject, which I wish to offer to the

consideration of pathologists, I beg to point out in two propositions, the validity of the one depending upon that of the other. First, Is it possible for electrical (or galvanic) influence to be transmitted through the body of a pregnant woman, which shall be destructive to the vitality of the *fœtus* and not of the *mother?* Secondly, If this be correct, can the *quantity* or *intensity* of the influence be so modified, that repeated experiments shall furnish correct data, indicative of the quantity which shall always insure the success of the operation?

That certain electrical discharges will destroy any animal of any known description or size is beyond doubt.

That shocks of the same influence will kill *small*, and yet are not sufficiently powerful to kill *large* animals, is also true, as proved by the experiments of Aldini and a host of others.

That many medicinal agents are used to procure abortion, which destroy the child and are not permanently injurious to the mother, is also a fact, which materially proves that the fœtus does not possess the same degree of vital tenacity as the mother. Also, that the fœtal vitality, though blended with, and dependent upon, maternal life, can be separated by *medicinal* means, as by powerful poisonous agents; by *mechanical* means, as by the knife, stopping the circulation, or by a blow in the hysteric region; and, in all probability, by *chemical*, including electricity and galvanism.

These form important points of consideration, as connected with forensic-medical investigation, inasmuch as it may, in the hands of some, be used as an engine of destruction to the life of the fœtus in utero, by such females as usually find it most politic to conceal their "little errors," which are sources of painful reminiscence and lasting disgrace.

Should any of your readers be able to prove the fact by experiment on animals, and be able to delineate the diagnostic and pathological phenomena, I think a hiatus would be removed, which would considerably tend to the advantage of science.

I have the honour to subscribe myself

Yours, obediently,

A Member of the London Medical Association.

Gerrard-street, Soho,
Feb. 12th, 1834.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, February 15th, 1834.

Dr. Copland in the Chair.

Organic Diseases of the Stomach—Dyspepsia—Gastritis.

The usual business having been transacted,

Mr. Parkins read a paper on organic diseases of the stomach, to which, he said, that during the last few years much attention had been directed; and that consequently many new facts connected with them had been elicited. Inflammation of this organ was seldom acute, unless when the consequence of the exhibition of poison; but it was in ordinary cases found principally to exist in the chronic stage, and to give origin to those forms which are termed organic diseases. He then referred particularly to tubercles of the pylorus, and ulceration of the coats of the stomach, and entered into the symptoms, which were, however, often found to vary; when the tuberculated state was situated near the pylorus, he had found that the pain was generally referred to the right hypochondrium, but the symptoms were so similar in many of these diseases, that no criterion could be formed from any one. The testimonies of Dr. Andral and Dr. Abercrombie were adduced in confirmation of the opinions of the author, and a case was related which showed that ulcers might exist without causing any of the usual symptoms, and that the greatest alteration of texture might take place without affording any diagnosis to the observer by which he might suspect the existence of such alteration; the causes of death in such diseases were then reviewed, and the author terminated his paper by some remarks upon the treatment, among which alkalies, oxide of bismuth, &c., were recommended.

Mr. Hunt considered that this was a subject of great importance, and demanded the most serious consideration of the Society. A friend of his, long a member of this Society, had been attending a lady who had pain in the stomach, but no urgent symptoms; he had recommended her to try change of air, and had said to her that her complaint was of a trifling nature, and would soon be benefited; for a short time she got better, but one day in his presence she suddenly expired; on examining

her body, a hole was found completely circular, as if made with a punch. Another case having a similar termination was related. Mr. Hunt then commended the author for the paper which he had read, but regretted that he had not expended a little time on the primary diseases of that viscus, as he (Mr. H.) thought that, by directing attention to the commencement, many of the most formidable consequences of the disease might be averted. One or two instances were then referred to, where change of diet, &c., had effected a cure.

Dr. Johnson directed the attention of the meeting to the difference of the symptoms in disease existing at the cardiac orifice, and at the pylorus; in the latter, food would remain for some hours in the stomach without being rejected, and without causing any particular symptoms, but after a time pain succeeded, and then the stomach was not at ease until the offending food was ejected. He considered that there was a great difference between the symptoms and pathology of diseases of the two orifices, and ulceration of the coats. The following curious case had occurred in his practice, a young man was seized with excruciating pain in the abdomen after a very hearty dinner, and a rupture, with which he had been some time troubled, became greatly distended. Mr. Stanley visited him, and, recognising the existence of strangulated hernia, proceeded to operate; on opening the sac a great quantity of undigested food escaped, much to the operator's dismay; the patient, however, shortly died, when an ulcer was found to have penetrated the coats of the stomach, and to have allowed of the escape of the undigested food into the abdomen. The edges of this ulcer were thickened, and it had evidently existed some time before it had burst; this was one instance in which disease might go on in the intermediate parts without causing any of the symptoms generally found. One remarkable symptom of contraction and disease of the pylorus was constipation, and the diminished calibre of the stools; frequently also the enlarged pylorus would be found on the left side of the umbilicus or even below it, and was such as frequently to mislead the practitioner.

Dr. Ryan observed, that the author of the paper was entitled to much praise for having brought before the notice of the Society so much valuable information on organic diseases of the stomach, and more specially on the difficulty of distinguishing them during life. The majority of the profession were too apt to apply the term dyspepsia to all diseases of the stomach, whether a subacute or chronic gastritis, and the various morbid lesions attended by the usual symptoms. It was well known that scirrhus of the pylorus often proved fatal, and that the subject of it had been treated for dyspepsia. He had known two examples of this kind, and was present at the autopsic examinations. He had been consulted within a few days on the case of a gentleman, who was supposed to labour under dyspepsia, and treated accordingly, and desired to go to the country, as very little was the matter with him. He had been ill since Christmas last, and was ordered infusion of cascarilla, with soda, which very much aggravated his sufferings, and he felt so exceedingly unwell that he sought for other advice. At the time of his application to him (Dr. R.), he complained of pain on pressure along the transverse arch of the colon, at the epigastrium, which was now almost constant. He suffered from flatulence, and the eructation of an acid fluid which produced a burning sensation; bowels open; pulse regular; tongue yellow in the centre and white towards the edges; appetite tolerably good; vomiting once or twice daily; no emaciation; no sleep. Leeches were ordered to the site of the pain, cold water, or barley water, with milk, and the diet to consist of arrow-root, tapioca, &c. The relief he obtained by this plan of treatment was astonishing; and this was observed in several cases of the same kind. He (Dr. R.) had seen the stomach one mass of scirrhus, and its cavity so small as not to contain more than a tablespoonful, though the disease was not suspected during life.

Mr. Johnson wished to ask, if, in the case referred to by Dr. Ryan, the tumour was of a pulpy structure, or whether it had all the characteristics of firm hard scirrhus.

Dr. Ryan replied, that it was true scirrhus.

Mr. Johnson continued, and said the cases which were most commonly mistaken were in his opinion those in which the soft medullary tumour occurred, for it was in this form that the greatest irregularity of symptoms took place; he had observed also that the fæces, as mentioned by his father, were much diminished in size. Speaking of gastritis, he said that, during last year, after the disappearance

of the cholera from the Lock Hospital, almost all the patients had been attacked with muco-gastritis, and that in every instance the symptoms had yielded to the application of leeches and counter-irritation.

Some further remarks having been made by several members,

Dr. Johnson said, that perhaps as Dr. Ryan had referred to the distinction between dyspepsia and gastritis, he would favour the Society by relating what were the distinguishing features of the two diseases.

Dr. Ryan said, that the diagnosis between dyspepsia, or functional derangement of the stomach, and gastritis, when the disease was very slight, and confined to a patch or two of small size, was extremely difficult. In cases of long standing, in which the supposed dyspepsia had been treated by tonics, purgatives, &c., and aggravated by these remedies, the symptoms having become more severe, there being pain at the pit of the stomach, or in some other part of the organ, increased on pressure, with cardialgic or burning pain at the cardiac orifice, often compared to that produced by boiling water, melted lead, &c., with nausea, occasional vomiting, and constipation; the pulse being unaffected, no fever present, he should have no hesitation in applying leeches, followed by counter-irritation, the exhibition of cold fluids, low diet, and regulation of the bowels by enemata. He had treated a great number of cases, both in dispensary and private practice, on this plan with success. The diagnosis was, however, extremely difficult in many cases, in which the subjects had not indulged in dram drinking; and here, though the symptoms were often severe, especially in those who pursued sedentary occupations, they generally yielded to purgatives, and tonics, combined with the essential oils, and that very rapidly. In all cases which were aggravated by tonics, spirituous liquors, or purgatives, he was of opinion that there was a greater or less degree of inflammation of the mucous membrane of the stomach, and they ought to be treated accordingly.

Mr. Hunt was of opinion, that the state of the pulse, which was small and sharp, like that indicative of abdominal inflammation, and that of the tongue, which was red in the centre and white towards the edges, afforded a clear diagnosis between dyspepsia and gastritis.

Dr. Ryan replied, that these symptoms were present when gastritis was well established, and when it could not be mistaken; but Dr. Johnson's inquiry was relative to the diagnosis of both, when one was passing into the other, and to this he confined his reply.

Dr. Chowne was desirous to learn from Dr. Johnson, whether the calibre of the fæces was always diminished in scirrhus of the pylorus.

Dr. Johnson replied, that it was not in an isolated case that he had observed this symptom, but he considered it as generally present, and he thought that the small quantity of nutritious matter conveyed into the intestinal canal, and consequently the diminished call upon the powers of the tube would cause contraction, and thus account for its existence. In reference to what had fallen from Dr. Ryan, he thought that gastritis could not exist without dyspepsia, whilst dyspepsia might be present without gastritis; but he fully agreed with Dr. Ryan, that the result of the treatment was the best criterion of the disease.

Mr. Costello gave notice, that on Saturday next he should perform the operation of torsion upon a dog, after which the meeting adjourned.

MEDICAL SOCIETY OF LONDON.

Monday, Febuary 17th, 1834.

Dr. Uwins in the Chair.

On the Bad Effects of Tea.

Mr. Cole, in referring to the discussion which took place at the last meeting on the effects of excessive tea drinking, said he believed it was admitted by all, that the subject was one of considerable importance, inasmuch as it is desirable to know whether an article which we are constantly in the practice of using as diet is wholesome or not; from what had been stated he thought it had been proved that tea produces injurious effects on the nervous system if used in excess. Generally, however, the person, who has been in the practice of taking this beverage, does not suffer from it until his health becomes deranged from some other complaint. He should be glad to hear from any gentleman the result of his experience, either as to the injurious effects or otherwise, of this article, for he had brought forward the subject principally with the view of eliciting information, being well aware that

in spite of whatever opinions they might form on the subject, people would still continue to indulge in what, by most, was considered so great a luxury.

Dr. Uwins said that at all times the subject of diet was one of the greatest importance, and as tea formed so principal an article in our present mode of living, the investigation of its properties deserved the serious consideration of the Society.

Mr. Proctor confessed that to a certain extent he was becoming a convert to Mr. Cole's views; still he could not go so far as that gentleman, but thought that the constitution of the patient, and the time at which the tea was taken, materially influenced its effects. He had made inquiries of a large tea-taster as to the effects on his stomach after tasting great quantities, and had been informed that, usually after so doing, he found his stomach somewhat disturbed. If the tea be taken in a morning on an empty stomach, in large quantities, it will most probably prove injurious, but if used in an afternoon after a hearty meal, it would, in his opinion, rather tend to assist in digestion, as it certainly is (at least in the first instance) a stimulant.

Mr. Kingdon related an instance of a gentleman possessing great alertness and powers of mind, who indulged invariably shortly after dinner in drinking black tea; he had found wine disagree with him, and he confessed that, since making the above change in his beverage, he had found himself quite a different person, but that if he left off the tea after dinner, he could with difficulty apply his mind to any serious occupation. In another case which had lately fallen under his observation, he had attributed the peculiar sensations of fluttering and uncomfortable feeling at the stomach to the use of tea, which the gentleman who mentioned these symptoms was in the practice of indulging in.

Mr. Headland said the numerous and varied effects which Mr. Cole had stated to have followed the use of the article now under consideration, certainly had startled him, and made him hesitate before coinciding in that gentleman's opinions; he thought, however, the part of the paper, in which he alluded to affections of the heart, of considerable importance; in French writings much was said as to gastritis, whilst little mention was made of dyspepsia and its consequences; this rather tended to favour the views of Mr. Cole in this part of his subject, as it was very well known that tea was used in much greater abundance in this country than by our continental neighbours.

Dr. Stewart thought that tea might be injurious either from peculiarity of constitution, or from excess; the cases related were extremely interesting, since however much we might be inclined to dissent from Mr. Cole's opinions, we must admit that when the tea was discontinued, many of the most prominent symptoms had also disappeared.

Mr. Cole said, in reply to a question as to whether he had ever used porter as an antidote to tea, that he had once used it in the absence of other remedies, but was not aware that it possessed any effects more beneficial than those of other stimulants. A case was related for the purpose of illustrating the irritative influence which tea possesses over the disposition. Instances had also occurred to him, where persons, leaving off the use of tea, had found a certain degree of placidity of temper, unusual to them in their general habits.

Dr. Uwins asked Mr. Cole if, in recommending the discontinuance of this article of common use, he did it with confidence in its remedial effects? Mr. Coles said, in several of the symptoms, such as sinking of the stomach, faintings, and many of the neuralgic affections, he certainly, judging from what he had seen, did feel great confidence in recommending the discontinuance of this beverage.

Mr. Dendy imagined that the effects which tea produced were relative, and not abstract. He bore testimony to Mr. Cole's observations, if they only referred to a few cases, which rarely occurred in practice, but he could not agree with that gentleman if he wished to inculcate the total abolition of the use of this article, as in all cases injurious; with respect to the effects on the disposition from its use, he drew a different conclusion, for many of the Irish labourers, who were unable to procure more solid food, were accustomed to take large quantities of this fluid, and stated that they experienced great gratification from its use. Kæmfer, who spent some time in Japan, has stated that the inhabitants there were in the practice of grinding down the tea and making it into a thick paste, which they take nearly every hour in the day without injury.

Dr. Whiting said that it was necessary that a partial view of this question should not be

taken; in considering the effects of the use of tea, the mode in which it was exhibited must also be brought to mind; no doubt many of the injurious effects resulted from the large quantities of fluid taken into the stomach with the tea; the influence of this was not only in the stomach, but in the system in general, for this fluid was conveyed into the circulation, and would naturally tend to weaken the qualities of the blood; and it was probable that the heart was affected through the medium of this increased quantity of fluid conveyed to that organ. He could not call to his recollection any instances in which irritation had been produced by the moderate enjoyment of this article, but he had seen a contrary effect take place. One remarkable effect of its use was in causing gastrodynia, which he felt some difficulty in accounting for, although he was disposed to think that it was in the muscular coat where the pain occurred.

Mr. Jones wished to ask Dr. Whiting if any particular case occurred to him, where injurious effects were produced by this kind of dilution.

Dr. Whiting said that it would be difficult to take more of a fluid than was beneficial whilst it was in the state in which nature has bestowed it on us: but art had succeeded in so disguising our articles of diet, that unconsciously more might be taken than was beneficial to health.

Mr. Kingdon, Mr. Dendy, Mr. Leese, Mr. Procter, Mr. Jones, and Mr. Yeldon made some further observations on the subject, when Dr. Uwins gave notice, that the anniversary meeting of the Society would take place on the 8th of March. The meeting then adjourned.

THE

London Medical & Surgical Journal

Saturday, February 22, 1834.

SELECT COMMITTEE—PUBLIC PRESS —QUACKS.

On Tuesday last the Committee met for the first time. In the absence of several members, not yet come to town, who take a deep interest in Medical Reform, nothing further than ordering the necessary documentary evidence was done. The Committee then adjourned for a fortnight. The public will be soon favoured with a coup d'œil of the jarring elements of charters, statutes, by-laws, and courses of education, which have harassed and distracted the profession from its first cultivation in this country; and many a secret regulation and by-law, which would never have reached the light but in a return, perhaps, to a *mandamus*, will be disclosed.

Since Mr. Warburton has made the revision of the medical laws an affair of state, the most influential and respectable part of the public press has not been silent in impressing upon the public at large the importance of Medical Reform to the well-being of society. The Times, The Herald, and The Globe have lent their characteristic energy to the cause; and, under their powerful advocacy, we have every reason to hope the public mind will be prepared for the reception of a code of laws not unworthy of the interests at stake. We implore the press to continue its valuable exertions to disabuse the members of the legislature of the vulgar errors, which are prevalent about the true nature of our medical dissensions.

In no other country have the laws, for protecting the public health, been so neglected as in this. We expect the Committee will procure correct statements of the laws for the government of the profession in the different states of Germany and in France. It will then be seen how much enlightened foreigners differ from the opinions of some of us, who entertain the singular opinion, that the destructive trade of quackery should not be interfered with by direct legislation. The author of a clever pamphlet * has, by

* Thoughts on Medical Reform. By a Retired Practitioner. Fellowes. 1833.

starting with this position, excited a prejudice against other parts of his speculations, which well deserve mature consideration in remodelling our medical ranks. He thinks that the suppression of quacks, by the force of law, involves the impracticable absurdity of prohibiting a mother, or nurse, from administering medicine to a child suffering from indigestion, till a licensed practitioner has sanctioned the prescription! and that, as every one is allowed to preach the gospel, who can procure hearers, so every one should have liberty to practise physic, who can obtain patients! Is it not surprising, after such an argument for free trade, to find the same writer strenuously contending for the due qualification of dispensers of medicine or medical druggists? We shall, on another occasion, return to the constructive part of the retired practitioner's system, which contains many interesting and useful remarks.

COLLEGE OF PHYSICIANS.—CAMBRIDGE.

A few weeks ago we announced the existence of rumours, as to certain changes about to be effected in the by-laws of the College of Physicians; and we pointed out, in a very significant manner to our understanding, the source from which we collected the particulars of so strange an event; that the medical public might not be surprised into a belief, that there was any foundation in fact for our statements, from an ignorance of the source whence we had derived them. It seems a precise acknowledgment of our authority * would have prevented the mistake into which our contemporary charges the medical press to have led the public; for it now appears, in the words of the same journal, that "no definite arrangements have been made, or are likely to be made." At the time, we expressed our suspicions, and deferred some comments on the proposed scheme of alteration, to wait the issue of another week;—the week passed,—the organ was hush,—a serious examination exposed the inadequacy and quackery of the projected alterative; and now the Gazette is at liberty to disown it as emanating from the College, and to repeat the unanswerable objections of the liberal press to such a measure of reform.

The fact is, that some of the Fellows, aware of the impending danger, have evinced a willingness to make some trifling changes, or concessions, in favour of the Licentiates, and to say with Brabantio:—

> "We here do give you that with all our heart,
> Which, but you have already, with all our heart
> We would keep from you."

and it is not at all improbable, that, among the other *secret* operations of the corporation, a scheme, not unlike the abortion now dead and buried, was canvassed amongst them. But of this are we certain, that, after no little coquetting,—"She Would and She Would Not,"—Dr. Seymour has the infinite credit of fixing their unsettled purposes; and it is now agreed to stand on the defensive,—to assert the immaculate purity of the College in times past, and rest its claims for future support upon the services it has rendered to medical practitioners; or, should the legislature unfortunately differ from the College in estimating its importance and title to respect, to bow with decent submission to the inexorable decree of fate.

It is impossible to object to the course the College has resolved to pursue at the present crisis: any effort at satisfying the claims of the Licentiates could not now save it from the general investigation

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* The Medical Gazette. See also last number.

about to be instituted; and any alteration under the present circumstances might appear disrespectful to the Parliamentary Committee, to which it is amenable, and from which the public expects to receive a code of medical law, embracing not only the College of Physicians but every medical corporation in the United Kingdom.

We have this week to record a repetition of bigoted infatuation at the University of Cambridge. A second effort was lately made to induce the University to dispense with her religious tests, in the case of medical degrees, and to throw open her walls to persons of every Christian denomination. This effort was as fruitless as the former: and it now remains for the Committee to decide what medicine has to do with religious profession; and, if the Universities persevere in excluding from their pale the intelligent dissenters of the kingdom,—if the expenses of the Universities are beyond the means of medical students in general,—if any superior privileges are to be conceded to the collateral knowledge, which ought to be acquired at an university,—it will also be its business to decide, whether some other test of superior general qualifications should not be adopted than the possession of a University degree.

COLLEGE OF SURGEONS.

Whilst this body, amongst others, is about to undergo the scrutiny of Mr. Warburton's Committee, and to reveal the *secrets* of its management, a sense of justice compels us to admit that it has latterly exhibited some marks of liberality, and of a deference to public opinion, which distinguishes it from many of its cotemporaries. To what this corporate anomaly may be owing, it is not very necessary to inquire. The absence of legal privileges behind which it might hedge itself, and its consequent dependence upon public support, may have induced the majority of its self-elected and irresponsible governors to yield what was untenable: but we are disposed to attribute a little of the merit of its partial reform to a more generous spirit among some of its rulers; which induces us to anticipate the cordial assistance of these latter in the approaching adjustment.

We were led to these reflections at the late public meetings of the College, by comparing what was then passing with the events of a few years ago. The Horatian rule—

"Posticâ falle Chirurgum"

has been since abandoned. It is no longer a question whether Portugal-street or Lincoln's-Inn-Fields is the licentiate front of the College; and the habitat of its theatre, whether in the parish of St. Clement's Danes, or of St. Giles Bloomsbury, now concerns none but the parish authorities. To most of our readers these matters of history are familiar*; to some it may be necessary to say, that at the time we allude to, the commonalty of the College were denied admission to its festival meetings by the Lincoln's-Inn-Square door, which was reserved for the exclusives; and that this insulting practical degradation of the members was justified, forsooth, upon the sapient principle that the back door of St. Giles was the front door of St. Clement's! Again, in the times we tell of, when a member slipped in with his hat slouched, and at last dared to hold up his head, and walk straight up to the place where he saw

* The reader will find some of the details in Mr. Salmon's Oration on the Necessity for an entire Change in the Constitution and Government of the Royal College of Surgeons. Whittaker, 1833.

others no better than himself, he encountered a bar which soon brought him to his senses, and convinced him that the man, who lets his nose be pulled with impunity, had better soap it for the next occasion.

The proceedings on the two late meetings were much more decorous; all members were admitted at once by the same entrance upon producing their tickets, and within there was no insulting reservation beyond a decent provision for the governing body. This recognition of the equality of all the members would, perhaps, scarcely deserve the notice we have given it, were it not a partial abandonment of the system of monopoly accomplished by the efforts of Mr. Guthrie, the President, commonly called the Joseph Hume of the establishment, and of such independent members as Mr. Keates and Mr. Vincent, and some others, whose liberal advice will, no doubt, have its due weight with the Committee.

PROVINCIAL MEDICAL ASSOCIATION, MANCHESTER.

A few days ago a meeting of members of the medical profession resident in this town was held at the York Hotel, for the purpose of considering the propriety of forming a provincial society for the advancement of medical science, similar in its design to that which already exists. Among the gentlemen present were Drs. Knight of Sheffield, and Williamson of Leeds; Drs. Hull, Lyon, Shaw, and J. P. Kaye; Messrs. Robertson, Catlow, Gordon, and other surgeons of Manchester. Dr. Hull was called to the chair, and Drs. Knight and Williamson pointed out the causes which had led to the formation of the present design, and the advantages which it was hoped it would possess over the other and more favoured association. It is proposed that the new Society should be confined to Lancashire and the West Riding of Yorkshire, by which means the association would be more accessible to the medical gentlemen of this part of the country than the one already in existence. It is observed also, that this Society would, in all probability, acquire greater strength than the elder one could attain; that, being of a comparatively local character, it must draw towards it more strongly the interests and sympathies of its members, from the fact, that the local concerns of Lancashire and Yorkshire could be more fully attended to and watched over than could possibly be the case in a society, which had the whole kingdom for its operation, and the members of which were not bound together by those private intimacies, and those professional ties, which unite the practitioners of particular districts. A resolution, expressive of the advantage of forming such an association, was accordingly proposed. It was supported, we believe, by Drs. Lyon, Shaw, and Kaye, and was ultimately carried. Mr. Catlow, surgeon, in expressing his opinions in regard to the scheme, to which he did not give his entire approbation, took occasion to complain of the monopoly which the medical officers of the Infirmary possessed, in having exclusive access to the valuable medical library of that institution, a monopoly which, he contended, was unjust to the great body of professional gentlemen in Manchester, and which ought to be brought to an end. Mr. Robertson expressed his sense of the great benefit which would result from a well assorted medical library in this town, and intimated his readiness to aid in any measures by which such an object could be accomplished. Mr. Gordon opposed the projected medical association, as being not only uncalled for but undesirable. He argued that it was impolitic to diminish the strength and efficiency of the society, which already had been founded under the auspices of Dr. Hastings, by the erection of associations partial in their operations, and limited in their influence, as the one now projected must inevitably be. He contended that the Provincial Medical Association was unobjectionable in its principle, that it possessed all the advantages which could possibly be proposed by this scheme, with many others which it could not possibly attain; whilst the objections which were urged against the elder society (namely, the distance to which gentlemen resident in this vicinity were compelled to travel in order to be present at its meetings, &c.,) were also applicable with

equal force to this design. The Provincial Medical Association was already established and in full operation; it counted among its members many of the most able practitioners in all parts of the country; it was accessible to every one upon easy and equitable terms; and was open to receive the contributions of any gentlemen who might have any information to communicate; and it was therefore impolitic to disunite a body of men who, united, were able to confer such substantial advantage upon medical science, but whose power must ultimately dwindle into insignificance if they were to be cut and carved into county or district associations. The resolution, however, was carried, and we are informed that seventeen gentlemen have enrolled themselves as members of the Medical Association of Lancashire and the West Riding of Yorkshire.

Foreign Medicine.

ACADEMIE DES SCIENCES.

At the sitting of the 27th of January M. Donné presented an essay on the chemical properties of the secretions in health and disease; also on the existence of electric currents produced by the acids and alkalies residing in the different membranes of organised bodies.

The following is a summary of the principal facts which it contains:—

1st. The exterior envelope of the body, the skin, secretes throughout its whole surface an acid humour; nevertheless the perspiration instead of being, as is generally thought, more acid in the axilla, and around the pubis, is, on the contrary, alkaline in these situations, as well as at the toes.

2nd. The digestive tube secretes an alkaline mucus throughout its whole extent, except in the stomach, where the gastric juice is strongly acid.

3rd. Serous and synovial membranes, in their normal condition, exhale an alkaline liquid, which, however, in certain diseases, sometimes become acid.

4th. The external acid, and the internal alkaline membranes, represent the two poles of a pile, the electric effects of which are appreciable by the galvanometer: thus when one of its conductors is placed in contact with the mucous membrane of the mouth, and the other with the skin, the magnetic needle deviates from fifteen to twenty, and even twenty-five degrees, according to the sensibility of the instrument, and the direction indicates that the mucous or alkaline membrane takes the negative, and the cutaneous membrane the positive, electricity.

Independent of the adverse chemical conditions presented by these two extensive surfaces, other organs exist in the economy, some of which may be styled acid, others alkaline, and which give the same results. For example, very energetic electric currents exist between the stomach and liver in every species of animal.

5th. M. Donné has observed similar electric phenomena in vegetables, on introducing one pole of a galvanometer into the medullary canal, and the other into the rind. These effects are more especially remarkable and defined in the different kinds of fruit. A fruit may be considered as a galvanic pile, the extremity towards the stem being, in adhering fruit, such as the apple and pear, electro-magnetic, and the opposite extremity electro-positive. The contrary occurs in non-adhering fruit, such as the peach and plum. The electric current is not produced in vegetables by their acid and alkaline condition, since the juice of fruits is found on examination to be more or less acid in every part, but it is owing, without doubt, to the difference in the chemical composition of these juices at the two extremities of the fruit.

6th. The acid humours of the animal economy may become alkaline, and the alkaline acid in diseases.

7th. Acidity is most commonly the product of inflammation, properly so called, and this effect may declare itself by sympathy in an organ situated at a distance from the inflamed part; thus in gastritis the saliva becomes very acid.

8th. The acid which is formed during inflammation is, in general, the hydrochloric. According to M. Donné, the presence of this acid determines the coagulation of the albuminous portion of the lymph or serosity, which abounds in inflamed parts. Pus itself is produced by its action on the albuminous lymph. M. Donné adduced numerous cases of peritonitis in which the pus, and even the serosity poured into the abdominal cavity, were found to contain acid qualities.

9th. The alteration in the chemical nature of the secretion re-acts on the different systems of the economy. As regards the etiology, diagnosis, and even treatment of diseases, they form a series of lesions and symptoms interesting to be observed.

Angina Membranacea treated by Cauterisation.

An epidemic of this nature was very prevalent lately in the town of Chateau-Regnault and neighbourhood; it was remarkable that in the town the complaint in the throat was very seldom complicated with scarlatina, whilst in the surrounding villages the two maladies existed together in many persons. It offered in its duration two periods distinguished by different symptoms; in the first it appeared complicated with scarlatina, and was particularly severe with those infants in whom the pharynx was injected, the tonsils swollen, and the uvula inflamed. The inferior part of these three bodies became almost covered with white spots which afterwards extended up the pharynx, covering it to its superior part; the breath became fetid; deglutition impossible, and oftentimes liquids returned by the nose; the respiration became difficult; the voice nasal; there was violent cough, and the patients rapidly perished from asphyxia. In the second period the angina principally affected adults, and commenced with the general symptoms, difficulty of deglutition, pain in the pharynx, and formations of false membranes, which extended throughout the pharynx, and assumed a gangrenous appearance. Some of the patients died from asphyxia, others from cerebral congestion. The treatment, pursued in this complaint with most efficacy, was the employment of cauterisation, and for which purpose M. Gerdron preferred in most cases the nitrate of silver; he recommends the adoption of this plan without delay, as soon as any of the white points are perceived either upon the amygdalæ, uvula, or arch of the palate.

Lithotriptical Instrument of M. Ségalas.

M. Ségalas, on the 4th of February, read a memoir on lithotrity to the Academy of Medicine, in which he endeavours to show by facts the superiority of his instrument over all those which have been employed up to the present time. The cases upon which he founds his claim are to the amount of eleven, and are of three kinds. First, when the stone is of small dimensions, and can be pulverised at one operation; second, where the calibre of the stone is of moderate size, and requires two or more sittings; and lastly, where it is of still greater magnitude. The two first cases mentioned referred to calculi of the first kind, and were destroyed at the first operation; one was in a young child, the other in an old man aged 70. Amongst the cases of the intermediate description, he cites one where the stone was ten lines in diameter in an old man of 79; another of eleven lines in an old man of 69 was broken at three sittings; one of fifteen lines, complicated with catarrhus vesicæ, was destroyed in three operations. The other cases are more remarkable. Thus in one, the patient, æt. 45, suffered from the presence of a stone of nineteen lines in diameter, and had at the same time acute cystitis. He was freed from the stone at six operations, without any augmentation of the inflammatory symptoms. In one old man, who had a stone twenty-one lines in diameter, the operation was performed without the patient's knowledge; he had refused to submit to the operation, but M. Ségalas, on the plea of introducing only a sound, succeeded in partially crushing the stone; no pain being occasioned, the patient did not afterwards resist, and in six sittings it was completely destroyed.

The most remarkable case was complicated with stricture of the urethra, enlargement of the prostate, and catarrhus vesicæ, the stone was twenty-three lines in diameter, and was destroyed in thirteen operations. The instrument used by M. Ségalas is something like the Percuteur à Marteau of Baron Heurteloup; but he has added to this instrument a screw, by means of which pressure is made. This pressure being made to a certain degree upon the stone, he strikes a light blow on the moveable blade with the hammer, and then again uses the screw.—*Gaz. Med.*

Replacement of M. Boyer at the Académie des Sciences.

The question which at present attracts the attention of the medical world in Paris, is the election of some person to fill the chair in the Academy of Sciences, vacant by the death of M. Boyer. Seven, if not more, candidates have declared themselves, amongst whom are MM. Patrix, Guerbois, Antommarchi, Velpeau, Lisfranc, Roux, and Breschet.—*Ibid.*

French Hospital Reports.

HÔTEL DIEU.

Icterus cured by bleeding, purgatives, &c.

A WOMAN, æt. 50, who had been ill some days, came into the hospital under M. Bally; the skin over the whole body was of a deep yellow tint; the conjunctiva was also deeply stained of the same colour, and felt oily; the saliva was green, and the liver evidently was much enlarged; below this organ there was a tumour, caused by the distension of the gall bladder. Percussion discovered slight abdominal effusion; and, by applying the stethoscope, a *râle* was very evident in the thorax. The febrile symptoms were violent, and the pulse was 120.

Bleeding was several times practised; sulphate of soda and large quantities of demulcent drinks were prescribed, and with the most happy effects, for the liver diminished rapidly in volume, the effusion disappeared, the skin quickly regained its natural colour, and at the present time (Feb. 6th) abundant discharge from the bronchial passages is the only symptom remaining.

Remarks.—Referring to this case, M. Piorry remarked, that icterus has been considered most frequently to depend on mechanical obstruction. From numerous cases which he had collected, and from the observations of Morgagni, Stoll, Andral, Cruveilhier, and others, he had arrived at the same conclusion; and thought, that, if moral causes can produce it, it is only by causing some anatomical derangement, which may obstruct the passage of the fluid secreted in the liver.

In our next Number we shall give the result of some further observations, made by M. Piorry, on the causes of obstruction to the passage of the bile.—Ed.

Hysteria — Pulmonary Emphysema caused by the violent struggles made during the paroxysm.

A girl, æt. 17, who had suffered during the last month from violent attacks of hysteria, was brought into St. Lazarus' Ward. She had invariably enjoyed good health, and had regularly menstruated up to the commencement of the attack, which was caused by the brutality of a man who ravished her. The moral perturbation joined to the physical sufferings which she endured were the source of the severe nervous attack which she has since suffered from. The genital organs are much swollen, and, for the relief of retention of urine, which she has, the daily employment of a catheter is required. During the paroxysms, the breathing becomes difficult, the abdomen tumid, and she makes violent but vain efforts to overcome the obstacle which seems to oppose the performance of respiration. These attacks recur many times during the course of the day; and any question touching upon the canse of her complaint never fails to occasion a fresh attack. During the intervals melancholy seems to overwhelm her mind, which is occupied solely with the idea of the loss of her honour, and the destruction of all her future prospects.

On the 29th of January, the thoracic organs were explored with care, during one of the intervals, when it was observed that the right side of the chest was the most sonorous. At this time, however, the respiratory noise was more indistinct, and a slight *râle sibilant* might be heard during expiration. She complained also of cough. On the following day these last mentioned symptoms had vanished. There was then no longer doubt that pulmonary emphysema existed on the right side of the thorax.

The prognosis from this lesion of the lung is very unfavourable; for if these paroxysms do not diminish in intensity, it is to be feared that the emphysema will invade the cellular membrane of the neck and limbs. At present baths and antiphlogistic drinks form the principal part of the treatment.

Case analogous to the preceding—Effect of Imitation.

A damsel, æt. 15, admitted for slight typhus fever, and placed in a bed near to the above patient, has been attacked with similar hysterical symptoms, evidently caused by the proximity to the former case.

Remarks.—This influence of nervous imitation has been observed by most authors who have written on this subject. It once reigned to a great extent in the hospital at Leyden; and Boerhaave, who was then attached to that institution, had recourse to the following mode of stopping the contagion. He directed a chafing dish to be placed in the ward, and, having heated an iron, threatened to apply it

to the next patient who should offer these paroxysms. This menace was attended with the most happy results in young girls, but in older persons, who probably did not believe in the truth of the threat, it completely failed.

British Hospital Reports.

WESTMINSTER HOSPITAL.

Enlargement and Irritability of the Mamma.

— Jones, a healthy, good looking young woman, æt. 19, was admitted into this hospital, having her right breast exceedingly enlarged, and endowed with a most exquisite sensibility. The least pressure on the part was attended with the most acute pain, rendering her existence very miserable.

Soon after her admission she was put on the extract of belladonna, in the quantity of one-fourth of a grain three times a-day. The tinctura lyttæ and oleum terebinthini were also administered. An ointment, composed of acetate of morphine and adeps, was used as a topical application.

Under this treatment the patient has experienced very beneficial effects, the enlargement of the breast having been considerably diminished, and the morbid sensibility, which it formerly possessed, being removed.

Enlargement of the Tonsils—Incision.

A young man came to the hospital some time ago with his tonsils very much enlarged. Deglutition was rendered very difficult, and his breathing was much impeded. Mr. White, on seeing the case, desired incisions to be made in the tonsils, which treatment was followed by Mr. Finch.

Incisions were made every alternate day in the tonsils, which were eventually cured by this mode of treatment.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON.

Westminster Medical Society	Feb.	22,	8 P.M.
Medical Society of London	—	24,	8 P.M.
Royal Geographical Society	—	24,	9 P.M.
Institution of Civil Engineers	—	25,	8 P.M.
Medico-Botanical Society	—	25,	8 P.M.
Medico-Chirurgical Society	—	25,	8½ P.M.
Zoological Society (*Scientific business.*)	—	25,	8½ P.M.
Society of Arts	—	26,	7½ P.M.
Geological Society	—	26,	8½ P.M.
Royal Society	—	27,	8½ P.M.
Society of Antiquaries	—	27,	8 P.M.
Royal Institution	—	28,	8½ P.M.

APOTHECARIES' HALL.

Names of gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, February 13th.

Edward Bowman	Carlisle.
William Hesleden Eddie	Barton.
Edward Robert Owen	Beccles.
John Penhey	Crediton.
Frederick Shury	London.

BOOKS.

Medical Botany.—A and B. By James Atkinson, Surgeon to H.R.H. the late Duke of Kent. Royal 8vo., pp. 378. Lond. 1834. John Churchill.

Subscriptions received in aid of Dr. Ryan's law expenses	£233	13	6
M. Downing, Esq., Bedford-st.	1	1	0
M. H. D. of Dublin	1	1	0

Erratum in No. 107, p. 95, col. 2, line 36, *for* "nervous trunks," *read* "arterial trunks."

METEOROLOGICAL JOURNAL.

MONTH. Feb. 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
13		37	40	32	29·92	29·96	80	79	W.N.W.	N.W.	Fine	Fine	Cloudy
14		41	45	35	29·82	29·97	78	78	W.	N.	Foggy	——	Foggy
15		69	44	32	30·07	30·08	78	79	W.N.W.	E.	——	Foggy	——
16	☽	36	39	32	30·16	30·12	79	77	E.	S.E.	Fine	Fine	Fine
17		36	42	37	30 04	30·03	78	77	W.N.W.	W.N.W.	Foggy	——	——
18		43	52	35	29·94	29·86	76	77	W.S.W.	W.S.W.	——	Cloudy	Cloudy
19		38	45	37	29·78	29.75	75	75	W.N.W.	W.	Fine	Fine	Sleet

50, *High Holborn.* William Harris and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 109. SATURDAY, MARCH 1, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,
BY PROFESSOR SAMUEL COOPER.
Delivered at the University of London, Session 1832—1833.

LECTURE LXXVIII., DELIVERED MARCH 29, 1833.

Gentlemen,—Although I have in previous lectures called your attention to various tumours, which are strictly *new productions—adventitious growths*—not having constituted any portion of the original structure of the body, I have not yet given you any account of the formation and characters of tumours in general.

In proceeding through the subjects of diseases of the bones, I described certain morbid formations, which are comprised under the preceding definition; as for instance, exostoses, and fibrous and medullary growths from the medullary membrane. In the account of cancer, fungous hæmatodes, and melanosis, I have also partly travelled through the subject of those tumours, which, at least in some of their forms, are regarded as new productions in the system, and not merely as changes of structure, or as augmentations in the bulk of original tissues, for they comprehend several of those formations which are denominated *heterologous*, and which our distinguished Professor of morbid anatomy describes as consisting "in the presence of a solid or fluid substance, different from any of the solids or fluids which enter into the healthy composition of the body." Professor Carswell's definition will include, however, calculous and purulent deposits, which, though they are heterologous formations, it is advantageous not to arrange them under the head of tumours. While some of the growths, also, which I regard as tumours, correspond to the foregoing definition in not being like any of the original tissues of the body, others bear more or less resemblance to some of its primitive structures. Tubercle, scirrhus, and melanosis, are examples of the first; adipose and cartilaginous swellings, of the second. In fact, as Andral says, with reference to such of these depositions as become organised, when once vessels are developed in the morbid product, or sanguineous currents are established in it, the amorphous mass begins to lose its homogeneous nature, and to assume some definite kind of texture. The anatomical elements may now take the arrangement of fibres, layers, coats, or of a net-work; and they may put on the appearance of any of the normal structures, excepting two—the muscular and nervous.

Our profession is under many obligations to the late Mr. Abernethy, for drawing its attention very particularly to the great difference between tumours of the above nature, and other swellings which are merely alterations of natural structure, or sometimes only the consequence of the accumulation of blood, pus, or other fluid in parts, and which last cases in particular have no claim to be considered as tumours, under the principle of classification suggested by Mr. Abernethy. This was, unquestionably, making a bold step, out of all the confusion in which this part of the pathology of surgery used formerly to be involved. Nobody can doubt that the distinction here laid down is a good one, and that all swellings of original parts, to which no new morbid tissue has been added, and which consists rather of alterations of natural structures, or of the accumulation of pus or other fluids in them, than of the growth of any adventitious substance, should not be confounded with tumours, in which the latter circumstance is exemplified. The swellings of arteries, termed *aneurisms*, the knotty enlargements of veins, called *varices*, and all tumours arising from accumulations of blood, pus, or serum, in natural cavities and tissues, as well as a multitude of other examples, in which the tumour or swelling, does not strictly consist of a new formation, growing upon, or amongst, or added to, the original parts and tissues of the body will not be comprised in Mr. Abernethy's classification.

If there were not some limitation assigned to the surgical meaning of the word *tumour*, every disease, whatever might be its nature, if accompanied by increased fulness, or enlargement of parts, would be arranged under this head, whether an aneurism, a phlegmon, an

erysipelas, a boil, a carbuncle, an abscess, or a dropsy. In truth, such is the miscellany, which you will find adopted in old works, and which should not be called an arrangement but a chaos.

As, however, we find the heterologous matter deposited not merely upon free substances, like those of serous or mucous membranes, or within the cells of the cellular tissue, but likewise deposited in the molecular structure of organs, after the manner of nutrition, it is manifest, that, when original parts become enlarged in the latter way, the disease ought to rank as a tumour, according to the principle of an adventitious substance being added to its primitive tissues. In this point of view, Abernethy's arrangement is not satisfactory, and so little was it suited for practical purposes, that he deviated from it himself almost as soon as he had explained it, by considering as tumours carcinomatous and different sarcomatous affections of several original parts, where the enlargement depended upon the molecular deposit in their tissues.

Tumours, in general, are divided into the *sarcomatous* or *fleshy*, and the *encysted* kind, many of the latter being familiarly termed *wens*, and consisting generally of a more or less fluid or fatty substance in a globular cyst; while the sarcomatous swellings are usually solid, and when they have a cyst, which is not always the case, it is not that regular, complete, and globular sac, commonly exhibited in a true encysted tumour. By a sarcomatous tumour is meant one that is chiefly or entirely composed of a fatty, fibrous, medullary, fungous, or other substance of inferior hardness to bone.

An *encysted* tumour is composed of a regular cyst, or sac, filled with matters of very different kinds in different examples, which matters are commonly secreted by the cyst into its cavity. The contents are not always fluid, being sometimes of a pultaceous consistence, sometimes like horn or bone, and, in other instances, like adipose substance. Frequently the cysts are filled with a fluid resembling honey or white of egg; and occasionally they contain melanotic matter, and even hair, or teeth. You will also frequently meet with cysts, which serve as lodgments for hydatids.

Some of the *solid sarcomatous tumours* are encompassed by a kind of cyst, by a dense cellular substance, which yields, and becomes thicker and thicker as the tumour increases in size, and appears to form a sort of barrier between the new morbid formation and the healthy parts, so as to protect the latter in some degree from the extension of the diseased action to them.

Some *solid sarcomatous tumours* have no such limit, but extend in the direction in which there is the least resistance, and soon transmit their morbid action amongst the surrounding parts. Others have no tendency to communicate any diseased action to the rest of the body; but only become dangerous or annoying by their bulk and pressure. Some sarcomatous tumours grow rapidly, and prove troublesome in a few weeks or months; others remain for years without much change or inconvenience. The texture of some of these tumours bears more or less resemblance to that of the neighbouring parts; thus, fatty swellings frequently grow in situations, where they are surrounded by the natural adipose tissue. Cartilaginous tumours, as you know, are often produced within joints, where they become detached from the articular cartilages, and a cause of pain and lameness; and tumours of a cellular structure internally, and covered by a mucous tissue, frequently grow from the surface of mucous membranes. But, gentlemen, you are not to consider the resemblance of the substance of a tumour to the nearest tissues as an invariable principle; for many swellings not only have a different structure and appearance from those of the adjacent parts, from whose vessels they derive their supply of blood, but from every other healthy and natural tissue in the body.

Mr. Abernethy not only proposed the restriction of the meaning of *tumour* to what is truly *a new* and *adventitious formation*, and not *simply a change* or *enlargement of an original tissue*, but he suggested the plan of naming every tumour according to its anatomical structure. Thus he first applied the term *medullary sarcoma* to what is also called *fungus hæmatodes*. That, and some other names, which he selected, appear to me appropriate enough; but fault may be found with others; and his nomenclature, however ingenious, has the defect of not being altogether consistent. Thus, as it was designed to be one, founded upon the anatomical structure of tumours, the term *cancerous sarcoma* is not admissible. I should say, also, that as the generality of sarcomatous tumours have vessels, the phrase *vascular sarcoma* is not well chosen to express only one species of the disease.

One fact, perfectly established, is, that some kinds of sarcoma are merely new formations, unconnected with any *malignant tendency*, or any thing particularly wrong in the constitution. Thus common adipose swellings only become troublesome by their size, weight, and pressure; but a scirrhus, a fungus hæmatodes, and, perhaps, a melanotic tumour, though this may be doubted, are malignant diseases. Certainly each and all of them, inclusive of melanosis, are associated with constitutional derangement or peculiarity, the precise nature of which may not indeed be known, but of the existence of which not a doubt can be entertained. The distinction between *innocent* and *malignant tumours*, important as it is with reference to practice, and especially with reference to the propriety of operations and the mode of doing them, is yet a subject involved in the greatest obscurity. Tumours, which in their regular progress destroy life by the changes produced in the affected part, such as ulceration, bleeding, and sloughing, or by causing similar productions in other parts of the body, more par-

tticularly in important internal organs, or by both together, are considered to be *malignant;* and the occurrence of serious, local, and general symptoms, the development of new growths in other parts, and such constitutional suffering as leads to the suspicion, that organs of consequence are involved in the affection, are generally set down as decided proofs of malignant character, and as insuperable objections to an operation. Yet, much caution is required in giving an opinion on the malignancy of some tumours.

The *tuberculated sarcoma*, as it was called by Mr. Abernethy, is represented by him as a very malignant disease; yet, in one example of it, recorded by Mr. Lawrence, where the original tumour had a most threatening aspect, where several similar tumours presented themselves in other parts, and where the patient had been brought to the brink of the grave by constitutional disturbance, life was prolonged for many years by amputation.

Some of the heterologous formations are organised and vascular; others are completely free from organisation, and are furnished with neither vessels nor nerves. They seem to be merely morbid products from the blood, only deposits produced in the manner of a secretion, and frequently from a serous surface.

With respect to the origin of vascular tumours, we have little information that can be supported by demonstration, or even by arguments unexposed to disputation. It is a subject that was lately considered by Mr. Lawrence, in a paper read to the Medical and Chirurgical Society. In this ingenious production he inquires into the mode in which tumours originate and increase, and adverts to the three explanations usually offered of the phenomena:—1. By the effusion of blood, and its coagulation, and the subsequent organisation of the coagulum. 2. By the effusion and organisation of coagulating lymph. 3. By chronic inflammation. Now, if these explanations were true, we should expect, with Mr. Lawrence, that tumours ought to pass through successive stages, and to present different appearances at different periods of their development. For instance, we ought to find them at first as masses of coagulated blood, or coagulating lymph, and then to observe various degrees of transition from those substances to the textures, which characterise the perfect growth. Observations, however, disclose nothing of this kind: tumours, in their earliest state and smallest size, have their peculiar structure as well marked as in their subsequent progress and full development. An adipose tumour, not exceeding the bulk of a pea, differs only in size from one as large as the head. Effusions of blood into the cellular texture, from external violence, are of daily occurrence; if they could become organised, and then form tumours, few persons would be without these productions, which would also be, from the first, as large as the extravasation. We see, however, that blood, thus poured out, disappears by absorption, or irritates the surrounding parts, and causes suppuration, by which it is expelled.

The hypothesis of the formation of tumours, by the effusion and organisation of blood, seems, indeed, to have little foundation; and, I think, we must agree with Mr. Lawrence, that no satisfactory proof exists of blood becoming organised, when effused in wounds, bruises, or serous cavities, or aneurismal sacs.

The interstitial effusion of lymph in inflammation is a thing noticed every day; the substance, thus poured out, is not formed into tumours, but is absorbed as the inflammation subsides, or its partial organisation causes the enlargement, or condensation of the affected structure. Then, none of the phenomena, characteristic of inflammation, commonly precede the formation of tumours, which arise insensibly, and often attain some size, before the patient is aware of their existence. Besides, as is well observed by Mr. Lawrence, if the accounts given of the origin and growth of tumours were correct, the attempts to check their production by leeches, cold applications, and antiphlogistic treatment would generally have more effect than we find to be the case. Such treatment has no influence over accidental productions, though sometimes employed with advantage in lessening swellings caused by changes of structure.

The best pathologists are then in a state of ignorance respecting the circumstances, which determine the production of tumours in general, or of any particular variety of them. No more is known about these aberrations of nutrition, than of the mode in which this function is accomplished in its natural or normal state.

Adipose sarcoma, or the *fatty kind* of solid tumour, is the most common of all these new formations. In its appearance and structure, it has a near resemblance to the subcutaneous fat, but is of a somewhat deeper yellow colour, less granular, and more compact. Adipose sarcomatous tumours are always covered by a thin capsule, formed by the simple condensation of the surrounding cellular tissue, and having but a slight attachment to the fatty mass itself, by means of very small vessels. It is in consequence of these circumstances, that adipose tumours admit of removal with considerable facility, and, after a sufficient division of the skin, the diseased mass may be readily detached from the surrounding parts, sometimes with the fingers, and always without any troublesome dissection.

You will find these fatty growths existing frequently in persons, in whose constitutions no particular defect can be discovered; and sometimes they occur, not merely in one situation, but in several, though the individual may be in other respects perfectly healthy. They are generally attended with little or no uneasiness, and are characterised by a soft doughy feel, or one as if they were filled with wool. They have no disposition to become dangerous by changing into any malignant

form of disease; and whatever pain and inconvenience they may produce, are the result of their weight, pressure, and magnitude, for adipose sarcoma is generally inclined to grow to a larger size than any other solid kind of tumour met with in the human body. I have seen one or two examples which weighed nearly fifty pounds, and larger ones are upon record.

They are sometimes the seat of uneasy sensations, never malignant, though occasionally attended with shootings, and they may interfere more or less with the free action of the neighbouring muscles.

Now, gentlemen, when it is recollected, that the operation for the removal of an adipose swelling of immense size may prove fatal from the unavoidable extent of the wound,—when we also remember, that you have no means of dispersing a fatty swelling, that if left to itself it is sure to acquire considerable magnitude; and that when of immoderate size, it is apt to become closely adherent to fasciæ, and even to the capsular ligaments of important joints, so as to render its complete removal difficult; you must see the prudence of always taking away an adipose sarcoma, while it is small and but loosely attached to the surrounding parts. Adipose sarcoma does not, like a malignant tumour, require the free removal of the adjacent textures.

The *pancreatic sarcoma*, so named by Mr. Abernethy, from a degree of resemblance in its structure to that of the pancreas, is rather an uncommon disease, and scarcely any unequivocal specimen of it has been preserved in any of the museums of the metropolis. One was exhibited last winter at the Medical and Chirurgical Society's house as a rarity, and even that was considered by some gentleman present as having much of the appearance of ordinary scirrhus. Mr. Abernethy represents pancreatic sarcoma as occurring sometimes near the nipple, and sometimes in the lymphatic glands on the mylo-hyoideus muscle, and as an irritable and excessively painful affection.

Some instances of pancreatic sarcoma have been met with by Mr. Lawrence. They were formed, either close to the parotid gland, or under the jaw close to the sub-maxillary gland. Pancreatic sarcoma is loosely connected with the surrounding parts, and therefore very moveable; a character in which it is said to differ from scirrhus, though we know that scirrhus, in its early stage, is frequently as moveable as any other kind of swelling. In Mr. Lawrence's cases, the disease was free from pain and malignancy, and effectually cured by operation. The pancreatic sarcoma, which Professor Carswell arranges in his Illustrations of the Elementary Forms of Disease as a species of cancer, does not at all correspond to the disease noticed by Mr. Lawrence; and, as a foundation for classing the disease with cancer, he refers to its diposition to terminate in the gradual destruction or transformation of the tissues affected, its tendency to affect several organs in the same individual, and its reproductive character.

Another species of sarcoma described by Mr. Abernethy is the *mammary*, from the likeness of its structure to that of the mammary gland. It appears to be malignant, communicating to the surrounding parts a disposition to disease, and requiring the same free removal of them in an operation as a scirrhus, of which I suspect that it is only a modification. In corroboration of this opinion, I may observe, that Professor Carswell, in his invaluable Illustrations of the Elementary Forms of Disease, actually arranges mammary sarcoma as a species of cancer.

The *tuberculated sarcoma*, consisting of numerous firm globular swellings, of various sizes and colours, connected together by cellular membrane, advances to ulceration, is a malignant disease, and ultimately proves fatal. It is questionable, I think, whether this form of sarcoma is essentially different from scirrhus, which, we know, has its varieties.

A species of sarcoma, with which surgeons have long been familiar, is described under the name of *cellular tumour*, consisting of a fleshy mass, elastic, and almost fluctuating to the touch; tough, fibrous, and chiefly composed of condensed cellular tissue free from fat, the fluid in the cells being like that of the common cellular membrane.

Between the cellular tumour and the enormous swelling, in which the male organs of generation are sometimes involved, Mr. Lawrence conceives that there is this distinction,—the former is a new production, the latter merely an enlargement of the cellular and cutaneous tissues by interstitial deposition, curable by extirpation.

The *Fibro-cartilaginous tumour* is another variety of sarcoma, not unfrequently met with about the head, neck, and axilla; and sometimes grows near the mammary or parotid gland. It differs from scirrhus in having nothing malignant in its nature; the only inconvenience is what results from its pressure and size.

About two years ago, I removed a swelling of the fibro-cartilaginous kind, from the occiput of a blacksmith at Halliford. It had been stationary and free from pain for many years, but at length began to enlarge and cause a great deal of annoyance. It was as large as an orange; and the patient was induced to have it removed, in consequence of his suspicion that a difficulty of swallowing, which he laboured under, was dependent upon it. The latter affection ultimately proved fatal, however, and on opening him, a stricture of the œsophagus was found, with two considerable sacs extending from the tube above the obstruction, in one of which were two orange pips.

The *painful subcutaneous tumour, or tubercle*, was particularly described by Mr. Wood, in the 3rd vol. of the Edinb. Med. Chir. Transactions. Although of small size, and free from malignant action, it is attended

with most excruciating pain, it is generally situated in the cellular membrane under the skin, but sometimes in that which is between muscles. One tumour of this kind, removed by Mr. Liston, lay so deeply, that it was in contact with the posterior tibial nerve. The tumour is usually of the size of a pea, and seldom larger than a cherry. It is not very prominent; the skin is loose and moveable over it, and its structure is almost like cartilage. The reason of its causing the extraordinary degree of pain by which it is characterised, has been ascribed by some pathologists, amongst whom is the celebrated Camper, to its connexion with the twigs of the sub-cutaneous nerves. It is indeed declared, that filaments of nerves can not only be traced upon its surface but within it substance.

Camper's opinion, that the tumour depends upon a diseased enlargement of a portion of a subcutaneous nerve, has been almost universally adopted, and is that to which Mr. Wood himself inclines, though he thinks it very desirable, that additional minute and accurate examinations of the tubercles and surrounding parts, should be made, with the view of ascertaining, if possible, whether the diseased alteration of structure takes place on the neurilema, or within it; or whether it may have originated in the contiguous textures, and become afterwards connected with the nerve. In those painful tubercles which he had an opportunity of examining, he found only a firm, whitish, homogenous body, of a fibro-cartilaginous appearance, without being able to say whether it was included between the nervous fibrils or not, or whether it was even positively connected with them.

The pain comes on periodically, and shoots extensively through the limb. The slightest pressure causes the most excruciating torment, and such is the agony sometimes caused by the action of the muscles, that the use of the limb is entirely lost. The disease is more common in the extremities, particularly the lower ones, than other parts. There is only one right and effectual treatment, namely, excision.

Gentlemen, I must next call your attention to *Nævi, and the Tumours termed Aneurisms by Anastomosis.*—Certain natural textures in the body are, in the ordinary state, flaccid, but admit of being rendered turgid and firm at particular periods, when they become injected with blood. You will find examples of this kind of structure in the penis, clitoris, and nipple; and by French anatomists it is termed the *erectile tissue.* Baron Dupuytren compares the tumours, which usually go under the name of *nævi*, to a *morbid erectile tissue;* and, as far as I can judge, there is a sufficient resemblance between the natural tissues of this kind, and the structure of nævi to justify the comparison.

Under the head of morbid erectile tissues may be arranged,

1. The Superficial Nævus.
2. The Subcutaneous Nævus, and Aneurisms by Anastomosis.

Gentlemen, I will first speak of *superficial nævi*, or *nævi materni*, as they are called, signifying those congenital tumours, spots, or imperfections and peculiarities in the appearance and texture of parts of the skin, which are vulgarly supposed to arise from some influence of the mother's mind upon the fœtus, as when during her pregnancy she *longs* for various delicacies and fruits, which she is not able to procure, or, at all events, which she cannot obtain so quickly as she desires. Or, perhaps, during her pregnancy, she is terribly frightened at the sight of a spider, mouse, or some other animal; and then, whatever cutaneous mark the infant is born with, is imputed to such disaster. As a proof of the truth of the connexion of the nævi with such longings or frights, a strong resemblance is often fancied between these maternal spots and the objects of desire or alarm. Thus some nævi with a granular surface are compared to strawberries, mulberries, or raspberries, and are supposed to become particularly red and conspicuous when those fruits are in season. Others have a reticulated appearance, produced by the ramifications of minute vessels on their surface, and being thought to resemble a cobweb, are named *spiders' nævi.* Then you will meet with other congenital blemishes of the skin, which, on account of their peculiar red colour, are called *claret marks.* Another common form of nævus is, what you must be familiar with, as receiving the name of a *mole*, in consequence of its brown colour, and the long hairs growing upon it. Objects of this kind always present an opportunity for a flight of the imagination, and for the invention of comparisons and names.

These superficial nævi frequently continue stationary during life, and neither increase in size nor cause any inconvenience; but sometimes, in consequence of their happening to be situated on the face or neck, they cause considerable disfigurement, and, with the view of removing or lessening it, the excision of the blemish may be undertaken if desired.

Examples do occur, however, in which these maternal spots assume, after birth, a disposition to grow, and even to acquire considerable size. In this circumstance, it is prudent to recommend excision of the tumour, which, as it is only cutaneous, may be accomplished with safety and facility. I have known some of them disperse after inflammation had been excited in them, by inserting vaccine lymph in them, or by touching them with nitric acid or a strong solution of nitrate of silver, or rubbing them with this substance. I lately attended an infant for a nævus situated precisely over the fontanelle, or unossified part of the cranium above the os frontis. Apprehending that excision might produce more bleeding than so young a child, only four or five months old, might be able to bear, I held a consultation with Mr. Wormald, of London, and Mr. Harcourt, of Weybridge, and then passed a double ligature through it as deeply as seemed prudent. This destroyed the greater

Part of the nævus; but a trivial portion of it escaped the constriction and began to grow with great rapidity, so that in a week the swelling was nearly two-thirds of its original size. We now attacked the disease freely with the nitrate of silver, which produced ulceration, and the effect of this and of subsequent pressure soon completed the cure. This case, however, was a subcutaneous nævus, and consequently more difficult to cure than the superficial kinds.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE X.

Nature and Treatment of some of the Diseases of the Large Intestine.

GENTLEMEN,—To-day we proceed to the consideration of the nature and treatment of some of the diseases of the large intestine. You will see in the various systematic treatises on the practice of physic separate descriptions of the affections of this portion of the digestive tube, you will find diarrhœa in one chapter and dysentery in another, and you will observe, that a great deal of ingenuity has been expended in forming nosological differences between these affections. I fear that much of what has been written respecting them is rather calculated to puzzle and mislead than to inform the student. Viewed anatomically there is no essential difference. You may for every practical purpose place them in the same class, and consider them as the result of the same morbid condition of the same part, namely, an inflammation of the lower portion of the digestive tube. Some persons may quarrel with the term inflammation,—call it then irritation if you please, but the truth is, that it is disease of the lower portion of the intestine, the results of which are increased sensibility and altered secretion, and this description, I think, will fairly apply to one as well as the other. If a man has purging with fever and pain it is called dysentery, if he has purging without pain, and without any manifest febrile excitement, we call it diarrhœa. But, in cases where persons have died, after having laboured under diarrhœa for a length of time, we *generally* find, on dissection, lesions of the mucous membrane of the intestinal canal, sufficient to account for death. There are some cases indeed, in which the mucous surface takes on a gleety discharge, similar to that which follows gonorrhœa, and under such circumstances you will not be able to discover any distinct anatomical evidences of disease. These, however, are comparatively rare, and bear little or no proportion to those cases which present distinct traces of organic lesion.

On the subjects of diarrhœa and dysentery I shall be very brief, as our time is short, and every thing relating to the pathology and treatment of these affections may be expressed in very few words. First, then, as to diarrhœa, which is the frequent passing of stools of a more or less watery consistence, and which may, and generally does occur without fever. This affection may be considered to arise under three different circumstances, but, in point of fact, every form of the disease may be referred to a single cause, as there is no essential difference in the actual nature of the circumstances by which they are produced. A patient, for instance, takes a quantity of indigestible food, this produces irritation in the gastro-intestinal mucous surface, and diarrhœa is the consequence. Another is exposed to cold, or gets wet feet, the mucous membrane of the bowels becomes more or less inflamed, and this terminates in diarrhœa. Again, a patient, labouring under hectic, has profuse perspirations, these go off and are replaced by frequent fluid discharges from the bowels,—here, also, the result is called diarrhœa. All these forms are, however, referable to the same cause,—irritation of the mucous lining of the digestive tube.

A man commits an excess at table, eats something that he cannot digest, and gets diarrhœa. If you happen to be called to such a case at an early period, your course is very plain and easy; there is every chance that the affected organ has received (as yet) no material injury, and it is attempting to relieve itself by increased secretion. The indication here is to get rid of the source of irritation as soon as possible, and this is best done by prescribing a laxative to remove the offending matter, and then following it up with an opiate. The simple rule is to relieve the intestine, and prevent the liability to inflammation. A mild laxative, followed by opiates and demulcents, keeping the patient on a low regimen for a few days, and in a warm temperature; this is sufficient for the management of the first form of diarrhœa. In point of fact, the principal thing, which the practitioner has to do, is to watch his patient, and take care not to permit the inflammatory action to become developed. It is in such cases as these that the expectant medicine is of value. What you are to direct your attention to, is the state of the intestinal surface. If a patient gets an attack of pain, if his belly becomes tender on pressure, if he is is more or less feverish, you may be sure there has been some mischief done. If, on the contrary, the diarrhœa yields to the exhibition of a mild laxative and light diet; if the pulse soft and the belly not tender you have no reason to fear. But if the purging becomes more distressing, if the pain is severe, the abdominal tenderness evident, the thirst and restlessness continue unabated, it is a sign that the irritation has produced something more than mere increased secretion, and that actual disease of the mucous tissue is setting in. We have now a true inflammatory diarrhœa, which may be

looked upon altogether as an enteritis of that kind, in which there is a copious secretion from the surface of the intestine. You observe this leads us at once to the principles of treatment. Here we have fever, pain, frequent morbid stools, thirst, and abdominal tenderness. Well then, what are you to do? In a case where these symptoms are so severe as to excite alarm, at once begin by applying leeches. Where there is merely evidence of intestinal irritation caused by indigestible food, give a laxative, and follow it up with an opiate; where, in addition to the ordinary symptoms, you have fever, pain, and tenderness, never omit the application of leeches. Many a time have I seen cases of this kind, in which chalk mixture and astringents not only failed but even caused additional suffering, speedily and completely relieved by the application of a few leeches. In using leeches, too, we are not, like the practitioners who trust to astringents, playing at the game of double or quits; nor do we stop the purging by exchanging it for something else equally bad, or even worse, for a peritonitis or a bronchitis for instance; *by removing its cause we not only check the diarrhœa, but we obviate any tendency to a metastasis of inflammation to other tissues, and our mode of cure has at once the merit of being successful and safe.*

A patient who has had an attack of diarrhœa should have his belly swathed with flannel;—this should never be neglected. He will also experience a great deal of benefit from the use of the hip bath and occasional opiates. Give also a combination of rhubarb and Dover's powder, and you will find that it will do him a great deal of good. This is the remedy which Rhœderen and Wægler found to be of extraordinary advantage, in the mucous fever with diarrhœa which ravaged parts of Germany in the last century. Give two or three grains of each every second or third hour, and increase or diminish each of the ingredients according to circumstances, increasing the Dover's powder where the indication is to remove pain and irritation, and increasing the rhubarb where you wish to produce a laxative effect. This combination forms a remedy of decided value in enteric inflammations; it has been much used in such cases by Dr. Cheyne, and I have repeatedly employed it in the Meath Hospital with marked advantage. You are also to bear in mind that though the principle of treatment in this disease is to remove its cause and put a stop to the purging, still you are in no case authorised to give it a sudden check by astringents in the early period. I gave the reasons for this at my last lecture, and showed that it was based upon a general law of the economy. If an organ in a state of inflammation pours out an increased quantity of secretion, *it is the mode in which nature attempts to give relief, and if you suddenly arrest this secretion, the probability is that you will excite more inflammation in that organ, or cause a metastasis to other parts.* This is particularly the case if inflammatory fever exists. You must also attend to your patient's diet. Your object here is to support him on such a diet as will require but little digestive power, and will not produce large collections of fæcal matter in the bowels. Jellies, arrow-root, chicken-broth, and mild farinaceous food are the only things that can be used with safety, until the intestinal irritation has subsided.

By pursuing this plan of treatment with steadiness and decision, you generally succeed in cutting short the disease. In some cases the diarrhœa will run on to the chronic stage, just like the gleet which follows gonorrhœa; and this is to be looked upon as the apyrexial period, in which antiphlogistic remedies are no longer admissible, and where you may employ stimulants and astringents with effect. The best way to manage this form of the disease, is to make your patient use warm clothing, an even temperature, and mild nutritious diet; to prescribe the vegetable and astringent tonics, the hip-bath, and the occasional use of mild laxatives, followed by an opiate. In this way, after some time, the disease generally goes off, and the patient recovers his strength. But it may happen that this gleety discharge will continue unabated; it is running the patient down, and he wants some decided remedy to check it. Now the remedies which appear to have the greatest power in stopping this discharge, are the metallic astringents, and the turpentines and balsams, combined with some of the preparations of opium. It is a curious and interesting matter to consider how these remedies act. They are a class of medicines which exercise an extraordinary influence over discharges from mucous surfaces, in a way we do not understand, but the effect is to arrest these discharges. In a case of ophthalmia, accompanied by copious secretion from the conjunctiva, or in a case of chronic gonorrhœa, we know there is nothing more beneficial than metallic astringents and balsams; and we are also aware of the great value which turpentine and balsam copaiba possess in checking the increased expectoration of a chronic bronchitis. In diarrhœa, also, they have the same power; they check inordinate secretion, and remove the morbid condition of the mucous membrane on which it depends, by some effect produced on the surface of that membrane, but in what manner this is accomplished we know not. In severe cases of this gleety discharge, one of the most certain remedies we can employ is acetate of lead. You will seldom have occasion to use this or any of the other remedies alluded to, in the case of a healthy person, because the disease will seldom pass into this second or gleety stage, but if it should, and that it is running down the patient, it behoves you to check it as soon as possible, consistent with safety. Give then the acetate of lead in free and repeated doses, and it is singular to re-

mark what quantities of it patients under such circumstances will bear without any bad consequence ensuing. Hitherto many persons have been afraid to employ it in large quantities, from fear of producing painters' colic; but at present it is known that this disease is to be attributed to the absorption of the carbonate of lead in almost every instance, and that the acetate is comparatively harmless. On this point I can mention one interesting fact, namely, that I have been in the habit of using it constantly, and in considerable doses, for the last six years, and I cannot bring to my recollection one single instance of colic produced by it. One patient in particular, who was under my care, took it in very considerable doses for six weeks, without any apparent injury. The only cases, in which I have seen the acetate of lead act as a poison, were those in *which it had been used as an external application*. Whether it be that this remedy is more pernicious when employed after the endermic mode, or whether, when applied to the skin, it attracts carbonic acid from the air and is converted into a carbonate, I do not know, but of this I am certain, that where bad effects have followed the employment of the acetate of lead, they have been brought on by its external use. I generally use this remedy in the form of pill, prescribing two grains of the acetate of lead and a quarter of a grain of opium, three times a-day. With the same intention you may employ the turpentines and balsams, which have a powerful effect in checking mucous discharges. Dr. Pemberton, in his work on Abdominal Diseases, speaks very highly of the efficacy of balsam copaiba; and I have seen many cases where turpentine has had a great efficacy in arresting chronic diarrhœa. You will see, in the works on materia medica, some other remedies which you can employ with benefit in such cases, but I may mention one which is not generally known,—the alkali of the nux vomica. Strychnine was first used in checking mucous discharges by a German physician, and afterwards by Dr. Graves in this city. The cases, in which it proves most successful, are those in which there is a mere gleety discharge, a copious secretion from the mucous surface without any inflammatory action whatever, or if there be, where it is so low as not to produce the least feverish excitement or pain. Cases of this kind, in which strychnine has been eminently successful, have been published by Dr. Graves. Among others is that of a gentleman, who had sudden calls, so that he often had not time to reach the close-stool. He passed a quantity of thin jelly-like substance, and then experienced a transient relief until another attack came on. This case was cured by the use of strychnine, one-twelfth of a grain, three times a-day, made into pills with crumb of bread or aromatic confection.

I may mention here, that, in treating gleety diarrhœa in this way, one thing should be always borne in mind,—it is always dangerous to check any copious secretion suddenly, and the danger consists in the liability to metastasis or new inflammation. Never forget this. What generally happens is, that the patient's belly begins to swell, and you have ascites rapidly formed. Now, I have never seen a case do well in which this kind of ascites came on after the sudden checking of a diarrhœa, the patients all died. Another consequence is the rapid supervention of pulmonic inflammation, and here the disease is almost as bad as in the bowels. You will ask how this unfavourable termination may be avoided. The best mode is, while you are arresting the discharge from the bowels, to promote a determination to the surface. While you are using opiates, and stimulants, and astringents, employ general warm bathing, or the hip bath, dress the patient in flannel, and use mild diaphoretics every night. You will also do right in blistering the belly occasionally. In this way you will succeed in curing the worst cases of this chronic flux, without exposing your patient to the risk of new inflammation, or translation of disease to other organs.

One of the most common forms of diarrhœa is the purging which occurs in cases of phthisis; a physician will be called to treat this as often as any other, and it is of importance that you should have correct ideas with respect to its pathology and treatment. The ordinary opinion is, that this kind of diarrhœa is one of the results of hectic fever, and many practitioners, in treating the purging of consumptive patients, overlook the actual condition of the intestine, and only take into consideration the state of the whole constitution, of the hectic state of which, the diarrhœa is looked upon as one of the symptoms. The consequence of this is, that they do not proceed on the same principles in the treatment of this as of other similar affections of the intestinal canal. Now I would impress upon you, that you should always consider the diarrhœa of phthisis as depending in almost every instance on enteric inflammation. There is no fact in medicine better established than this. Persons think it is the hectic which produces the purgation, but I believe the converse of this proposition is often much nearer the truth, and that the constant diarrhœa often produces and keeps up the hectic. If you examine the digestive tube of a patient who has died with symptoms of phthisical diarrhœa, you will commonly find extensive ulcerations in the colon, cæcum, and ileum. In some cases of consumption, where the purging has been very severe, the amount of disease will often be found to be quite extraordinary; I have often seen the whole of the lower part of the tube one sheet of extensive ulceration. I find I have not brought up any specimens of the effects of phthisical diarrhœa from the museum, but will exhibit them at our next meeting. The preparations before us are those which are illustrative of dysentery, but they

will convey to you a good idea of the state of the great intestine in the diarrhœa of consumption, for the effects are nearly the same. Observe now, gentlemen, the importance of this fact, and recollect that in treating every case of consumption with diarrhœa you will have constantly to bear in mind this enteric complication. Recollect, also, that one of the best means of stopping it, when all other remedies have failed, is a blister applied over the abdomen. If the purging depended on hectic this would not be the case. I could bring forward several cases in which every thing had been tried without success, when a blister was applied to the belly, and from the time it rose, the patients ceased to be troubled with diarrhœa, and continued so up to the period of death. I do not mean that you should in these cases proceed to attack the enteritis with the same vigour as you would a similar disease in the healthy subject. Generally speaking, I believe this form of enteritis to be incurable, but it is of importance that you should be aware of this enteric complication in phthisis, and when you are called in to treat such a case, you should carefully avoid prescribing any thing calculated to add to the existing irritation.

Before I quit this subject, I wish to make one remark by the way of caution. It not unfrequently happens that a person, labouring under chronic diarrhœa, comes to consult a medical practitioner, and tells him that he has been suffering from this complaint for months, that he has eight or nine discharges by stool in the day, and that he has been under the care of five or six doctors in succession, without any benefit. Well, you are determined to have your trial too, and you commence operations by putting him on full doses of acetate of lead. After a week or a fortnight he comes back and tells you he is not a bit the better. You then try turpentine or balsam copaiba—no use. Nitrate of silver—the same result. The man gets tired of you in turn, and perhaps goes to a surgeon to ask his advice. The surgeon examines the rectum carefully, and finds, at a short distance from the anus, an ulcer, which he immediately touches with a strong solution of the nitrate of silver. The ulcer begins to heal, and accordingly as it heals, the irritation of gut ceases, and the diarrhœa goes off. The surgeon is extolled to the skies, and the doctors disgraced for ever in the opinion of the patient. Now this is not an uncommon case. I have seen several instances of it, and I must tell you I was once mistaken in this way myself. These ulcers are situated close to the verge of the anus, they occur chiefly in persons of broken-down constitution, and those who have taken a great deal of mercury. They produce irritation in the colon, tenesmus, griping, frequent discharges by stool, and, most commonly during the straining, a little blood is passed. During the course of last summer, I treated a soldier for this affection, who had been discharged from the East India Company's service (as was stated in his discharge) for incurable dysentery. I examined the rectum, and finding some ulcers close to the anus, had them touched with the nitrate of silver. Under this treatment a rapid amendment took place, and in the space of three weeks the man was discharged quite cured. Now, are you to make this examination in every case? I believe you will act rightly in doing so in every case of chronic diarrhœa in the male, but the examination is absolutely necessary in all cases under the following circumstances: first, when the diarrhœa has been of long standing; secondly, when it has resisted a great variety of treatment; thirdly, when it is combined with tenesmus and a desire of sitting on the night-chair after a stool has been passed, showing irritability of the lower part of the great intestine; and lastly, when the patient's health does not appear to be so much affected as it naturally should be, where there was long-continued disease of a large portion of the great intestine. A patient will come to consult you, who will inform you that he has had eight or ten alvine evacuations every day for the last six months, and yet he eats heartily and looks quite well. Under these circumstances, the cause of the diarrhœa will generally be found to be ulceration of limited extent low down the tube, and capable of being quickly and effectually removed by a strong solution of the nitrate of silver. I shall recapitulate all the circumstances under which an examination is indispensable; where the symptoms have been persistent, have resisted a variety of treatment, are accompanied by tenesmus, and where the injury done to the general health is not in proportion to the duration of the disease. I may mention here, that a medical friend of mine has communicated to me the particulars of another case of this form of diarrhœa in a soldier who was invalided on this account, and who experienced sudden and permanent relief from the application of nitrate of silver to some ulcerated spots which were discovered near the termination of the rectum.

We come now to the subject of *dysentery*. I shall draw your attention briefly to the general principles of the pathology and treatment of this affection; but I do not intend to enter upon the consideration of its general history which you will find sufficiently detailed in books. The first principle I have to enforce on this subject—and you may take it as an observation based on the soundest pathology—is this, that dysentery is inflammation of the large intestine. In some cases it is complicated with fever, and in others with disease in the upper portion of the digestive tube; and I believe that those cases, which are termed *epidemic dysentery*, are those in which this disease is combined with typhus fever, or with an extensive affection of the small intestine—where there is ileitis as well as colitis. I shall not take up your time with discussions respect-

ing epidemic dysenteries, or those of warm climates; it will be sufficient for the present to allude to that form of disease which is observed in this country.

I have told you that dysentery is an inflammatory affection of the great intestine, and all the symptoms during life, as well as the phenomena revealed by dissection, tend to confirm this view of the subject. We often have fever because the constitution sympathises with the inflammation of an important organ; we have excessive pain and irritation of the intestine, in consequence of its muscular fibres being involved in the inflammation; and we have discharges of morbid, purulent, and bloody secretion. You will now please to inspect this preparation, and hand it round. See the effects of dysentery—the extensive inflammation, ulceration, and sloughing of the mucous membrane. Here is another preparation; you perceive the whole surface of the colon is covered with coagulable lymph, which, in some cases, forms a chief part of the dejections. Here is a preparation which exhibits extensive sloughing of the mucous membrane; its tissue, you see, is quite abraded and destroyed. Here is a preparation of chronic dysentery, which presents a very curious appearance; the mucous membrane is finely mamillated, as it were, and it is stated on the label, that the process of cicatrisation was going on. If you compare it with the others, you will find a remarkable difference. Here is another specimen of dysenteric destruction.

Here, then, is a disease in which we have violent inflammation of the mucous membrane and submucous cellular tissue, and, in severe cases I believe, of all the coats of the great intestine, except the serous. Let us rehearse its symptoms briefly. Fever of an inflammatory or typhoid character, great pain and excessive irritability of the great intestine, morbid discharges of purulent, bloody, and lymphy matter, twisting pains called *tormina*, and frequently the absence of fæcal matter in the dejections.

At my next lecture I hope I shall be able to finish this subject, and I shall then bring before you some remarks on constipation and collections of air in the great intestine, two points upon which much light has been lately thrown.

CLINICAL LECTURES

DELIVERED BY

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LECTURE X.

On the Anatomy and Diseases of the Bladder and Urethra.

GENTLEMEN,—The symptoms of stricture, like those of most other diseases not immediately affecting life, are often as slow in their progress, and as insidious in their nature as they are appalling in their results. They may be divided into several stages, both with reference to the age of the patient, and to the nature and duration of the complant. When a young man has suffered from a long continued gleet, in the manner I have already described, he is in all probability first alarmed by a partial retention of urine; from having been obliged to make his water on the first sense of desire taking place, and which he could not restrain for an instant, he finds he cannot now pass it except by drops, or with great straining, or perhaps not at all. This usually occurs after a debauch, and is generally relieved by the warm bath, or hot fomentations to the perinæum, and a gentle dose of medicine, and the patient is equally aware of the cause and of the means of relief. This is the first inflammatory stage attended by thickening only of the mucous membrane, and admits of his sometimes evacuating his urine in what he calls a full stream. On this point, however, persons are always deceived; they never duly estimate the size of the stream they formerly made or now make, and when they are cured they always express their surprise at the difference which has taken place, and their astonishment that they should not have perceived the alteration. It is only when a great change has occurred that the sufferers are aware of the fact. The discharge, which it is probable may be but trifling, glues the sides of the orifice of the urethra together, and the urine which passes first in the morning often comes from this cause in a double or forked stream, whilst at others it is quite natural. The desire to make it is more frequent, and the patient has to get up at night sometimes four or more times instead of sleeping the usual number of hours quite soundly, although its evacuation is rarely accompanied by pain, unless the prostatic part of the neck of the urethra, or the neck of the bladder are particularly affected. The more anomalous sensations differ much from each other. Some persons feel only generally debilitated, others suffer from flying pains in the hip, a sort of weight in the pelvis, with uneasiness in the perinæum, and there is a very marked symptom which frequently prevails in mere permanent and irritable strictures, viz. a pain extending from the perinæum down the inside of the left thigh, and which occurs very rarely in the right, although I know not why it should be so. When the derangement has become a permanent stricture, the patient is much less liable to a sudden attack of dysury, or retention of urine, than he was in the mere inflammatory stage, but the stream of water has become less, and he is sensible of the more frequent desire to pass it, and that it is longer in flowing, although a smaller quantity is made at a time. He is also aware that he can repeat the attempt in a less space of time than formerly; for unless the bladder has become more than ordinarily irritable, the whole

of its contents are not discharged, but only such quantity as relieves the urgency of desire. There is still a discharge, and it is often this that makes the sufferer apply for advice, rather than the other symptoms. When the disease is more advanced, the urine flows only in a very small stream, either twisted, forked, double, broken, or passing by drops, and the patient is even obliged to solicit and assist its passage by pressing with his finger in the perinæum, and at the same time elongating the canal, something in the way, as a gentleman said to me, a dairy woman milks a cow. When the disease has reached this point, the urethra may have become dilated behind the stricture, and some water remains in the dilated part after the bladder has ceased to act, and this dribbles through the stricture, keeping the patient wet and uncomfortable, and often excoriated. This symptom is experienced in a less degree at a much earlier period, and the younger patient often complains of the longer time he is obliged to occupy than formerly, in getting rid of the last drop of water. This inconvenience sometimes remains when a man is apparently cured, and can pass a full-sized bougie with only a slight sensation when it goes over the part affected. This some patients expressively enough call *back water*, and it occurs either from there being a small bank of stricture remaining, or from that particular part, in which it was situated, having its natural elasticity impaired. This is the last symptom to be removed, and it is never effectually done unless every vestige of disease has disappeared. The straining, which is necessary to expel the urine through a very narrow opening, brings into action the abdominal muscles, and this often gives rise to a rupture, by which the maladies of the unfortunate patient are augmented, and he is obliged to encumber himself with a truss. His miseries are only, however, now beginning; the excessive actions of the abdominal muscles lead to a corresponding relaxation of the sphincter ani, and the fæces pass in small quantities, involuntarily, during the effort, the mucous membrane of the bowel protrudes, and this protrusion sooner or later, combined with bleeding piles, augments his distresses, which are even increased from time to time by an irritation of the whole of the mucous membrane of the bowel, which sympathises with the urethra, and occasionally causes a diarrhœa, which, whilst it augments all his evils to a point almost unbearable, is often removed as by a charm, by any thing which will allay the irritability of the stricture. Hitherto we have attended to one function only of the urethra, its second and hardly less important one in middle life shares alike in, and adds to, its difficulties. In the early stages the irritation of the prostatic part of the urethra and of the neck of the bladder, with which in structure and function it is inseparably connected, leads to the increased desire to make water, and the establishment of chronic inflammation; these re-act on the diseased part of the urethra in front, and materially augment the mischief. The orifices of the prostatic ducts inflame and enlarge; the inflammation extends to the glandular structure itself, even if it has not been sympathetically affected previously, the emission of semen is attended by excruciating pain, a dull heavy weight referred from the perinæum to the part, and an especial tenderness in the rectum when the prostate is touched mark the progress of the evil. The irritable state of the habit is immediately augmented; a cold shivering occurs, followed by heat; these are repeated and fever is fairly established; the secretion of the liver is principally deranged, and vitiated bile is discharged in great quantities; the fever at last gradually diminishes, although it does not entirely subside, and assumes more of an intermittent type, but not before a greatly augmented discharge of matter from the urethra marks the opening of an abscess of the prostate into it, or a tumour in the rectum, or perinæum, indicates its probable evacuation in these directions, and which must be assisted by art. The cup of misery is not yet full. The bladder partaking of disease may either be very much thickened and diminished in size, as well as acutely or chronically inflamed, or it may be augmented in size without being materially thickened. When the disease in the urethra has been rapid in its progress and acute in its symptoms, the bladder more often partakes of the first state; when the disease causing it has been slow in its progress, and situated at the neck of the bladder itself, or in the prostatic part of the urethra, it has appeared to me to be more often of the second. In either case the desire to make water is continual, the irritable state of the neck of the bladder and part immediately adjacent allow scarcely a moment of rest, and if pouches have formed in it, every turn of the restless individual renders his desires more urgent, by emptying these pouches of their contents. Worn down by his sufferings, in the agony of despair he prays to God for his dissolution, and if it has pleased the Almighty to weaken his intellectual faculties, as it has been his will to afflict his bodily powers, he sometimes becomes forgetful of his duties, and seeks in laudanum, or other narcotics, a temporary solace, which he hopes and expects may prove in this world eternal.

The testes at an early period of prostate irritation often partake of disease. This has often been supposed to depend on sympathy, but I apprehend, and am inclined to believe with Mr. Abernethy, that it occurs from the continuous propagation of irritation from the opening of the ejaculatory ducts in this part of the urethra. The testes become uneasy, then painful, and a little swelled. In warm climates it usually terminates in hydrocele, with a softened and enlarged, or sometimes a hardened and enlarged testis. In more northern climates, abscess occasionally takes place, or chronic induration is sometimes mistaken for scirrhus. Some of the most brilliant cures I

have been the means of effecting in surgery, have been made in cases of this nature.

When the obstruction to the passage of urine is nearly complete, the violent efforts made to discharge it bring on ulceration, and some parts yield. The bladder has been said to burst, but this is of very rare occurrence indeed. I have known the bladder ruptured by a fall from a height when a quantity of urine was contained in it, but not solely from its own action, or from over distension. Mr. Brodie has alluded in his work to two cases, which occurred in St. George's Hospital, of this kind; but these, or others of a similar nature, are only rare exceptions to a general rule, that the urethra yields before the bladder, when the urine is effused into the surrounding parts, giving a temporary relief, to be followed by more fatal symptoms, unless the science as well as the art of surgery be brought to the assistance of the sufferer. The surgeon may at this moment prove a guardian angel, one single thrust of a lancet, in the proper direction, may suffice, and the unhappy man, groaning in the utmost agony, is at once relieved, and placed in comparative safety, whilst in a few minutes more, the rupture of the urethra and the extravasation of the urine places him in a situation from which he will never probably be extricated, or only after much suffering. The urine is forced into the cellular membrane with all the power of the bladder acting spasmodically: the instant the rupture of the urethra takes place, the patient is relieved by the extravasation; he is sensible that his urine is flowing from his bladder, he hopes he is passing it, as the accident usually takes place in a moment of great straining and agony, but on looking down, he perceives with alarm the scrotum and the neighbouring parts greatly distended. He is, however, for the time relieved, the extraordinary excitement of the bladder ceases, and as the pressure and irritation on the posterior part of the stricture are partly taken off, the urine even dribbles through it, exciting hopes which are not likely to be realized. The white doughy feel of the scrotum assures the surgeon of the danger of his patient; he hopes yet by several free incisions to save him; but if he is not called until the skin of the scrotum, of the penis, or of the lower part of the abdomen, has taken on an erisypelatous blush, he will be, in all human probability, too late. The cellular membrane has lost its life, and must slough away with its covering skin, under which, and indeed before this process is completed, he sinks and dies. Mortification in these cases often rapidly supervenes, black patches appear in different places, the febrile symptoms are momentarily augmented only to be depressed, and the same symptoms of anxiety and distress, which supervene in all other cases of mortification, await in this. The cessation of pain, the extreme exhaustion, the inexpressible anxiety of countenance, combined with clearness of intellect, mark in the most fatal manner the nature of the case, and the patient's expression of his sanguine hope of recovery is only interrupted by the dim shadows of approaching death, which cast a blueness and a film on surrounding objects, which he himself observes and complains of, and but too ineffectually attempts to remove; or if his powers have been more slowly exhausted, he gradually sinks into a state of coma, or low muttering delirium, and dies.

This rapidity in death is not always so great; the ulceration of the urethra may be slower in its progress, an abscess forms external to it or to the bladder, the contents are then discharged, either naturally or artificially, and a passage through is thus established for the urine, and several fistulæ in perinæo or above the pubes or in the groin are or may be the result. This also, in middle aged or elderly persons, or those of bad constitutions, is often attended with great danger; a high degree of fever supervenes; cold shiverings mark the formation of matter; the pulse becomes as quick as it is small and irritable; the tongue gradually assumes a brownish colour, and is dry to the appearance as well as touch; the countenance changes to a dingy yellow, a reddish spot forms on the cheek, and if the abscess is not early opened, and relief in this way obtained, the patient equally, although less rapidly, sinks and dies. Its contents are always dark coloured, and unhealthy and fœtid, indicating the urinous participation in its contents.

In some few cases, but which I hope may always in future be obviated, the stricture is never so very complete but that some urine can find its way through it, and, by the great effort and urgent solicitations of the patient, it passes in a small, wiry, spiral, and often unconnected stream; more often by drops; or rather it dribbles away, forcing the patient, in better circumstances, to wear a bag to receive it; whilst the poor man, on whose clothes it falls, is rendered an object of abhorrence to himself as well as to all around him. It is with regret I recal to my recollection the situation of an officer, a captain of the navy, whose urethra I opened too late, some years ago, to bring the desired relief; and who, by the present improved modes of treatment, would, I am persuaded, have been saved. His bladder was enlarged, as it usually is in these cases, and was never completely emptied, although the urine constantly dribbled away. Affected by chronic inflammation of its mucous membrane, the urine was and is always, in these cases, loaded by a viscid muco-purulent deposit; and which, from its long retention, has often partly undergone that decomposition, which renders it offensive in more than an ordinary degree.

When the irritation is entirely chronic, the thick, white, viscid secretion predominates; when it is more or less acute, the muco-purulent. When chronic from time, but acute from suffering, the quantity of this kind of matter

discharged is quite surprising. I attended a friend of mine, a clergyman, for more than three years, who had also the assistance of every surgeon of eminence in London,—he died under the care of Dr. Prout and myself; and we both suspected there might be ulceration of the bladder, but dissection showed only the internal membrane of a dark red colour, thickened, and coated in patches by fibrine. I had cured him three times in earlier life of the same complaint, the fourth attack was always irrelievable by all the various means employed. In this case, and in all others of a similar nature, the mischief is not confined to the bladder, if the disease continues for any length of time. The ureters and kidneys become affected, and the destruction of the latter takes place in a variety of ways. It is usually supposed that these alterations of function, as well as of structure, begin not from the kidney sympathising with the bladder and urethra, in the same manner as the testes have been presumed to be affected, but by the extension of inflammation from the lining membrane of the bladder to that of the ureters. Without denying that this may be the case in some instances, I am not disposed to believe that it is the most frequent or common cause of such disease taking place in all. In the generality of these, the disease of the kidney is accompanied by more or less of dilatation of the ureter; and, from the views I have entertained of the manner in which the urine is admitted into the bladder, I suspect that it is the dilating and dilated state of the ureter which gives rise to the mischief in the kidney. In other words, the accruing difficulty to the ingress of urine into the bladder, whilst the kidney continues to secrete it, causes distension of the ureter, pressure on the tubular as well as the secreting parts of that organ, and ultimately chronic or acute inflammation, ending in absorption of its substance, dilatation, abscess, or other lesions of structure usually found in these cases.

If an abscess, under any of these circumstances, should lead to a communication between the urethra and rectum, the misfortunes of the individual are complete. The future offers to him but little prospect of health, of comfort, or of happiness; for, although I have known some instances of a cure being effected under these deplorable circumstances, the generality of sufferers have had, for the remainder of their lives, to bemoan their miserable existence, and to pray for its speedy termination.

On the method of examining the Urethra.

When it becomes necessary to examine the urethra by the bougie, in order to ascertain the nature of the disease existing in it, the surgeon should regulate his proceedings by the age and the symptoms of the patient. If he be a young man, suffering but little, and making his water in a tolerable stream, a solid silver sound is the best instrument, because it will always pass with much less pain or inconvenience to the patient, and is less likely to be interrupted in its progress by any of what are called natural obstacles. It should be well oiled, smaller at the point than in the shaft, and of a size to pass very readily into the orifice, whatever the size of it may be; it is to be, in fact, not more than two-thirds of the size of the canal. If the urethra is sound, this will meet with no obstacle, give no pain, and only cause a feeling of desire to make water as it passes through the prostatic part of the passage, accompanied by a sense of faintness, if it has been passed for the first time, but which does not always occur, and will not recur after two or three trials. If it only gives rise to soreness or pain when passing on, or rather over, the part particularly affected, and its progress is continued without inconvenience, it shews by this the portion of the urethra which is suffering from chronic inflammation. If the sound stops at the spot, instead of passing over it, and only proceeds after a little pressure, it indicates a thickening of the mucous membrane, and a probable loss of elasticity of its external covering, constituting what is called a dilatable stricture. It is not often that a derangement of this kind is found after the first six inches and a half, and when none is discovered in this space, the complaint is in all probability in the prostatic part, or from seven to eight inches, or even nine, as the case may be. If the instrument passes without obstruction, but with a pain which is often so very severe as to make the patient exclaim not only of it, but of the desire to make water, the disease is in the membrane of this part, and may extend by continuity of structure to the neck of the bladder, and which will be shown by its irritable state, and the urgency of the calls to rise at night to evacuate its contents. If the sound is arrested at or about seven inches, and after some difficulty, and on withdrawing it and depressing the handle, it then passes on into the bladder, the complaint is, in all probability, an inflammatory swelling of the transverse portion of the prostate, and must be treated very gently and cautiously, by abstaining from the use of instruments, or by using them very rarely, and at long intervals. In the former case of prostatic membranous inflammation, the solid sound should be laid aside, and the cure completed by the small soft bougie, which is to be carefully and very gradually increased to the full size of the orifice. When the obstacle to the passage of the instrument exists at the very entrance into the bladder, which is known first by the resistance at from seven and a half to eight or even nine inches in different persons, and by the peculiar sensation communicated by it to the hand as it enters the hollow bladder, the elasticity of the neck of this organ is impaired but not irrecoverably so. The patient will in this case not only have a frequent desire to pass his urine, but will find it very difficult to do it; and even when a No. 12 can be passed, he will sometimes be unable to evacuate his

bladder but by drops, and at last not at all. With a narrow stricture the young man makes a stream, however forked, spiral, or small; in this complaint he can scarcely make it at all, and at last cannot do so, and is to be relieved by the catheter. I have never seen this disease in a person under twenty-six years of age, and it is more common between thirty-five and forty-five, although when once formed it will continue through life unless relieved.

When a young man has a permanent stricture, the sound, if small enough, passes through it, giving to the hand of the surgeon the sensation of going over a ridge; and it is quite curious to observe how small an increase in the size of the instrument will often prevent its progress under any reasonable pressure. After a little time the obstruction becomes greater, and the opening narrower, so that the instrument which passed on the first trial will not go through after the violence offered by the larger one. The face of the permanent stricture will, in fact, not yield, yet if a smaller pointed conical instrument be insinuated into it, it will then give way by its inner circumference, but not by its surface, and a larger instrument will then go through without doing much mischief if it does no good. If the bougie hesitates, and afterwards passes on extending the pendulous portion of the urethra, and thus putting it on the stretch, it has in all probability hitched on a fold of the urethra; and if a small pointed instrument is used, and is arrested at a particular spot, whilst a larger and round pointed one passes over it, the obstacle is most likely caused by an enlarged orifice of a follicle, and which will bleed freely if the pressure of the small bougie be continued. If the larger bougie passes over a spot which is exquisitely painful, and which bleeds, it will often lead to the suspicion of an ulcer; and if much blood flows without any obstruction, or there is only a sort of hesitation, a soft fungous growth may have taken place from it, such as I have already described.

When a moderate sized bougie will not pass, and the diminished stream of urine leaves no doubt of the existence of a narrow stricture, a smaller bougie must be had recourse to; and if the obstacle is evidently before the curve of the urethra, or five inches and a half along the canal, the instrument, whether solid or soft, should be straight, and must be used with a light and gentle hand, by which means, and after several trials with the point turned in different directions, it may perhaps meet with the opening of the stricture and pass through. Too much, however, should not be done at one essay, pressure on the face of a stricture with any kind of bougie, I have already said, does more harm than the passage through it of a larger one. In these cases it will be necessary to take an impression of the face of the stricture, in order to discover where the opening is situated, by which means the point of the instrument may be more certainly directed to it. This is accomplished by means of a middle-sized bougie made of soft materials, the point of which is first softened by dipping it into hot water, when it is well oiled, passed down to the stricture, against the face of which it is to be gently but steadily pressed. If the stricture, although narrow, is not very tough or permanent, it will sometimes yield, and the softer bougie goes through, when the point of the harder one only turns back, the bougie having doubled on itself in the passage. If the stricture does not yield, the soft bougie does, and is gradually pressed into the sinuosities or openings on its surface, so that after remaining some minutes, it is withdrawn, with one or more processes projecting from the end of it, either acute or obtuse, as the case may be, and indicating the commencement of the true, and sometimes, also, that of one or more false passages. The experience of the surgeon will now be his best guide; and he will remember that this obstacle is much more often below than above, and that a channel in that direction is much more often a false than a true one. Messieurs Ducamp, Lallemand, and Phillips recommend for this purpose a bougie, the end of which is particularly soft, by being made of a quantity of cotton threads drawn through an elastic bougie hollow at each end. The cotton threads, when nearly drawn through, and only a small portion projects, are to be dipped into a composition composed of equal parts of bees' wax, empl. plumbi or diachylon, and cobbler's wax, and are to be rolled in the usual way, until the bougie appears smooth, round, and of an equal size. The French make this soft part too long, and they are therefore objectionable as imported from Paris, inasmuch as they bend more than is necessary, and leave a portion of the composition behind and in the stricture, giving rise, as Lallemand has himself shown, to great inconvenience and even distress. This is, in some degree, avoided by making the cotton thicker, and the soft point altogether shorter. The desired information being gained and the size of the opening ascertained, its passage is to be attempted by some duly selected instrument, of a firmer material, of plaster, of catgut, or caoutchouc, which last will be without comparison the best, if the obstruction be situated at or near the curve. It is not, however, an easy matter to hit the small opening, and many efforts may be made in vain, until at last one better directed or more fortunate succeeds. If by a bougie it should be allowed to remain in for an hour, and if a catheter it should be kept in altogether, unless the bladder is peculiarly irritable, and then it need not be carried into it, but be firmly fixed an inch beyond the stricture. This method is not however necessary, and is often so inconvenient to the patient's pursuits, that it cannot be adopted. A solid sound or catheter can only be used straight, or with its accustomed curve; a gum-elastic one can be made

to take any curve, and a soft bougie may be so managed, by bending it a little, about an inch from its point, to the right or the left, or otherwise, that the shaft may be level against the under part of the canal, whilst the point is directed against the upper.

When an elderly person is to be examined, who is known to have had stricture from his youth, there is no difference in the mode of proceeding, save that any stoppage of a small sized instrument, although it has gone beyond six inches and a half, must be viewed with great suspicion, as indicating the possibility of chronic enlargement of the prostate, the disease of elderly people, which gland should then be examined per rectum, and its enlargement, if any, ascertained. If the stricture admits of it, a large catheter will be found to pass easily, when properly borne against the upper part of the urethra, and its handle duly depressed, when the curve or stoppage of the smaller one will be satisfactorily explained. When the obstacle is further on, and at the neck of the bladder, it will be easily felt with due examination, and will be equally well known, by the sudden flow of urine on its entering the bladder, and by the peculiar sensation communicated to the hand at the moment.

If the elderly or middle aged man has attended but little to himself, and only knows that he has been some time suffering from a derangement about these parts, but what he cannot tell, and has no knowledge of any disease in earlier life, the surgeon must be cautious, even in his examination with a solid catheter, which is yet preferable to a soft bougie. There is, in most cases of disease of the prostate, some sympathetic irritation at the membranous part of the urethra, which will often offer considerable resistance to the passage of an instrument of a large size, and lead to the suspicion of stricture, after the same manner as irritation there, in early life, gives rise to a dilatable one. If a large catheter be forcibly used, the urethra will resist; but, unless there really be a stricture of a permanent kind, this irritable spot will be readily passed by gentleness and judgment in the management of the instrument, when the true nature of the complaint will be easily discovered. If there should be a permanent stricture, which is either unknown to, or only suspected by, the patient, the steady and regular obstruction to an instrument of a certain moderate size, whilst one a little less will readily pass through, and with the usual sensation of riding over an obstacle, will demonstrate its nature. Strictures in the urethra are prone to give rise to disease about the prostate, if not of the gland itself; but still, persons having the true chronic enlargement of the prostate, are not as commonly affected by obstruction in the anterior part of the urethra, as might be, *à priori*, supposed.

The disease being ascertained by the stricture, the means of cure are to be selected:—they are three in number—by dilatation, by cauteries, by division, and, perhaps by a continuation of all these methods; and first of dilatation.

On the Cure of Stricture by Dilatation.

As an impassable stricture cannot be cured by dilatation until such time as a passage is obtained through it, sufficient to admit a small bougie, I shall for the present suppose that passage to exist. A bougie of a size that will pass without inconvenience, is to be introduced and allowed to remain for an hour, and if the bougie is a little conical, the stricture may not only be completely filled by it but moderately dilated. If the stricture be very irritable the soft bougie may be grasped and marked by it, and the same thing will occur if the bougie be too large and too strongly forced into it. If the bougie be rather too large at the point, it will not proceed on meeting with the stricture, although sometimes, by a gentle pressure for two or three minutes, the stricture will gradually yield and allow it to go through, but there is a probability that more irritation will follow this mode of proceeding than if a small one were first introduced for a quarter of an hour, and a larger one then made to take its place, which it will almost always readily do. This is in fact the principle on which dilatation should be conducted, and it will always be accomplished more safely and easily for the patient if done in that manner, for a larger bougie can always be introduced if it follows a small one, than can be got into the bladder without such a precursor. This is a fact that does not admit of a dispute. I never use the bougie as a mere dilating instrument oftener than every two days, and when the urethra is irritable, only every three and sometimes four days. Proceeding in this manner the stricture gradually yields, and a bougie, whether made of plaster or of silver, and as large as the orifice will permit to enter, will at last proceed through the whole passage without meeting with any obstacle, and it ought to be repeated at longer intervals, until this disposition for contraction seems to be removed; and where a stricture has been a permanent one, the patient should be taught the manner of doing it, so that he may use it once a week, then once a fortnight, and at last once a month, or quarter. In this manner I have made some most successful cures, even where the patient at the beginning of the treatment could scarcely pass his water; and there can be no doubt of its being the best when it is successful, for the inner membrane of the urethra is by it restored, as nearly as possible, to its former and natural state, and without any new formations; for, although the question of the reproduction of mucous membrane has been much agitated, and particularly by continental writers, there does not seem to be any sufficient reason for believing that a reproduced part is so perfectly like the original structure as to resemble it in

every respect, and particularly in its secreting properties.

It happens, however, most unfortunately, and in too many instances, that the orifice of the urethra will not admit an instrument of a size sufficient to dilate the constricted part to the natural dimensions of the urethra; and more unfortunately still, that if the orifice be dilated by division downwards, so as to admit a sound as large as the urethra will bear, still the diseased part cannot always be sufficiently dilated to remove its contracting propensities, and the patient, from neglect or otherwise, finds it impossible to keep it up; in other words, the disease is not cured, but only kept at bay, ready to return in a few weeks, or months at most, and to be quite as distressing as before. This method of proceeding will, however, cure a great number of persons who cannot be cured by the simple passing of the bougie without the dilatation; nevertheless, it will not cure all, and many persons do not like the enlargement of the orifice. It was formerly done, as I have already said, by stretching the orifice until it yielded, when it was torn generally downwards. This was fashionable then, but is not so now; and if you are obliged to do it, or think it right to do it where the orifice is naturally very small or vascular, you should do it by division with a small sharp knife; and if a short bougie, of a full size be introduced every morning for a few days, the orifice will remain patulous for the future. This practice succeeds, because the sides of the orifice possess their natural peculiar structure, and the inferior elastic part is quite cut through; but it does not succeed in a similar manner when the whole orifice has been eaten away by ulceration, and in healing, contracts almost to the smallest possible point, constituting a stricture at the orifice, and giving rise to very serious reflections, which bear very forcibly on the different modes of treatment. As far as I know from personal observation, or from written testimony, this sort of stricture is never cured by dilatation, although it may be relieved; and where a person has such a complaint, he should always carry about with him a short silver tube, to be introduced for an inch whenever he wishes to make water, in the same way, as I am told, the eunuchs, called black, from the extent of mutilation, do in the east. I have never seen, although I have read of a case of this kind having been cured by caustic, but I suspect it was only a temporary relief, followed by greater contraction; and the best means I am acquainted with, is to divide the orifice downwards, and prevent the wound contracting and closing during cicatrisation by the use of the bougie.

If you divide the orifice in this manner, and by this means are enabled to dilate the urethra to a greater extent, it does not always succeed in effecting a permanent cure; for although the solid silver sound will go through the orifice, it will not proceed along the urethra without giving more pain than many people will submit to, and is therefore abandoned, the patient either changing his surgeon, or determining on putting up with the inconvenience. If this evil does not occur, another may, viz. the urethra becomes generally irritable or inflamed, an acute discharge is set up, and the bougie cannot be borne at all; or if this does not occur, it soon becomes apparent that this augmented dilatation is not sufficient to effect a permanent cure, and that a greater dilatation cannot be borne generally by the urethra; and, under these circumstances, attempts have been made to dilate the diseased part without dilating the whole, and even by this proceeding to avoid the preliminary step of dividing the orifice to obtain room for the admission of the larger instrument. My first attempt in this way, was by having a bulb made about an inch from the end of the instrument, which was small at its point, and gradually increased into a bulb, from which it again diminished to a proper sized shaft. This gave very much less pain than an instrument of the same size throughout, but I was soon satisfied that it was insufficient for all cases, and that in some a greater dilatation was necessary in order to effect a permanent cure, than could be made by this method. I then contrived an instrument with a bulb which opened by a piece of mechanism within it, worked by a screw in the handle, and I thought I must now certainly succeed, but this rather did too much, by producing irritation on the stricture and affecting the neighbouring parts, as the bladder, and even the testes, and proving to me that dilatation would not cure every kind of stricture. The history of the instrument is curious, inasmuch as it is the parent of most of those which have been made for various purposes connected with the bladder and urethra, and of the various improvements in the treatment of stone in the bladder which have been since introduced.

CONTRIBUTIONS ON MIDWIFERY.

BY THOMAS RADFORD,

Surgeon Extraordinary to the Manchester Lying-in Hospital, &c. &c.

NO. II.

On the Injury which the Head of the Child sometimes sustains in its passage through the Pelvis.

THE injuries which the head of the child sustains during its passage through the pelvis in protracted labours are very numerous. But that which is more particularly considered in the following remarks, is what is technically called the "mould shot head."

When the head enters a narrow pelvis,

and its occipito-frontal diameter corresponds with the oblique or the transverse of this cavity, and it is propelled through it by the unaided natural powers, an alteration in its figure is produced. The occipito-frontal diameter is considerably increased, whilst the conjugate is in an equal degree diminished. The same change in shape is observed in the head when it is long detained at the outlet of the pelvis, in consequence of rigidity of the soft parts. The brain bears this alteration in the figure of the cranium with comparative little inconvenience, because the pressure it sustains is parallel with the fibres of some of those parts which lie between the two hemispheres, and with the falx, which in its natural state supports this organ. The pressure is also less injurious, because it is applied upon the sides of the vessels, but not in such a degree as considerably to influence their calibres.

The figure of the "mould shot head" is very different from the one just described. It is very considerably increased from the base to the crown, and diminished in its occipito-frontal diameter. It does not take place in all cases of protracted labour, but only in such as are produced by a malposition of the fœtal head. It sometimes occurs when pressure is artificially applied in the same direction.

When the head presents with its long diameter lying parallel with the short one of the superior aperture of the pelvis, the occiput may be situated towards the pubes, or towards the sacrum. In both cases the labour is slow and difficult, even if the pelvis is well-formed; but if, along with an unfavourable position, the pelvis be narrow, or if the head is larger than ordinary, the difficulties are considerably increased. In this presentation the alteration which takes place in the head is as follows:—a considerable diminution in the length of the occipito-frontal diameter is produced, in consequence of approximation between the frontal and occipital bones, the fontanelles become nearly obliterated, the parietal bones are forcibly separated, and the sagittal suture is wider and more prominent. The brain is pushed into this space, which is insufficient for its accommodation, its organisation is injured, and the child, when born, is either dead, or dies soon after birth.

Injuries of a similar character are sometimes met with, when the long forceps have been used. This mischief will inevitably occur if the obstetrician has no regard to the kind of instrument he uses, or to the degree of pressure he applies. If the head is forcibly and rapidly dragged through the pelvis, regardless of the axis, instead of waiting for that moulding of the bones, which nature adopts when left to herself, effects of the most serious nature are produced upon both the mother and child. In all instrumental labours, when the head presents naturally, the pains, however trifling, if attended to, have a tendency to effect those salutary changes in the cranial bones whereby the delivery is accomplished more successfully. But if the instruments are brought into their full action, the tendency of these feeble efforts will be completely overcome.

Children, whose heads have suffered pressure in the direction of the occipito-frontal diameter, are frequently born dead, or they die soon after birth, unless the case is properly considered. They are unable to effectually commence the important function of respiration. The lungs are only partially filled with air by the convulsive sobs which take place. The action of the heart is not free; and if the pulsations in the funis continue, they are laboured and oppressed. The countenance is turgid, and of a livid colour, and the vessels of the conjunctiva are quite injected with blood. These symptoms fully prove, that the difficulty to commence respiration does not depend upon a mechanical obstruction from mucus in the trachea; but on the injury which the brain has suffered. This organ is in a state of apoplexy, sometimes depending on a very highly congested state of the blood vessels alone, sometimes on an effusion of blood, which takes place in different parts of the brain, and also varies in quantity. This opinion is corroborated by dissection, and the appearance discovered will be best understood by detailing a case or two.

Case I.—I opened the head of a child which was born with the symptoms already mentioned, and lived twenty minutes. A considerable quantity of extravasated blood was found upon each hemisphere, between the pia mater and the tunica arachnoidea, and at the base of the brain upon the dura mater. The superficial vessels were universally gorged with blood. Those of the plexus choroides were very turgid.

Case II.—Upon opening a child born dead, after a protracted labour, in which the long forceps* had been applied, on account of distortion at the brim of the pelvis, I found a considerable quantity of coagulated blood upon the left hemisphere of the brain, and also upon and under the cerebellum. The structure of the brain was much softer than natural. The vessels upon the surface were very full. Upon opening the ventricles, a clot of a flattened shape was seen in the left. These serious effects are produced by the brain being compressed in a direction contrary to the course of the fibres of some of those parts which lie between the hemispheres, and also to the current of blood along the longitudinal sinus.

The pressure, applied to the fore and hind part of the head, has a tendency to change the relative situation of many parts of the brain. It forces one hemisphere from the other, which, if carried beyond a certain degree, will inevitably produce laceration of the coats of the veins, which pass to the longitudinal sinus; and this danger is increased by the great congestion which exists.

The practice to be adopted, is to bleed freely as soon as possible after the child is born. The funis ought to be divided before it has ceased to pulsate, as no blood can be obtained if this be neglected. If the pulsations in the vessels of the funis have ceased, two leeches must be applied to the temples.

If these means have not been adopted, convulsions generally ensue, as happened in the two following cases, the first of which I am indebted for the particulars to my esteemed friend and partner Mr. Hunt, and I shall cite it in his own words.

Case III.—"In a case of difficult labour, which I attended last December, in conjunction with Mr. Greaves, one of the surgeons of the Lying-In Hospital, and which happened to a female suffering so much from contraction of the brim of the pelvis, as to induce the surgeon, who had attended at her preceding labour, to have recourse to embryotomy; the long forceps, with blades of equal length, were successfully employed, although very considerable difficulty was experienced in applying them. The child's head was not only very much lengthened, but also distorted at the right parietal region, in consequence of the pressure occasioned by the combined action of the contracted pelvic bones and the blades of the forceps. The face was tumified and dark coloured, and respiration oppressed. It was thought desirable to allow some blood to flow from the funis, but as this was not divided until its pulsation had ceased, although no ligature was applied, no bleeding of the fœtal portion followed. Next day the child continued to suffer from the state of the head, and had two convulsions; a leech was applied to each temple, gentle aperients ordered, and the child gradually recovered."

Case IV.—I was requested by Mr. Dick to visit a poor woman in New Blakely-street, who was suffering from protracted labour, caused by contraction of the brim of the pelvis. The long forceps were applied, and the child delivered alive. A depression of considerable size was produced on the left parietal bone, from the pressure it had sustained from the promontory of the sacrum. The signs which the child manifested were those of apoplexy. The funis was divided, but no blood followed, as the pulsation had previously ceased. The child continued in the same state during the day, and in the evening was attacked with convulsions, which were frequent. Two leeches were applied to the temples, the bowels were opened, and the child recovered.

* The forceps used in this case, as well as in the one related before, were Dr. Hayton's.

Foreign Medicine.

Angina following Measles.

In the Gazette Médicale de Paris of the 8th of this month there are some observations on gangrenous angina following measles. The author, Dr. David d'Ecueillé, prefaces his remarks by regretting that the attention of medical practitioners is not sufficiently directed to the subject of epidemic maladies, and he considers that this is the consequence of what he calls the centralisation of the study of medical sciences. They who are shut up in large towns are, in his opinion, less exposed to the causes which produce the different epidemics than those who dwell in the country; and consequently in the former places, where diseases nearly always present the same forms, the result of pathological observations is ne-

usually confined in a small compass. He then proceeds to observe, that in no part of France have so many efforts to investigate these forms of disease been made, as in the departments of the Indre and of the Indre et Loire. In the year 1833, an epidemical form of the measles ravaged some of the districts of the two above-mentioned departments, and was, during the first few days of the fever, so mild in its symptoms, that medical treatment was not considered requisite. In a short time, however, the disease assumed a more complicated form, became much more serious, and presented symptoms more severe in adults than in children. It was constantly accompanied with pneumonia or pleuro-pneumonia, enteritis or gastro-enteritis, simple or pultaceous angina, rarely did it follow its natural course. The eruption frequently disappeared on the slightest exposure to cold, and then the angina became serious. At the termination of the eruption many of the patients had white-coloured scales upon the uvula or arch of the palate, which were generally arrested by the application to them of the hydrocyanic acid; this was not, however, always successful, for sometimes the disease continued in spite of its use, and the cases terminated in death, with all the phenomena which have given to this form of angina the name of gangrenous. Many of the cases of measles got well by the second or fourth day; and when slight diaphoretic drinks did not suffice for the cure, emetics of ipecacuanha often proved beneficial; if the state of the tongue and stomach did not allow of the administration of this medicine, a succession of one or two blisters applied to the arm often was of service, especially when there was coryza or ophthalmia.

From the consideration of this complaint, the author proceeds to speak of another epidemic which raged in the same part of the country. Scarcely had the cholera, the measles, the swellings about the ears, and the hooping-cough ceased to exercise their more or less fatal influence, when scarlatina, angina parotidea, and croup attacked a great number of children.

The affection of the parotids, either alone or accompanied with enlargement of the submaxillary and sublingual glands, was the constant prelude to the scarlatina, which was prevalent from the commencement of September. The patients cured of the glandular enlargements were considered convalescent, when suddenly they were seized with the forerunning symptoms of scarlatina, and in twelve hours' time the eruption was generally complete; in other cases it was, however, longer in its development. The pains in the back part of the pharynx and difficulty of swallowing were very distressing, and greyish-coloured spots were observed on the former, which rapidly increased, and frequently caused the death of the patient in four or five days. Cauterisation seemed to arrest the disease most rapidly.

At the conclusion of the paper, Dr. David gives the following result of his observations on the different plans of treatment. Out of 58 cases of scarlatina which commenced in the parotids, 32 were bled in the commencement, and out of these one only terminated in death; out of 26 cases of long-existing angina parotidea, which were either leeched or bled with the lancet, six terminated in suppuration, petechiæ, anasarca, or death. Of 18 patients who were attacked with croup, 10 were bled and carefully watched; one only died, the other eight were only seen during the last hours of their life, and all with the exception of one died.

Diseases resulting from Conception.

M. Velpeau has lately communicated to the Institute of France the result of his researches upon the maladies which conception produces. He divides them into the maladies of the fœtus, of the cord, of the allantoid, and of its canal, and regards them as the source of a great variety of monstrosities or of morbid productions.

The hydatids of the uterus, which occur in clusters, for example, are, according to M. Velpeau, a production from the external face of the chorion, a degeneration of the granulations, and of the villous surface which covers this membrane. Scirrhus and steatomatous tumours of the placenta result from the effusion of blood, in consequence of the rupture of the external surface of the placenta, so common during the three first months of pregnancy. This effusion sometimes happens to a great extent, and forming prominences upon the internal face of the membranes, which it raises, often causing miscarriage; sometimes, however, its growth is suddenly arrested, and then it permits of the pregnancy

proceeding to its completion.—*Revue Médicale.*

TRANSLATION OF M. ALIBERT ON THE DISEASES OF THE SKIN.

BY SAMUEL PLUMBE, M.R.C.S.
Late Senior Surgeon to the Royal Infirmary for Children, &c.

We resume the translation of M. Alibert after a lapse, which has created an impatience on the part of many of our readers, but with the hope that we shall now be able better to effect our object, inasmuch as we have now on our table the latest complete edition of the letter-press, and the whole of the engravings, which have been completed, before us. M. A. having expressed a very reasonable dissatisfaction on some points, regarding the translations before published, we shall now give him, as well as our readers, the pleasure of reading a very correct (at least as far as our humble abilities go) translation of his "grand work."

M. Alibert is yet an enthusiastic student, as regards diseases of the skin, and it is evident, from the spirit pervading every line of his writings, that though half a century has passed over his head, since his attention was first directed to the subject, he has lost none of the ardour of youth in following it up. It is evident, also, from his writings, that he is a good and amiable man, and that the interest of his fellow-creatures is his greatest study. He plainly perceives, that best to serve that interest in his character as a physician he should direct his exertions towards the improvement of medical science, and particularly that branch of it which circumstances have given him opportunities of observation of, not to be obtained by more than a few. His juniors may be content to follow in his steps, and be well satisfied by picking up from time to time a grain from the chaff he, in his long life of practical experience, habitually sifted, and which escaped his observation; but they hardly find these grains, sow them as they will, productive of any thing deteriorating Mr. A's. high character as the first of French dermologists.

Still, with the obligation before us of rendering M. Alibert to our readers as near as possible, according to his own meaning, we are compelled to look seriously at the space necessary to do justice to ourselves and to him at the same time, and we must therefore say, as indeed we did at the commencement of the undertaking, that we will look *first* to our contract to our readers to give all which is new and established, as valuable, in the writings of our author, and that the description of the disease, the pathology, etiology, and method of treatment shall follow with the utmost regularity.

M. Alibert has invented a new form of illustration of the classes of cutaneous diseases. He has constructed an "Arbre des Dermatoses,"—a tree, the branches of which are twelve in number. We need not say more to excuse us from copying it, and handing it in our pages to our readers, than that the

First branch has .	47 sprouts,
Second branch .	28 sprouts,
Third branch .	14 sprouts,
Fourth branch .	21 sprouts,
Fifth branch .	10 sprouts,
Sixth branch .	14 sprouts.

134 varieties of disease on one side.

On the other

First branch has .	29 sprouts,
Second branch .	7 sprouts,
Third branch .	7 sprouts,
Fourth branch .	8 sprouts,
Fifth branch .	6 sprouts,
Sixth branch .	8 sprouts.

65—199 total.

This *denouement* will hardly, we think, induce our readers to purchase M. Alibert's book in this country, because the arrangement altogether, the multiplied divisions and subdivisions are such, that, on the very first view, none but a disciple of M. Alibert could tolerate, much less study, them.

To return, however, to our original object, namely, a translation of the new edition of the work before us, M. Alibert commences with "Erythema," which we take the liberty to interpret "Inflammation of the Cutis."

Of this he names seven kinds—

1. The spontaneous,
2. The epidemic,
3. The endermic,
4. Intertrigo,
5. The paratrine (from pressure),
6. Chilblains,

an affection, by the way, as well known to

involve the cellular tissue beneath the cutis as erysipelas, and

7. Inflammation from burning.

Erysipelas itself he has very properly estimated, in giving it no place among diseases so comparatively trivial.

The *spontaneous* form of erythema, he says, is marked by spots or spaces of different shades of redness, as if the parts had been exposed to the rays of a scorching sun. The backs of the hands, the face, the chest and lower extremities, and other parts of the body, simultaneously or alternately, are affected, always having distinct spaces of healthy natural appearance of the skin intervening. This form of disease is accompanied with slight sensations of pricking and irritation, similar to those produced by stimulating applications. A tingling and feeling of stiffness, such as a needle produces on pricking the skin, or the sting of a hornet, &c., next follow, and then symptoms of fever supervene. The conjunctiva becomes red in the neighbourhood of the carunculæ lachrymales. There is severe headach, and the heat of the skin prevents sleep.

When the affection has attained its highest point, the skin is swollen, and tender, and shining. When it begins to subside it assumes a blue, violet, or yellow colour. The cuticle exfoliates, but in a short time it regains its normal state. It is sometimes of a chronic character, sometimes more active.

The *epidemic* erythema, it appears, first attracted the attention of M. Alibert in 1828, when many patients of each sex were received at the hospital of St. Louis from different parts of Paris. The hands and feet of these were affected with swelling, accompanied with a sense of formication or pricking, and tingling, throbbing, burning, &c. It appeared in the Infirmary of Marie Theresa, in the Hôpital de la Charité, and the Hôtel Dieu in the upper stories, with symptoms more or less severe. MM. Miguel, Chomel, Cayol, Récamier, Bally, Chardon, and others, have published remarks on it as it passed under their observation, and of course, in an institution particularly appropriated to the treatment of diseases of the skin, we have not been unmindful of it ourselves. Successive desquamations of cuticle take place in most parts of the body, and particularly about the joints. Our means of observation were more extensive in St. Louis than elsewhere, for the reasons before mentioned. Many of the patients here were found to have vesicles on the extremities, containing a reddish serous fluid. These discharged their contents, and the cuticle exfoliated, leaving dry scales and scurf, which gradually disappeared. On the hands and other parts of the extremities they were thin, but on the feet somewhat thicker, and often very hard and thick indeed. In one case, of a pedlar, the heels were corned and hard as marble, and the lower part of the legs were encased as if in a boot.

The patients presented, besides the appearances described, circumscribed purple, or red patches on the fore-arms, hands, thighs, legs, and feet. A sooty black colour of the integuments of the abdomen, chest, arm-pits, &c., also evinced itself in the greater number of cases. One female particularly, whose breast was affected, had the nipple covered by this thickened and black cuticle, which ultimately separated like the cup of the acorn from the fruit. Many were so discoloured as to resemble chimney-sweepers, and when scratching off the discoloured exfoliating cuticle, and exposing the part beneath was resorted to, it was found covered by a substance like a dried earthy or farinaceous powder. The surface of the skin is in some cases found to be dry and harsh, as if it had been exposed to the heat of an oven.

Numbness of the feet, rigidity of the skin, inflicting much pain in walking, and much inconvenience in moving the fingers were the sequelæ.

This singular epidemic occasionally was accompanied with symptoms of a more serious character; vomiting, diarrhœa, strangury, convulsive and suffocating cough, blindness, &c.

Endemic Erythema.—This is the *pellagea* of Lombardy.

It is, says M. Alibert, a chronic disease of the skin, which shews itself usually towards the end of winter or beginning of spring. It attacks exclusively the peasantry, who work exposed to the rays of the sun, and who spend the best part of their lives in fatigue and misery. It is reproduced at the same period from year to year, through the life of the sufferer if he continue exposed to the cause of it. It was thought endemic where it was first noticed among the Milanese, but it is now known to extend itself wherever the same causes are found to exist. Piedmont is not free from it,

and cases have been seen at Vienna, and one individual, affected with it, has been seen by M. Alibert in Paris. The manner, in which this disease shows itself, is as follows:—towards the end of February or the beginning of March, when the peasants resume their labours in the fields, itching more or less violent is experienced by some of them about the fore-part of the neck and chest. The feet, the hands, and face are especially affected, the skin reddens, and a slight erythema shows itself, followed by desquamation about the ninth or tenth day. If, however, the skin is protected by any covering from the heat of the sun, no mischief arises; the backs of the hands, then necessarily remaining exposed, are the only parts on which it is seen, a severe smarting is felt, blisters containing a yellow fluid are formed, never becoming afterwards healthy in appearance, but breaking are succeeded by a blackish adherent crust, which is a long time in separating, and is renewed at intervals. However slight the attack, it scarcely ever disappears before the end of autumn. As winter comes on, the skin approaches to a healthy character, but remains dry and harsh, and shining as if covered with varnish. The following year the disease reappears, and goes through the course described over again. There is a variety designated "*la salsedine*," not so much dependent on the seasons of the year, and irregular as to the period of its appearance. A saltish taste in the mouth commonly experienced gives it this name; it is felt most in the morning rising. An acid discharge from the nose accompanies it. Diarrhœa, pale and fœtid urine, and an offensive perspiration follow. Loler says that the hair assumes a red and singed appearance, and drops off. Faintings and cramps take place, particularly in the muscles of the lower jaw. The persons affected sometimes have so little command over the muscles of volition, that when they attempt to walk they cannot turn, but proceed in a direct line, and endeavour to support themselves against any object in their way; others remain motionless, excessive tremor is the distinguishing feature of other cases; these and others ultimately become idiots, or at least insane, and a disposition to destroy themselves by drowning is supposed by some to be caused by the burning heat of the skin belonging to the disease.

The fourth species is the *E. Intertrigo*, or chafing between the legs. It takes place in corpulent persons not of cleanly habits, and in young children whose linen is not sufficiently often changed. If acrid, or even healthy urine is suffered to moisten the linen for any length of time, this affection is the consequence. Thus those who suffer from paralysis of the bladder can hardly be protected from it.

E. Paratrine; i. e. inflammation from pressure. M. Alibert has two kinds; that arising in the palm of the hand in labour with hard implements, and that so often seen on the coccyx in bed-ridden patients.

Itching and heat in the palm, and chronic inflammation, thickening of the cutis, and sometimes adhesion of the subcutaneous structure to the tendons of the flexor muscles take place. In such a case some alarm may be reasonably felt.

The skin over the coccyx often becomes inflamed in bed-ridden patients. It follows where patients have suffered from typhus, scurvy, and other diseases, wears an aggravated form in the more serious of these diseases. It often terminates in gangrene.

E. Pemio, or inflammation from chilblains. This is a disease which makes its appearance on the setting in of winter, and disappears as the weather gets warmer. Children, who are most subject to it, experience itching, and tingling. The poor exposed to cold show themselves first with sanious ill-conditioned sores, surrounded by thickening of the integuments, which become of a blue colour. Some writers think that the bone is occasionally involved.

E. par adustion; or the inflammation produced by burns. The effects of fire on living substances are totally different from those on dead or inert matter. M. Dupuytren, to show more methodically the phenomena of this aniduct, has adopted a division into six degrees. In the first or slightest, the skin is merely reddened. 2. It is blistered. 3. The cutis is involved, and it becomes excoriated. 4. An eschar or slough of the surface takes place. 5. The inflammation finishes by destroying the cellular tissue, and separating it from the bone. 6. The injured part is in the first instance, and at once, burnt to a cinder.

These different states every one will understand. In one individual they can never all be seen together. An event, however, oc-

cured in Paris, in 1810, which gave French surgeons an opportunity of witnessing them all at the same period, under the following afflicting circumstances. A fête was given in this year by a foreign ambassador to the Emperor Napoleon. An immense assemblage took place; the rooms of the palace, all thrown open to dancers, were discovered suddenly to be on fire. Six hundred persons were surrounded by the fire. Perhaps there was never a greater number of persons assembled, where terror was so powerful as to prevent flight. They were surrounded by fire; every thing favoured its activity. The varnished papers, the multiplicity of light, the light and flowing garments of the females, all contributed to favour the fatal element.

The slightest as well as the worst cases of burns were upon this occasion furnished to the French school for attention and observation. Never heart had so much to tremble at, never science so much to learn.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, February 22nd, 1834.

Mr. Pettigrew in the Chair.

Torsion of Arteries.

The usual business of the evening having been transacted,

Mr. Costello proceeded to perform the operation of torsion on the femoral and carotid arteries of a dog. He was assisted by Mr. Quain and Mr. Dobson. He laid bare the vessel, and then called the attention of the surrounders to the fact that there was a distinct pulsation, noticing this in refutation of the statement of Dr. Parry, that arterial trunks when exposed do not pulsate. Two pairs of forceps were then applied to the vessel, about three or four lines apart, and its coats were divided between them; the seperated portions were then dexterously twisted several times, and on removing the forceps, little or no hæmorrhage ensued.

Objections were raised to this operation by Mr. King and Mr. Greenwood, the latter of which gentlemen enumerated the different processes following the application of a ligature.

Mr. Costello then made several observations in answer to these objections, and gave a review of the remarks which he had made on the subject on a preceding evening, after which the Society separated.

MEDICAL SOCIETY OF LONDON.

Monday, February 24th, 1834.

W. Kingdon, Esq., President, in the Chair.

Empyema—Diseases of the Lungs simulating Hydrocephalus—Calomel in Pneumonia.

The preliminary business of the evening having been completed,

Dr. Whiting proceeded to relate the case of an infant, ætat. 6 months, in which the breathing was performed with difficulty, the face was slightly tinged with blueness, and the left side of the thorax was deformed, there being a projection of the ribs of more than half an inch on that side; the pulsation of the heart was felt in the right cavity, and in the epigastrium; there was no respiratory sound in the lower part of the chest on the affected side; at the upper part, however, puerile respiration was evident; the child could lie with the greatest ease on this side, and it appeared from the statement of the parents, that there had been some pulmonary ailment previously, but of what nature did not appear. From the train of symptoms which were observed, it was considered that there was deposition of fluid into the cavity of the pleura, and that it was a proper case for the performance of paracentesis; this was however delayed, nothing was given to the child but the breast milk, and under this absence of all medicines it continued to improve till last Wednesday, when it was observed to be at a stand still; small doses of digitalis and blue pill were then given, and under this treatment the child amended, and is now in a fair way for recovery. He thought, judging from the sequel of this case and other instances, that too frequent use of the trocar was often made, as it would appear that it was best to watch the progress of the complaint.

Mr. Kingdon said his attention had been directed to a corresponding case some time since; a child was seen by him twenty-four hours before its death, and appeared to be dying from hydrocephalus. The disease had been considered as an affection of the lungs,

and the surgeon who attended the case thought that the child had died from this affection. The body was examined, and both hydrocephalic appearances and empyema on one side of the thorax were found; probably if the disease in the head had not supervened, the child would have recovered; he coincided with Dr. Whiting in his opinion with regard to the too frequent use of the trocar.

Mr. Dendy had attended a child, æt. three months, in whom there was pain in the left side, dyspnœa, and inflammatory symptoms; proper antiphlogistic treatment was adopted, and for some time the child improved. On the fifth or sixth day the symptoms were aggravated, the breathing was laboured, and there was found tumefaction at one part of the chest, projecting between the ribs; respiration was indistinct at the lower part of the thorax on this side, but there was no metallic sound. In the presence of Mr. Callaway an oblique puncture was made in the tumour, when about two ounces of a limpid ichorous fluid escaped. In five or six hours the whole of the symptoms were much alleviated; the child went on well for some time, but on the sixth morning it died. It was evident that there was a relapse of the disease, since the child was getting better rapidly. No post-mortem examination was permitted; but the presence of fluid in the chest was, he thought, sufficiently well marked. In answer to a question, Mr. Dendy said that the tumour pointed externally, and was as large as a goose's egg, was situated near the apex of the heart, and had penetrated through the intercostal muscles; no external marks of inflammation were observed.

Mr. Kingdon said the amelioration in the symptoms certainly led to the supposition that there was no fluid at that time in the thorax, but it was possible that it was then making its way externally.

Dr. Whiting did not think that this was a case of empyema, but was probably an abscess formed internally, making its way to the parietes of the thorax. He did not think that openings into abscesses made at an early period were attended with benefit, as great constitutional irritation was thereby caused. In one instance he had found the abscess bursting internally into the bronchial tubes, and allowing of the escape of the pus mixed with blood by the mouth. It was probable case the abscess was formed either in the lungs or in the pleura, which was adherent.

The subject having dropped,

Mr. Kingdon informed the Society that an essay on the properties and uses of the lobelia inflata had just been laid before him by Mr. Robarts; but, as a great portion of the evening had elapsed, he thought it better that so important a paper should be deferred until some future occasion, in which opinion the Society agreed.

Mr. Headland wished to draw their attention to the subject of pulmonary disease simulating the symptoms of disease of the brain; this was well known to all as occurring frequently, and rendering the nature of the disease, at least in young children, exceedingly ambiguous. He was also desirous of ascertaining the views of Dr. Whiting (to whom all the Society were indebted for the many important remarks which he had made) on this subject, as to the efficacy of calomel in cases of pneumonia.

Dr. Whiting said he would wish to delay what he had to say on this subject till later in the evening, as many other members might be desirous to address the Society, and as he felt that he had already trespassed too much on their time.

Mr. Kingdon related an instance of pulmonary disease in his own family, where the administration of calomel had been used with perfect success, after other means had failed in arresting the complaint.

Mr. Stevens had met with a case precisely similar to those alluded to by Mr. Headland. The symptoms were all situated in the head, the thorax being entirely free from all appearance of disease; examination however proved that, although there was a slight degree of vascularity in the vessels situated at the base of the brain, still the principal traces of disease were found in the thorax. The lungs were tinged and vascular, the cells being filled with a frothy fluid; the child had had epileptic fits, and it might have so occurred, that the violent efforts during the paroxysms might have caused this appearance, as it did not altogether resemble inflammation. He was accustomed generally to give emetics previous to bleeding; and he had found that by this mode of practice the difficulty of breathing, and all the inflammatory symptoms were sooner relieved.

Mr. Proctor did not coincide with the last speaker in his opinion with regard to the safety of exhibiting emetics in the first instance; he however thought they might prove good auxiliaries. Local bleeding was, in his opinion, necessary in these acute forms of disease; as regarded calomel, he had used it many years since, but had not found it to prove such a specific as Dr. Whiting had on a former evening represented it.

Dr. Whiting, after making some remarks on the subject of auscultation, the use of which he considered as of very great importance in forming our opinions on diseases of the chest, said, with respect to the question of giving calomel in pneumonia, it was only in inflammations which did not partake of a specific nature, that he had found such decided benefit from its use; it was by the giving small doses and at long intervals that it did good, but the constant exhibition of a grain each hour scarcely ever failed to produce much and rapid relief. He related a case bearing upon this subject, when, the time for terminating the discussion having arrived, the meeting separated.

MEDICO-BOTANICAL SOCIETY OF LONDON.

Tuesday, February 25th, 1834.

Dr. Chowne in the Chair.

On the Dietetic and Medicinal use of Tea.

Dr. Ryan delivered a lecture on the dietetic and medicinal use of tea, in which he cited a great number of writers, who praised it in the highest terms, and many who condemned it as a fertile cause of diseases. The majority of the authorities quoted were in favour of the salutiferous properties of the article. He contended that its effects were modified by age, sex, constitution, and habit. He expatiated on the superiority and safety of black in preference to green tea. He adduced the evidence of the great mass of society in favour of the exhilarating effects produced by this beverage on most persons, and on the exaltation of the intellectual and physical powers, and the extraordinary effect it possessed of causing vigilance or want of sleep. He proved that tea was conducive to health when used in moderation, but was highly injurious when taken too strong, or used in excess, without a proper quantity of solid aliment. He detailed the effects of it upon himself under different conditions, when fatigued, or when taken on an empty stomach. He quoted Short, Petensen, Murray, the author of App. Medicaminum, Whytt, Beddoes, Smith, Lettsom, and many others, on the deleterious effects of tea. He also cited several who considered the different teas tonic, excitant, stimulant, and afterwards narcotic, sedative, diuretic, and diaphoretic. He illustrated, by numerous cases, its deleterious effects in inducing nervousness, lowness of spirits, tremors of the limbs, indigestion, disordered action of the heart, laborious respiration, faintness, change of temper. He alluded to the paper of Mr. Cole, read at the late meeting of the Medical Society; and after speaking in high terms of that gentleman's observations on the use of tea and coffee for fifteen years, could not agree with him, that these were the exciting cause of organic diseases of the heart, which were now so common. He mentioned a variety of causes of dyspepsia and functional disorder of the heart, and contended that organic diseases of that organ were not more common at present than they had always been; but that they had passed unnoticed until the discovery of the stethoscope, and the application of auscultation. He fully agreed with Mr. Cole, that dyspepsia, hypochondriasis, and various anomalous nervous affections, were greatly benefited and often relieved by the sufferers discontinuing the use of tea for some short time; but many persons so affected derived great relief from a moderate use of tea, and often gave it up with great reluctance. He then described the effects of tea, when taken without and with solid aliment, when the digestive organs were disordered, and in a state of health, and as modified by the addition of milk and sugar. He concluded by observing, that the good effects of tea experienced by the bulk of mankind, overbalanced the effects caused by its abuse in individual cases. He argued that the introduction of tea had greatly improved civilisation, by preventing intemperance, and replacing it by sobriety, by diminishing expense and debauchery. He stated that various attempts had been made to introduce infusions of indigenous plants in place of tea, but all had failed, and must fail. In recapitulation, he remarked, that a moderate use of black or bohea tea, as employed in this country, was highly conducive to health, but that green tea

was highly injurious. Dr. Ryan said, that he had confined himself to the good and bad effects of tea, and avoided details, which would occupy more time than the regulations of the Society would permit. He was anxious to derive farther information from many gentlemen present, who had been in China, more particularly with respect to the practice in that country of using tea, as he believed it was seldom employed sooner than a year or two after its preparation.

The Chairman observed, that the subject, so ably treated by the learned Professor, was one of great interest, and the Society would be happy to hear observations from visiters or members.

Dr. Sigmond then addressed the meeting, and expatiated at great length on the noxious and innoxious properties of tea. He described its effects on the animal economy, at different hours of the day, and in different states of the system. His observations were listened to with great attention, and elicited applause.

Mr. Judd mentioned a curious fact, which was, that when he was in Dublin, he knew dropsy cured by an infusion of green tea, made from the rejected leaves of the article, used by the nurse of the hospital. A patient was twice relieved with this remedy. He knew 1600 individuals who took coffee, yet paralysis was very common amongst them.

A gentleman observed, that, in reply to a question put by the learned Professor, as to the length of time the Chinese kept tea before they used it, he that day received a Canton newspaper, in which it was stated, that the period was from a year to a year and a half.

Mr. Smyly said that he was six times in China, and could speak from personal observation. He said the Chinese took tea, not as a meal, as we did, but during the whole day. It was the custom to present a visiter, first with a pipe, and then with a cup of tea. He bore testimony to the salubrity of the beverage, for the Chinese were a robust people, and lived to an old age.

Dr. Negri gave a minute account of the effects of tea upon himself, which corroborated that of his friend, Dr. Ryan's.

Mr. Pettigrew observed, that he knew a person who could not bear tea of a morning, but took it freely of an evening; and another who found it a preventive of intoxication.

It was then announced, that Mr. Everett, the Professor of Chemistry, would lecture on tea at the next meeting.

THE

London Medical & Surgical Journal

Saturday, March 1, 1834.

POWER TO CONFER MEDICAL DEGREES IN LONDON.

THERE is not a capital in Europe without its Universities, except that which exceeds them all, and all that history records, in extent and population. London contains about a million and a half of inhabitants, a large fraction of the population of Great Britain;—and yet, strange to say, the Government, in all its vicissitudes of courtiers and patriots, has never troubled itself with the thought of providing for the convenience of the first city in the world, by establishing a Chartered University within it.

Public instruction, the first care of every German Prince, (including his Majesty in his Hanoverian dominions,) has never been an object of Cabinet solicitude in England. "In pious times," the munificence of her sovereigns founded some Colleges; the wealth of a few of her mitred clergy was liberally devoted to the same purpose; and the death-bed generosity of many private individuals has provided funds for the maintenance of public schools, almost sufficient, under proper management, for the purposes of elementary education. But all these establishments of by-gone days, partake of the times in which they date their origin;—and, without questioning the wisdom of our ancestors, we may be allowed to judge, as they did, for ourselves in pronouncing the *letter* of their donations unsuited to the nineteenth century; nor should we apprehend grieving their spirit, by adapting their liberality to the wants of the age we live in.

Since the revolution, prelates have been too busy in erecting and aggrandising families, and successful adventurers in trade too full of the pomps and the vanities of the world to which wealth is the passport, to add to the stock for public education;—since that period, also, the personal influence of sovereigns has passed into the hands of ministers, and their tenure has been heretofore too insecure, too much dependent upon party principles and family connexions, to induce any Government to add to its difficulties the gratuitous task of legislating for public education.

We trust we have the good fortune to live in a new era, when the instruction of the people will be felt as the great duty of the Government. The subject is known to have occupied the Lord Chancellor's attention long before his Lordship's elevation to the influence of office;—and, promoted as he was—supported as he is, by a power beyond the intrigues of party, we have a confident assurance the Government of which he is so distinguished a member, will not shrink from the labours of revising and supplying the defects in the means of public education. Already are we indebted to his activity for the establishment of two great schools in the metropolis. The London University is the growth of his private interest; and the King's College, with its aristocratic subscribers, would never have existed without the stimulus of his exertions.

Neither of these schools at present possess a charter. As both of them, however, contain schools of medicine, it is not improbable they are looking forward to the possession of the power of conferring medical degrees, a power, which, it is admitted on all hands, should be vested in some body in the metropolis. In the present inquiry into medical education, the proper depository of this power will, of course, occupy much attention.

"It seems to us an indisputable principle, that the power of teaching should be left open to every possible competition, consistent with the proper qualification of the teachers. Some would have the examination of the candidate for a medical degree every thing, and would disregard the quality of his teachers, provided the candidate passes the requisite examination. In other words, they would overthrow what is called the certificate system. Agreeing in the paramount importance of the examination test, we cannot dispense with some inquiry into the student's sources of information;—and even, for the sake of the student, as a guide in his professional studies, certain recognised teachers should be appointed, who, of course, should possess qualifications, both professional and collateral, beyond the requisites for admission to practice. The nature and amount of these qualifications, and the mode in which they should be tested, are matters of interesting inquiry. The *Retired Practitioner*, whilst he admits the general practitioner, or doctor (as he would have him called) who has not had, upon obtaining his degree, the requisite increased knowledge for the rank of a teacher, (or a Fellow of the Royal College of Medicine, according to his nomenclature,) to offer himself, after some years' application to practice, as a candidate for this, the highest rank in the profession in his system,—allows others at once to take precedence, upon undergoing the necessary examination. It may be suggested whether it would not be more advisable, that none should be admitted to the honour of teaching without the experience of some years' practice in their profession.—However, whether the rank of teachers is to be recognised as the

highest rank of the profession or not, it is quite clear, that no real competition can subsist amongst lecturers, if the power of conferring degrees were bestowed exclusively upon any body having a school of medicine;—such a body would, of necessity, monopolise all students, from the real or supposed advantage of a connexion with those who were ultimately to examine all candidates; and that, without any reference to the merits of its Professors. For this reason it is advisable that a NEW board, distinct from any particular medical school, should be established in London for the purpose of conferring medical degrees; and that all the recognised Lecturers should be members of it; and that the Examiners should be chosen by ballot out of that class. The details of its management may be matter for further inquiry. But in the general principles here stated,—in the necessity of having in London, and, perhaps, at some other points of the United Kingdom, besides Dublin and Edinburgh, a body or faculty with power to confer medical degrees,—in the necessity of isolating this body from any one school of medicine, in order to secure a fair competition amongst qualified Lecturers; in these essential particulars we anticipate the concurrence of the unprejudiced part of the profession.

The pertinacious bigotry of the University of Cambridge has been brought, we are glad to observe, before Parliament. An hon. member has given notice of a motion for returns upon the religious tests exacted at the University. It matters little, however, to the profession what course the Universities in their repentance may be desirous to pursue. The highest honours of medicine can be no longer at their award; and the utmost value to be given to a degree in arts can only be to save its possessor from a rigorous examination in such parts of academical study as may be required, and justly required, from any particular class of the profession. Besides, it is very probable that the power of conferring degrees in arts will be given to one or both of the great London schools.

PROFESSIONAL MEETINGS.

IN this

"Sullen interval of war,"

we would not have our brethren in the country relax their efforts, or think that their co-operation in petitioning the legislature is unnecessary because a Parliamentary Committee is at this moment sitting. It is desirable to impress upon the legislature the necessity of reforming the intolerable abuses to which we are exposed; and to rouse the interest—not of the Committee, on which there are some ardent friends to the profession, but of the House of Commons. Nor is it to the lower House only we should direct our attentions. There is another place more swampy in its nature, over which it often requires some broad contrivance like snow-shoes to pass without sinking. The House of Lords, we are assured, will be dosed by the worthies of Pall Mall East; and, perhaps, at this moment, while the whole profession is confidently awaiting the decision of the Committee, in sober certainty that the legislature will act upon it, our antagonists are chuckling at the *possible* defeat of all our hopes in the upper House. Let not, therefore, the profession think that there is nothing further to be done; but, to ensure success, let them still act as if they had yet to make their first step. We have observed with gratification the alertness of the profession in the north of Ireland; and we implore our fellow-sufferers in

this country to imitate the example of the profession at Liverpool.

Since our last number, some members have been added to the Committee; which is understood to be still engaged in receiving documentary evidence.

French Hospital Reports.

HÔTEL DIEU.

Paralysis of the Organs of Sight, Smelling, and Hearing on the right side of the Face.

During one of the three days of the revolution of 1830, a man, named Godin, received a ball on the left side of the nose, which, having traversed the face in an oblique direction, made its appearance beneath the integuments, a little below the mastoid process on the right side of the neck. The opening, where the ball had penetrated, was perfectly round, corresponded in size to an ordinary bullet, and was situated precisely upon the level of the lachrymal duct, about two lines from the tendons of the orbicularis oculi. An incision was made upon the tumour, beneath the mastoid process, and the bullet, a little flattened on one side, was extracted without any difficulty. Some febrile disturbance of the system followed, which however soon disappeared; and then it was perceived that the whole of the right side of the face, along which the ball had passed, was completely paralysed, sensation and motion were quite abolished, there was a marked distortion of the mouth, which was drawn up to the left side, and was particularly evident when he attempted either to laugh or speak; the eye, upon the same side, had ceased to be at all sensible to even the most vivid light, but there was however no apparent alteration in its structure, and the pupil still preserved its contractility. On this side of the face the sense, both of smelling and hearing, was completely destroyed, whilst, on the left, these organs still preserved their sensibility.

Fifteen days after the wound hæmorrhage took place at the back of the fauces, and the patient, in a short time, lost upwards of a pound of a blood; the place from which the blood escaped could not be found, but as it chanced this was of no importance, for the hæmorrhage ceased spontaneously, and did not return. This patient left the hospital without any improvement in the paralytic symptoms, and at the end of six months still continued in the same state.

Inflammation of the Uterus and Ovaries.—Acute Peritonitis.—Death.—Autopsy.

In No. 3 Ward is a patient, who has suffered some time from chronic affection of the uterus and ovaries. In the hypogastric region there is a tumour, which extends even as high as the umbilicus, and in the left iliac fossa there is another of smaller size. She has œdema of the left lower extremity, and suffers much from violent pains in this leg, and irregular attacks of shiverings.

Jan. 30th. The pulse this morning is 120, and all the symptoms seem to announce the existence of suppuration in one of the abdominal tumours, most probably in the left ovary, the œdema and the pains in the left leg are manifestly caused by the pressure of the tumours on the vessels and crural nerve.

Since the last report this patient has been seized with acute peritonitis. The abdomen became swollen and extremely painful, nausea and vomiting occurred, the pulse rose to 160, and could scarcely be felt; mercurial frictions were applied to the abdomen, and blisters were placed upon the thighs. The prognosis, given by M. Chomel a few days previously, proved correct, for in three days the case terminated fatally.

Autopsy.—A sero-purulent effusion was found in the cavity of the peritoneum. The uterus, ovaries, and cæcum had contracted old adhesions, and the walls of the first viscus were much thickened, and its tissue was of a grey colour; the two ovaries were in a state of suppuration; the left iliac bone was denuded, and in the fossa of this side there was purulent effusion, which surrounded the psoas and iliacus internus muscle. In the stomach the mucous membrane was found in a complete state of ramollissement.

HÔPITAL MILITAIRE DE STRASBOURG.

Venereal Ulcers caused by the application of Leeches—Amputation of the Penis—Retention of Urine — Puncture of the Bladder.

— Desret, æt. 22, was admitted into the hospital with a venereal ulcer at the base of the glans penis, complicated with phymosis,

for which the application of leeches was judged advisable. Six were applied to the penis, but all the bites terminated in ulcerous wounds, which rapidly increased in size; the ulcer of the glans at the same time making rapid progress. Incisions were made in the prepuce, and afterwards it was excised, but the wounds resulting from both of these operations ulcerated. After trying in vain many cauterisations and different plans of treatment, M Béclard decided upon amputating the penis near to the pelvis. It chanced, in the operation, that the introduction of the catheter was delayed until after the application of the ligatures, and it then became impossible to discover the opening of the urethra, in consequence of the retraction of the stump. It became, therefore, necessary to wait until the passage of urine should discover the aperture. At length a desire to micturate was felt, but in vain did the patient endeavour to evacuate his bladder, for not one drop escaped. On the succeeding day M. Béclard, fearing that he had tied the urethra, undid all the ligatures, but still the desired opening escaped observation, and relief was only afforded by puncturing the bladder through the rectum. In consequence of the imprudence of the patient the canula escaped in a few days, and recourse was had, this time, to the puncture above the pubis, because of the swelling of the prostate gland. At the end of eight days, the urethra still being invisible, and the urine not escaping by its natural exit, the operation of cutting down upon the canal was performed with success. Inflammatory attacks several times made their appearance, and rendered the puncture above the pelvis each time indispensable. The urine still continued, however, to flow through the opening made anterior to the prostate. At the end of nine months this man was attacked with confluent small-pox, and died from suffocation caused by suppuration of the interior of the larynx.

HÔTEL DIEU D'AIX.

(*Bouches du Rhone.*)

Strangulated Entero-Epiplocele Crural Hernia—Double Incision at the Crural Ring necessary to relieve the Stricture—Cure.

M. G., ætat. 58, a woman of lofty stature, and formerly of a robust constitution, has suffered for a long time from derangement of the digestive organs, chronic bronchitis, and crural hernia of the left side, for which latter complaint she has constantly worn a truss. On the 5th of April the hernia became strangulated, and as all the plans adapted for its reduction failed, M. Goyrand determined not to delay the operation. The tumour was as large as a pullet's egg, hard and very painful. She complained of hiccups, and constantly vomited stercoraceous matter. An oblique incision downwards and inwards was made over the tumour, and the layers were successively opened; in the sac was found a portion of epiploon folded on itself about two inches and a half wide, and three long; below this was a knuckle of large intestine of a dark brown colour. The operator passed a bistoury under the falciform ring, and made an incision of two or three inches in length at the crural arch where the stricture was situated; this was sufficient to allow of the reduction of the intestinal portion of the hernia, but a further enlargement of the crural ring was necessary to effect the return of the omentum. This incision was made upon Gimbernat's ligament, and sufficed for the easy return of the protruding portion. The convalescence of this patient was long retarded by inflammation and suppuration in the omental part of the peritoneum, which had been cut during the operation. The suppurating matter made its escape by an opening left at the upper part of the wound. At the end of six weeks the suppuration and inflammation had disappeared, and the woman was dismissed cured.

British Hospital Reports.

ST. GEORGE'S HOSPITAL.

Strictures.

THERE is a ward (Egremont) especially appropriated for the male patients who labour under these affections of the urethra. It contains seven beds, and of these seven three are under the care of Mr. Brodie. The first of these is very simple, and is yielding slowly but surely to the use of the bougie, introduced alternately by Mr. Brodie and the house surgeon. The second is an obstinate case, combined with great tenderness of the urethral passage posterior to the stricture and fistula

in perinæo. This patient has also an abnormal elongation of the prepuce, caused by a vicious habit followed in early youth. The bougie is introduced about once every week only, as the patient complains of great pain afterwards, to relieve which he is frequently obliged to have a starch opiate injection. The third case is of a different and more obstinate nature than either of the preceding. The patient's name is Clark, and he has been under Mr. Brodie's care, either as an in or out-door patient, for upwards of a twelvemonth. He is naturally of a full habit, and hale, and rubicund in appearance, but this high flushed state of health has very much decreased within the last three or four months. On his first admission he was treated with common bougies, gum elastic catheters, and sounds of the smallest size; but these were found of no avail, and a whalebone bougie, tapering downwards to a point, was then tried, and with but little better success. These means having been tried for some time, and without success, Mr. Brodie remarked that the best plan that could now be pursued would be to divide the stricture with a lancet, in the groove of a catheter, in the manner recommended by Mr. Stafford, and then to pass bougies afterwards, and in that manner to keep the stricture open, as far as was practicable. He (Mr. Brodie) considered that this plan (which was only to be adopted in cases of urgent necessity like the present) was a good one, as far it went, and was certainly preferable to cutting down upon a stricture through the perinæum. He purposed, therefore, bringing an instrument with him, which he had ordered to be made for the purpose, at his next visit, and he would then operate.

At the next visit, it was found that since the last attempt to pass an instrument, the patient had been seized with great pain in the perinæum, urethra, and loins, extending downwards along the course of the meatus to the bladder. To relieve these, he had been obliged to take opiates, and to be kept quiet at rest in bed. He had also, according to the house-surgeon's report, passed some pus with his urine. Mr. Brodie, however, doubted the fact of its being pus, from the circumstance of there being no blood mixed with it, which, as he remarked, is a very rare occurrence. We should also state, that from the irritated state of the mucous membrane of the urethra, behind the stricture, the same membrane of the bladder has become affected with chronic irritation, to relieve which the patient has repeatedly taken the pareira brava with great effect, a medicine which, as Mr. Brodie observes, has been most ignominiously and unjustly expelled from the Pharmacopœia of the College of Physicians. It has a very great influence in cases of irritable bladder, lessening very materially the copious secretion of ropy mucus, as well as diminishing the inflammation and irritability of the bladder. It is given in the following manner:—Take half an ounce of the root of pareira brava, add to it three pints of water, and let it simmer gently near the fire until reduced to one pint. The patient is to take from eight to twelve ounces of this decoction daily. From the above circumstances the operation for dividing the stricture was postponed until a more fitting and favourable opportunity should present itself; it being a maxim with Mr. Brodie, that where there is any constitutional disturbance it is better not to meddle with the stricture until such disturbance shall have passed over. We shall continue our notes of this case.

Injury of the Hip Joint.

A boy, named Kennett, aged nine years, and of a light scrofulous complexion, was brought to the hospital from the country (Deal, we believe) having received, a twelvemonth before, some injury to the hip-joint. The history of the case, as far as we could learn from the confused statement the boy made, was, that he had fallen and struck the hip, immediately after which he felt pain at the anterior part of the groin of the same side, and three months afterwards the limb began apparently to shorten, so that he was obliged to raise the heel, and walk upon the toes of the affected side. On examination it was discovered that the hip-joint was anchylosed, and moved, not upon, but with, the pelvis; turning out the foot gave him great pain, and some slight crepitus could be indistinctly felt about the joint. The boy had been repeatedly blistered, and Mr. Brodie gave it as his opinion that the case was a most obscure one. There might be fracture near the neck, or separation of the epiphyses of the bone, or there might be merely thickening, and consequent stiffness of the joint, from the original injury. He recommended that the boy should be taken to Brighton, and undergo a regular course of shampooing. The boy was taken from the hospital by his friends a few days afterwards.

ST. BARTHOLOMEW'S HOSPITAL.

Moveable Tumour in the Thigh.

A young lad was admitted into the hospital with a tumour situated about midway between the inner condyle and neck of the femur. It was of an osseous hardness. The patient, in his history of the case, says it originally existed much lower down in the thigh, close to the inner condyle, and adds, that he received a violent blow exactly on the tumour, which knocked it up. He can move it up or down at pleasure. Mr. Earle thinks it to be an exostosis, which was attached to the femur by a very slender weak neck which was broken by the violence above mentioned. The patient is at present on low diet, and Mr. Earle will shortly (if, in the meantime, the tumour does not disappear) cut down on the part and remove it.

ROYAL COLLEGE OF SURGEONS.

NAMES of Candidates who received Diplomas during the last month.

George Henry Perrett	Sprootley, York.
Thomas Jackson	Hull.
Charles Fred. Browne	King-st., Covent Garden.
William Murdoch	Rotherhithe.
Joseph Walker Ratcliffe	Wrexham.
Maurice Mason	Colchester.
Henry Bidwell	North Walsham.
John Lindley	Derby.
Thomas Groome	Smithcot, Salop.
Walter Harsant	Earlsshan.
Thomas Norris	Peckham.
Edward F. Lonsdale	Berners-street.
Robert Stone	Oxford.
C. G. Parker	Henley-on-Thames.
J. C. Weaver Leven	Woolwich.
Henry Adams	Leicester.
Samuel Waldegrave	Milford Haven.
Robert Romney Cheyne	
George Fleetwood	Chester-st. Grosvenor-pl.
John R. M'Collah	Newcastle-upon-Tyne.
Robert John Scott	Plymouth.
Boniface Langley	Staffordshire.
John Philips	Haverfordwest.
William Heselden Eddie	Barton-on-Humber.
Frederick Shallis Saner	Bishopsgate-st.
F. Xavier Moseley	London.
Henry Bird	Swansea.
G. Rawden Robson	York.
David Fraser	Dublin.
Thomas R. Fisher	Oxford.
Robert Wylie	R. N.
William M'Carron	Londonderry.
John Burdon	Highampton, Devon.
Edward Martin	Doncaster.
L. P. Mortimer	Trehowel, Pembroke.
Thomas Wallace	Dormstown Castle, Meath.

APOTHECARIES' HALL.

NAMES of gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, February 20th.

James Thomas Edwards	———
Alfred Gyde	Painswick.
Daniel Augustus Lowe	Plymouth.
John Hodge Lawrence	Liskeard.
Thomas Slipper	Ludham.
Francis Augustus Young	Henley-on-Thames.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON.

Royal Asiatic Society	March	1,	2 P.M.
Westminster Medical Society	—	1,	8 P.M.
Anniversary of the Horticultural Society	—	1	
Medical Society of London	—	3,	8 P.M.
Harveian Society	—	3,	8 P.M.
Phrenological Society	—	3,	8 P.M.
Anniversary of the Royal Institution	—	4,	
Linnæan Society	—	4,	8 P.M.
Horticultural Society	—	4,	1 P.M.
Institution of Civil Engineers	—	4,	8 P.M.
Society of Arts	—	5,	7½ P.M.
Royal Society of Literature	—	5,	3 P.M.
Royal Society	—	6,	8½ P.M.
Society of Antiquaries	—	6,	8 P.M.
Zoological Society	—	6,	3 P.M.
Royal Institution	—	7,	8½ P.M.
Astronomical Society	—	7,	8 P.M.

THE Animal Kingdom, arranged according to its Organisation, &c. By Baron CUVIER. No 13. Henderson, Old Bailey.

Dr. R. Lee has been appointed Professor of Midwifery in the University of Glasgow.

Correspondents in our next.

METEOROLOGICAL JOURNAL.

MONTH. Feb. 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
20		45	49	37	29·90	30·05	75	75	N.W.	N.W.	Fine	Fine	Fine
21		42	47	35	30·16	30·14	73	72	W.	S.W.	—	—	—
22		46	52	42	30·14	29·98	75	76	S.W.	W.S.W.	—	—	—
23	○	47	55	41	29·95	29·63	78	78	S.W.	S.W.	—	—	—
24		45	49	38	29·74	29.84	77	77	W.	W.S.W.	—	—	—
25		44	48	41	30·25	30·24	76	78	W.N.W.	W.S.W.	—	—	—
26		47	52	47	30·15	30·06	78	78	S.W.	S.W.	Foggy	—	—

The fall of rain in February, $\frac{27}{100}$ of an inch.

50, *High Holborn*. WILLIAM HARRIS and Co.

ALL Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 110. SATURDAY, MARCH 8, 1834. Vol. V.

LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXIX., DELIVERED APRIL 1, 1833.

Gentlemen,—From the observations which I made at our last meeting, you may infer, that there is great similarity between the *subcutaneous nævus* and the tumour called by Mr. John Bell the *aneurism by anastomosis.* You should remember, however, that the latter is characterised by blueness of the skin, and a throbbing synchronous with the heart's pulsation. The swelling is emptied of its blood when pressure is applied, but, on the removal of such pressure, the blood quickly returns into the tumour. Whatever has a tendency to quicken the circulation renders the part more turgid, prominent, and discoloured. At birth, aneurism by anastomosis is often a mere speck or mark; but, on the arrival of puberty, it becomes large, and is apt to burst, in which event it bleeds so profusely as often to endanger the patient's life. In females, in whom aneurism by anastomosis is more common than in males, these discharges of blood more frequently present themselves at the menstrual period; and numerous instances have been met with, in which the bleeding returned every month, and became a substitute for menstruation. Aneurism by anastomosis is most frequently observed on the face, the scalp, the neck, or the upper part of the back, and sometimes on the hands and the feet. I have seen one example on the hand, but many about the face and head. The eye has also been the seat of the disease, as you may learn by referring to the Med. Chir. Trans. of London, in which such cases are reported by Mr. Travers and Mr. Dalrymple. This kind of tumour is described by Mr. John Bell as a congeries of small arteries, expanding into, or communicating with, considerable cells, as a substance resembling the gills of a turkey cock, or the texture of the placenta, spleen, or womb. Baron Dupuytren observes, that their structure, and occasional turgescence, give them a resemblance to the erectile tissues, such as are exemplified in the glans penis, clitoris, nipples, &c. Many surgeons have considered this disease as consisting of a morbid cellular structure, through which the blood passes from the arteries into the veins. These cells, however, might perhaps with more propriety be considered as presenting the sections of large arteries. The best authorities do not entirely coincide respecting the pathology of the disease, though all agree on one point, namely, that the subcutaneous nævus, or aneurism by anastomosis, is a new formation, charged with blood, and that, when cut, it bleeds most profusely and dangerously. Whatever plan you choose to try in the treatment of it, I should say, you must at all events not expose the patient's life to danger from the occurrence of hæmorrhage. I know of nothing that would be more likely to endanger a practitioner's reputation than a deviation from the principle or rule which I am now inculcating. Supposing you make use of a cutting instrument, therefore, whatever you do, don't cut into the tumour, but cut it out; make your incisions at some little distance from it, and remove it whole; this is the maxim of Mr. John Bell, and, as the saying is, it deserves to be written in letters of gold. If you cut into the tumour, it will bleed profusely, and your patient may die in two or three minutes, especially if the subject of operation be a child, in which the sudden loss of a moderate quantity of blood would suffice for the production of the fatal event. Besides the above important objection, let me observe, that if you only cut into the tumour, and do not remove every particle of it, though the patient should not die of hæmorrhage, he would not receive any substantial and permanent benefit, because the part of the disease left behind would grow with surprising rapidity to even a larger size than what it previously had. Hence, the safest practice is to make the incision into the sound parts around the tumour, and not into it,

Even, with these precautions, gentlemen, the operation is not altogether free from danger. Many cases are recorded of a fatal termination from loss of blood after the operation. Mr. Wardrop, in a manner that reflects great credit on his candour, has recorded an accident of this kind that happened in his own practice; the subject of it was a child; the tumour was of the size and form of half an orange, and was situated on the back part of the neck. The bleeding was so profuse, that the child was lost before it could be suppressed. On examination of the part, it appeared that an artery, of the diameter of a common quill, had been divided. Such misfortunes have made surgeons shy of using the knife for the removal of nævi, and led them to turn their attention to other plans. One of these consists in passing a double ligature through the tumour, and tying one part of it over one side of the base of the swelling, and the other over the opposite side of it. The only danger that can here arise, is from the irritation and sloughing induced by the ligature. If the constitutional and local disturbance be kept within certain bounds, and the sloughs separate favourably, the patient will recover. When the risk of hæmorrhage prohibits the removal of the tumour by the knife, no practice is perhaps more eligible than the ligature. Another mode of treatment, long ago proposed and often tried, is that of tying the principal artery leading to the nævus. Amongst others Mr. Hodgson and Baron Dupuytren have tried this practice, and the results were not satisfactory. In the majority of cases, the disease recurs after a certain time, and grows again as rapidly as ever. Yet, it must not be concealed, that this method has sometimes cured the disease, and we know that tying the carotid, as was done by Messrs. Travers and Dalrymple, accomplished the cure of two examples of this disease, formed in the orbit, and occasioning a protrusion of the eye. Another plan is that of destroying the tumour with caustic; this practice has sometimes been followed by Mr. Wardrop. Then, gentlemen, I have to mention to you the variety of treatment, which has sometimes been adopted, founded on the principle of exciting a degree of inflammation in the part, but not so violent a degree of it as to produce sloughing. With this view different stimulant applications have been employed. A stimulating fluid has sometimes been injected, by means of a very fine syringe, into the texture of the tumour. This plan has sometimes answered; but, I believe, only for very superficial nævi of small size. Nævi have been known to undergo a spontaneous cure, when accidentally attacked with inflammation excited by fevers, and hence it has been proposed to endeavour to excite the requisite degree of inflammation in the swelling, by the insertion of vaccine lymph. I have not tried this remedy myself, but have sometimes succeeded by applying the nitric acid and nitrate of silver. The late Mr. Abernethy was an advocate for treating nævi with pressure made with a bandage; if it answer, it must be on the principle of its producing the requisite inflammation in the tumour, for the production of a total change in its texture. In the Med. Chir. Trans. you will find a paper by Mr. Macilwain in favour of the seton as a means of curing nævi.

Gentlemen, having finished this subject, I may now consider *tumours of the encysted kind*. *Encysted tumours*, commonly called *wens*, are composed of cysts, of which the texture varies in different cases; but generally they are of a globular form, and when free from inflammation, are unattended with pain. They have been divided into three kinds; the first from the contents bearing some resemblance to honey is called *Meliceris*; the second *Atheroma*, from its containing a pultaceous or pulpy substance; the third, being filled with a substance like suet, receives the name of *steatoma*. These terms are applied to the more common forms of encysted tumours, but there are many encysted tumours, which do not contain any substances precisely corresponding to those now specified. The atheromatous tumours, which are situated upon the occiput and the back of the trunk, have remarkably dense, strong, tough cysts, while other cysts, met with on the face, are exceedingly thin. The cysts, therefore, are found to vary in their density in different situations. They have generally only one cavity, but, in some cases, they are made up of separate cells, which may be of different sizes. In certain examples, you will find them adherent to the skin and to the surrounding and subjacent parts. In a few cases, they attain an immense size. In general, however, their size varies from that of a pea to that of an orange. Fatty or steatomatous tumours are sometimes as large as a cocoa nut. Cysts, containing hydatids, and connected with the ovary, frequently acquire an enormous size. Here is a cyst, which I removed from the body of a man, who died two years ago in the King's Bench. Feeling a fluctuation I made an opening into it with a trocar, but hydatids prevented the issue of the fluid, and I feared, at first, that my operation was what Sir Astley Cooper terms *dry tapping*. This cyst was connected to the liver, and contained seven gallons of fluid, and hydatids of all sizes. Here is a specimen of an ovarian cyst of prodigious magnitude. These cysts are frequently divided by septa into distinct cavities. I opened a woman a week ago, a patient of the Bloomsbury Dispensary, who had a collection of cysts adherent to the mesentery. As much fluid was discharged as filled a pint and a half; it had the consistence and appearance of turtle soup, though not precisely the taste (*a laugh*). I had tapped her several times before she died, and let out various quantities of the same fluid. Steatomatous encysted tumours sometimes contain, in addition to their characteristic suetty contents, calcareous matter, and even teeth or

hair. The hairs found in encysted swellings have neither tubes nor bulbs. Tumours of the encysted kind are very frequently situated under the skin, where Sir A. Cooper conceived them to be formed by obstruction and enlargement of the sebaceous glands. This preparation, which Sir A. Cooper was so obliging as to make me a present of, illustrates the fact: here you see the cyst, with a duct leading from it to the surface of the skin, in which duct a black bristle is introduced. In the living subject the external orifice is denoted by a black point, which may be seen. Sir Astley Cooper finds, that these cutaneous encysted tumours, when they contain fluid, may be prevented from giving the subjects of them any serious annoyance by occasionally cleaning the orifice of the duct, and pressing out the contents. When those cysts occur near the eyebrow, they are generally situated under the orbicularis palpebrarum. In some persons there is an extraordinary tendency to the production of encysted swellings. A man, at an inn at Dartford, had an immense one on his head, which prevented him from wearing his hat, which was lifted up in a most ludicrous manner. You will find the particulars of this case in Sir Astley Cooper's Essay. This bust, which was taken after death, shows us the form and magnitude of an encysted tumour that was situated upon the back of the head. The surgeon, in this case, no doubt considered that the attempt to remove the tumour would not have prolonged the patient's life, though, in an earlier stage, it ought to have been taken away. The tumour, which I next show you, I removed from the epigastric region last year; it was connected with the cartilages of the ribs; and had proceeded to ulceration. I objected at first to remove it, on account of its size, and of its being already in an inflamed and sloughy state; but the smell was so offensive and oppressive to his family, and all who came near him, that I judged it advisable to perform the operation, large as the tumour was. The man did very well. Tumours of this description have sometimes been known to ossify. On the table we have a tumour, the cyst of which is completely ossified; it was taken from the liver. Here is another bony cyst, which was taken from the brain of a sheep.

The next preparation is a remarkably dense cyst, which was found between the cranium and dura mater of a young person; but the particulars of the case I am not in possession of. Some of the French pathologists distinguish encysted tumours, rather according to the nature of their cyst than their contents. The serous cysts are curable without excision; the fibro-cartilaginous are not so: the former may be cured like a common hydrocele. This is the doctrine of some modern French surgeons, though I do not admire the practice to which it leads. Some cysts throw out a horny substance: I removed one of this kind from the nates of a medical gentleman in this neighbourhood (*a laugh*), which troubled him very much. Whoever is curious about these horny growths, may go to the British Museum, where he will see one resembling a ram's horn in shape: it was taken from a woman's head. Another curious growth of a similar form was given to Sir A. Cooper by Dr. Roots: it grew on a gardener's head at Kingston, and, I believe, was successfully removed. Many years ago, I saw a horn cut away from the scrotum by the late Sir James Earle. It is in the museum at St. Bartholomew's, I believe, at the present time. I will now mention to you the treatment of encysted tumours:—those which are subcutaneous, and considered by Sir Astley as consisting of an enlargement of the sebaceous glands, in consequence of an obstruction of their duct, you may keep from enlarging, or becoming troublesome, by introducing a probe occasionally into them, pressing out their contents and afterwards maintaining the aperture clear; thus you will do away with the necessity of extirpating them. The generality of tumours, however, cannot be so easily managed. In some few cases, if inflammation attack the tumour, and lead to effusion of coagulable lymph in the cyst, so great a change may take place in the organisation of the cyst, that it may cease to renew its usual secretion, and the disease be finally cured. The plan of puncturing the tumour, letting out its contents, and then applying caustic or stimulating lotions is not a safe one. It not only generally fails in curing the disease, but is attended by some hazard. It has been known to give rise to the production of a fungous growth, accompanied by considerable pain, irritation, and the most dangerous disturbance of the system. The proper practice consists in dividing the skin freely, and detaching the whole cyst without wounding it. Sir A. Cooper first makes a section of the cyst, cuts it in half, as it were, and then dissects out each half separately. If the cyst, or any portion of it, be not removed, the patient will be likely to be afterwards harassed by the formation of a fistula, and even by the occurrence of fungous growths.

Another kind of tumour, which here I shall only advert to cursorily, constitutes a variety which can grow only from a mucous membrane, and is well known by the name of *polypus*. I only mention *polypi* in the present place for the sake of arrangement, and because I am considering the subject of tumours in general; but, in a future lecture, I shall notice polypi of the nose more particularly. Polypi are of three kinds, the *soft* or *gelatinous*, the *fleshy* or *sarcomatous*, and the *malignant* or *medullary*, which, in fact, partakes of the character of fungus hæmatodes, and is therefore improperly regarded as a polypus at all. The common polypus is soft, and of a light grey colour, not very vascular, and therefore not disposed to bleed much. It is not characterised by any tendency to become malignant.

Whatever inconvenience and pain may be experienced by the patient arise from its pressure on the contiguous parts, and its obstruction of certain canals or passages. It is mostly of a pyriform shape, and has a slender neck or pedicle. The neck generally remains almost of the same diameter and thickness as at first, but the body expands and acquires a broader shape, which, however, is frequently accommodated to the form of the cavity in which the tumour grows. Some polypi partake of a fibrous structure, and these are chiefly met with in the uterus. Some are so soft as easily to be twisted off with a pair of forceps: and this mode of removing, then, is called *extraction*. Polypi of the uterus are commonly removed with a ligature, applied with the aid of a double canula, like what I now show you; yet a few practitioners prefer cutting through the pedicle.

Another kind of tumours, which I shall here notice, are *warts*, which seem to be excrescences from the cutis, or tumours formed upon it. At first they are always covered by cuticle; but after they have risen above the surface of the skin, their apex assumes an expanded or cauliflower form, while the thin base remains either of its original thickness, or does not, at all events, increase in diameter so fast as the upper part of the excrescence. The deep part of warts in general is very sensible, highly vascular, and disposed to bleed freely when cut. These adventitious growths cannot long resist the application of stimulants; under such treatment they speedily diminish, dwindle away, or fall off. The stimulants for this purpose in common use, and, I may say, the best, are the nitrate of silver, the muriated tincture of iron, the sulphate of copper, a mixture of savine powder and subacetate of copper in equal proportions, and the concentrated acetic acid. There is one species of warts which may be said to approach polypi in the nature of their texture: they are seen about the rectum of both sexes, and on the perinæum and parts of generation in females. They may generally be cured by stimulating applications; but if these should fail, the best plan is to remove them with the knife.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XI.

Dysentery—Tympanitis.

Gentlemen,—I drew your attention briefly, at my last lecture, to the subject of dysentery; I stated that its anatomical character is now known to be inflammation of the great intestine, and gave it as my opinion, that, in many cases of the epidemic, disease of the large intestine occurs under one of two conditions, either as secondary to typhus fever, or with an extension of the inflammatory process into the small intestine. These circumstances should, I think, be always taken into consideration in cases of epidemic dysentery; but the ordinary sporadic dysentery of this country, which we have now to consider, is, generally speaking, an inflammation of the large intestine. The old doctrine on this subject was, that dysentery was the result of an irritation caused by the presence of scybalæ in the colon; and the indication was to attempt their removal by purgatives. You will find this opinion put forward in many of the older authors, and that the plan of treatment which they recommend is in perfect accordance with their notions of the disease. It is a very curious fact, however, that in this country these hard fæcal masses, or scybalæ, are very seldom met with in cases of dysentery. During the epidemic of dysentery, which occurred in Ireland in 1818, a series of clinical investigations was made on an extensive scale by Dr. Cheyne, who at that period had charge of the Hardwicke Hospital; and he states, that, on a strict examination of the discharges in a vast number of cases, no scybalæ could be discovered; and in the sporadic cases, which we receive from time to time into the Meath Hospital, I have never found that the patients passed them. It is a great error to think that dysentery depends on the presence of scybalæ; the notion is now shown to be founded on a false pathology, and the treatment which it inculcates decidedly bad. You will be convinced of the latter when you recollect that the disease is inflammation of the great intestine, that its effect is to throw the muscular fibres of the gut into violent and painful contractions, and that the existing mischief must be therefore greatly increased by the exhibition of strong purgatives. For a knowledge of the true and scientific treatment of this disease, we are indebted to the light which modern pathology has shed upon practical medicine. We now employ purgatives with extreme caution, we use general or local bleeding, according to the urgency of the case; and we treat the disease as an inflammatory affection of the lower intestine demanding active depletion. All writers are unanimous in recommending the employment of the lancet, in cases of acute inflammation; and acute dysentery is one of those cases, in which general bleeding seems to have the best effect. Dr. Cheyne states, that in this disease the most decided relief resulted from the use of the lancet. He says that in several cases in which there were excessive pain and tormina, and in which nothing was passed for several days but mucus and blood, as soon as venesection had been performed, the patients became comparatively easy, *and passed large quan-*

ities of feculent matter. He also found that the blood drawn was buffed and cupped; and states that his experience led him to conclude, that this disease was best treated by the lancet. Dr. Mackintosh, who has had great experience in dysentery, says, that laxatives will act with the best effects, when blood-letting has been premised. In fact the utility of general bleeding in dysentery is established beyond any possibility of doubt; and those who object to the use of the lancet object to it on theoretical, and not on practical, grounds. As a proof of this, you will see a great many cases, in which decided relief is obtained by a natural hæmorrhage from the bowels; and this I think ought to be sufficient to overcome the doubts of those who are sceptical as to the value of general bleeding in acute dysentery.

Next to bleeding, the best thing you can have recourse to is the free application of leeches, a practice not sufficiently appreciated or followed in this country. I would advise you to apply leeches freely, along the course of the colon; and if the tenesmus be constant and distressing, round the anus also. The case, in which the application of leeches round the anus is attended with the greatest relief, is that in which the tormina and tenesmus are excessive, and in which a quantity of blood is found blended with each discharge. After you have applied the leeches, I would strongly recommend you to direct your patient to sit in a hip bath for some time, and you will find that he will experience great relief, because the bath will act as a fomentation, and promote the flow of blood from the leech-bites. I have often seen the application of a dozen leeches round the anus, followed by the hip bath, attended with the most rapid and signal advantage in dysentery.

Many persons are in the habit of giving small doses of some mild saline laxative in this affection; of this practice I cannot speak much from experience, and I think more benefit will be derived from the free use of demulcents, gum-water, whey, barley-water, and linseed tea. But the internal remedies, on which we chiefly rely in the treatment of dysentery, are mercury and opium. Blue pill and Dover's powder are an excellent combination, so are calomel and opium, and you may give either of these remedies alternately with a mild laxative, whenever you are led to suspect an accumulation of fæcal matter in the bowels. In very bad cases, it will be necessary to continue the mercury until the mouth is affected; but in the sporadic dysentery of this country you will very seldom be under the necessity of bringing on actual salivation.

Permit me here, gentlemen, to make a few observations on mercurial action. In treating a case of dysentery, it does not, in the first place, follow as a matter of course, that you will cure your patient by subjecting him to the full influence of mercury. You are not to expect that salivation will be always attended with success. There is another point which should never be forgotten, although it is one which I believe has not been sufficiently considered. It is a common idea with respect to the administration of mercury in cases of local inflammation, that if you produce salivation, you do a great deal towards accomplishing a cure, and this is true in most cases. Many persons are of opinion, that it is the ptyalism which carries off the disease, and hence it is that we so often see the principal share of a practitioner's attention directed to produce salivation *at all hazards*. This is the history of the medical treatment ordinarily pursued in warm climates, where such vast quantities of calomel are given. Here the idea seems to be, that the disease is to be subdued by salivation alone, and acccordingly the practitioner "throws in" mercury, an expression evidently arising from the enormous quantities given. There are many cases on record, in which eight hundred and even one thousand grains have been given for the cure of a single local inflammation. But it is remarkable, that, in several cases in which vast doses have been given, no ptyalism has been produced, and thus it frequently happens, that the practitioner goes on increasing the quantity, lest he should have failed in consequence of not having given enough. All this practice is wrong, and founded on false notions; and I think that when you come to practise yourselves, you will be inclined to adopt the opinion, that, in cases in which mercury has been employed in the treatment of local inflammation, salivation is to be looked upon more as the result of the relief of inflammation to a certain degree than as its primary cause. For instance, suppose you are called to treat a case of acute enteritis or hepatitis; you give ten grains of calomel two or three times a-day, and find that day after day passes without any appearance of salivation. Another practitioner is called in, who bleeds the patient, and this is almost immediately followed by the appearance of salivation and relief. My friend, Staff-Surgeon Marshall, who is intimately conversant with the diseases of India, has informed me, that *he has never known a case in which abscess actually formed in the substance of the liver*, in which salivation could be produced; and that when the patient became salivated, he believed it to be a proof that there was no inflammation of an intense character, or that no abscess had formed. The greater the intensity of the disease, the less was the chance of salivation occurring, so that the salivation in certain cases appears to be the result of the same influence which produces a relief of inflammation, and not the cause of that relief. When, therefore, you have given mercury in free and repeated doses for twenty-four or forty-eight hours, and find no sign of salivation appearing, you should be cautious how you proceed, because in such

cases the inflammation may be of that intense character, which will not permit the mouth to be affected. Under such circumstances, the use of mercury, if rashly persevered in, will only aggravate the disease. In many cases of intense pneumonia, you will find that the patient will not be salivated until an advanced period, when, in consequence of the subsidence of intense irritation, the mercury is, as it were, allowed to produce its effect on the salivary glands. You may also frequently observe instances of intervals between the salivation, in which, during the course of an inflammation, the patient's mouth becomes affected by mercury; but if he gets fresh symptoms of the original affection, the salivation disappears, and returns only when the new attack has been overcome by appropriate treatment. I think that, under these circumstances, we are authorised in considering salivation as the effect of a certain degree of reduction of inflammation, and not as its cause. You will see the importance of these observations, when you reflect, in how many cases of local inflammation practitioners are in the habit of trusting to calomel alone; not being aware of the fact, that inflammation of an intense character has a powerful tendency to prevent it from acting on the salivary glands. Be assured of this, that if, in any acute visceral inflammation, after you have performed the usual depletions, you find an unusual resistance to the action of mercury, you may, on that account, form a more unfavourable prognosis.

There is one point in the treatment of dysentery which it is necessary you should be acquainted with. Sometimes the symptoms steal on gradually, and the patient appears to be in a condition not at all dangerous, when, all at once, the disease explodes with violence, and exhibits an extraordinary intensity; the fever is ardent, the tormina excruciating, the tenesmus constant and harassing, the dejections frequent and blended with lymph and blood. Such an array of threatening symptoms must be met with a corresponding activity. In such a case as this I would bleed, leech, use the hip bath, and give free doses of calomel and opium; and if you were to ask me, to which of the internal remedies used I should attribute the most decided alleviating influence, I should say to the opium. Dr. Cheyne says, "after the lancet, the best remedy I know of is opium." He says further: if another epidemic, similar to that which he witnessed, occurred, he would have no hesitation in giving opium, in four grain doses, in such cases.

There was a very curious circumstance connected with the history of the epidemic dysentery of 1818–19. At one time the deaths happened to be extremely numerous, and every thing which the experience or ingenuity of Dr. Cheyne could suggest failed in arresting the disease, in many cases. An English physician, who happened to be in Dublin at that period, and was in the habit of visiting the hospital, proposed the administration of large doses of cream of tartar, stating that he had tried it on several occasions under similar circumstances, and was convinced of its value. As the cases were not succeeding which had been treated after any of the ordinary modes, Dr. Cheyne consented to the exhibition of the cream of tartar, and allowed the physician to prescribe and administer it himself. Accordingly he proceeded to give it in doses of half an ounce every fourth hour. Its first effect, generally, was to produce violent distress, and to aggravate all the symptoms, but, after three or four doses, bilious and feculent stools came away, and the patient experienced the most extraordinary relief. Many cases, which had been considered desperate, improved and recovered, and Dr. Cheyne expresses his conviction, that many persons were saved by this practice, who would have been lost under the ordinary modes of treatment. One of the older German authors has also alluded to this singular efficacy of cream of tartar in the treatment of dysentery; and from the result of Dr. Cheyne's experiments, there can be no doubt that it is entitled to a high rank among the remedies usually employed. In case you should prescribe castor oil as a laxative, it will be necessary to combine it with mucilage of gum arabic and a few drops of laudanum; given alone, it will be likely to prove too irritating, particularly during the acute stage. In the advanced stage much benefit will be derived from a combination of castor oil with tincture of opium and a small quantity of oil of turpentine. This is not at variance with the pathology of the disease, for there is a period in this as well as in every other form of inflammation, when stimulants may be used with benefit.

Such is the treatment of the ordinary forms of acute dysentery; but it may happen that you will be called to a case in which you cannot employ these decided measures; and here I shall mention, that in all local inflammations it is of the utmost importance that you should act with judgment and decision in the commencement. Every hour is precious; a single day is worth much; and if two or three days are allowed to pass, and the treatment is inactive or indecisive, the patient too often sinks into the chronic stage or dies. Whenever you happen to be called to treat a case of acute local inflammation, attempt to cut it short as soon as possible; it is much easier to cure an inflammatory attack in its commencement, than to save the patient from the effects of it in the advanced stage. Now, if you should be called to a case of dysentery of some standing, and on your arrival find the patient lying on his back, his skin of a pale dirty hue, his eyes sunk and without lustre, his extremities cool, and bedewed with a clammy sweat; his pulse small, rapid, and feeble; his thirst ardent; his pains and tormina inces-

sant; and constantly passing from his bowels a quantity of fluid matter, blended with depraved mucus, lymph, and blood, with great irritation about the anus, and if these symptoms have lasted for some days you may be sure there is extensive ulceration of the lining membrane of the large intestine. How are you to act under such circumstances? The patient will not bear bleeding, or perhaps the application of a small number of leeches. Here your sole object must be to support your patient's strength; you must give wine (if the skin be cool), strong chicken broth, beef tea, jellies, &c.; you must wrap your patient in flannel, and have recourse immediately to anodyne and astringent injections, and you should blister the abdomen, taking care to remove the blister at a proper time, and not leave it on so long as may add to the existing irritation. You may also prescribe the acetate of lead, or the sulphate of zinc with tincture of opium. I have seen several cases of this kind in the Meath Hospital, in which the administration of the sulphate of zinc was attended with good effects. The best mode of using it is to dissolve ten or twelve grains of the sulphate of zinc in six or eight ounces of cinnamon water, with a proportion of laudanum, and direct this quantity to be taken during the twenty-four hours. Dr. Elliotson recommends the sulphate of copper, and you can employ it in combination with opium. In this way, by supporting your patient's strength, keeping him warm, paying attention to the state of his bowels, using counter-irritation, and prescribing astringents combined with opiates, (taking care not to check the discharge too suddenly,) you will often succeed, even in very bad cases. Before I quit this subject I may observe, that Dr. O'Beirne has succeeded in some cases, and in others has given great relief by the use of tobacco injections. You can understand this when you reflect, that tobacco acts powerfully on the general system, and produces effects somewhat analogous to bleeding. Like general bleeding it brings on faintness, vomiting, cold skin, perspirations, and feeble pulse. It is also a powerful anti-spasmodic, and Dr. O'Beirne states, that its employment has been attended with the best effects in several very bad cases. I have not tried this remedy myself, but I think it well worthy of a trial in the acute stage of dysentery, when there is room for an antiphlogistic treatment. In the advanced stages, of course, it is inadmissible.

We come now to consider the affection of the digestive tube, which merits a separate consideration, and this is tympanitis, or, as it is sometimes termed, meteorism. I shall not enter upon the general pathology of aëriform effusions into the abdomen; we are not acquainted with that peculiar condition of parts which produces them, but it is now established that we may have effusions of air, not only into the digestive tube, but also into every part of the body. The term tympanitis is limited to effusion of air into the digestive tube, in all parts of which we may find it. We detect it in the stomach under two circumstances; first, as a recent and transient affection, as when it comes on after swallowing indigestible matter; secondly, in a more permanent form, as when it depends upon hysteria, hypochondriasis, or chronic gastritis. It may be also frequently seen in very young children, when there is feverishness with irritation of the digestive system. I recollect a very remarkable case of this kind, in which the distension was so great, and the pressure on the diaphragm so considerable, as to cause displacement of the heart upwards;—this, I believe, has not been mentioned among the causes of displacement of the heart. The symptoms of this affection are sufficiently obvious;—a sense of uneasiness and distension at the region of the stomach; when the effusion is in excess, a distinct tumour can be felt, and the sound on percussion, over the stomach, is like that of a drum. It often happens, also, that when the patient is shaken, a distinct sound of fluctuation is heard, a circumstance which more than once has led to the suspicion of the existence of pneumothorax, or empyema. There are also cases on record, in which the distension was so great as to cause rupture of the stomach, and effusion of its contents into the cavity of the peritoneum, causing intense inflammation and rapid death.

The effusion of air into the intestinal tube is extremely common in cases of acute enteric inflammation and gastro-enteritis, after the disease has lasted for a few days, and, as this is a matter of considerable interest, I wish to make a few remarks upon it. It is of importance that you should bear in mind, that this is one of the results of enteric inflammation, because many persons are in the habit of looking upon it, not as a mere symptom of another affection, but as a peculiar form of disease, forgetting that it may occur with, as well as without, inflammation. In consequence of this limited and imperfect view of the subject, they are in the habit of prescribing turpentine as a specific remedy for tympanitis. Now, I can say, that I have seen the most dreadful effects from the administration of turpentine in the tympanitis of acute enteric inflammation. The immediate effect is to produce a rapid diminution of the tympanitic swelling; but this is purchased at too dear a rate; for you will find next day, that there will be a violent exacerbation of the existing symptoms, and the tympanitis becomes worse than before. You should never, therefore, interfere in this way with the tympanitis of acute enteric inflammation, nor should you alter your practice on this account in the slightest degree, except where the tympanitis is so great as to interfere with the due performance of the function of respiration; but, in the advanced stage, after the twelfth or sixteenth day, when the fever has abated and the tongue is moist, I have frequently seen great advantage result from

the use of turpentine. *But as long as the condition of your patient admits of antiphlogistic treatment, be assured that the administration of turpentine is hazardous.* When the patient is in a low state, when you can no longer have recourse to bleeding or leeching, when the tympanitis is connected with an asthenic condition of the intestinal mucous membrane, then, and not till then, should you venture on the employment of turpentine. I shall return to this subject when we come to speak of hysteria.

I may mention here, that the occurrence of flatus in the intestines sometimes gives rise to dreadful suffering in that affection which has been termed windy colic. A person in the enjoyment of good health happens to take at his dinner or supper a quantity of indigestible food, he goes to bed without feeling any particular inconvenience, but about the middle of the night he awakes with an attack of pain and tormina, which extend from the hypochondria to the umbilicus. This subsides for a short time, and then returns with violence, and the patient often finds that it is relieved by pressure. In a short time the pains get worse, and the abdomen begins to swell, sometimes at one point, sometimes at another, as if the air was confined and pent up in particular situations. The patient begins to suffer indescribable anguish, he has great anxiety, extreme prostration of strength, his face is pale, his extremities cold, a cold sweat breaks out all over the body, and he sits bent forwards, with his hands pressed on his stomach to relieve the paroxysms of pain which come on with increasing rapidity. In some cases there is distressing hiccup, in some a large quantity of aqueous urine is passed, in some there are loud borborygmi, and the intestines may become so enormously distended, as to fall rapidly into a state of gangrene. Hippocrates has given a description of one of the forms of this disease, which terminates by the passage of air upwards and downwards, by which the patient obtains relief; this he calls dry cholera. This windy colic is an exceedingly violent disease: one of the first cases of it, which I witnessed, presented such an array of alarming symptoms, that I thought every moment the patient would expire. It is, however, a disease which is generally easily managed if taken in time. One of the first things to be done is to apply heat to the abdomen by anodyne stupes, or warm flannel. Flannels wrung out of a decoction of poppy-heads, as hot as can be borne, will do a great deal of service, and in some cases will give complete relief, when assisted by the use of carminative draughts. But of all the remedies which I have seen, the most efficacious is an injection with tincture of assafœtida, turpentine, and opium. This is generally followed by speedy relief, the pulse becomes more natural, the belly soft, and the excruciating agony is relieved. This is the mode of treatment in which I have the greatest confidence. After the acute symptoms are removed, it will be proper to exhibit a laxative, for the purpose of removing the exciting cause of the disease,—indigestible matter; unless you get rid of this, your patient is liable to a return of the attack, and even to an inflammation of the tube itself. Be not, therefore, satisfied with merely relieving your patient; watch him carefully, and, by a proper treatment, obviate a recurrence of the symptoms, and prevent any tendency to inflammation.

LECTURES

ON THE

PHYSICAL EDUCATION AND DISEASES OF INFANTS AND CHILDREN,

BY DR. RYAN,

At the Westminster Dispensary, 1833.

LECTURE XV.

Literary Education of Children.

GENTLEMEN,—A question of deep importance to the infantile growth and health presents itself to our notice, with regard to the proper time of commencing the literary education of children, or of sending them to school. The ablest philosophers and physicians have written on this question, and therefore I shall offer a few remarks upon it.

I pointed out, in a former lecture, the imperious necessity of exercise in the open air, for insuring the developement and health of children. I stated, that the more a child plays in the open air, when the weather permits, the better. I agree with those who condemn the practice of sending children of three or four years of age, "out of harm's way," to school; first, because confinement is most prejudicial to their development and health; and secondly, because a child of seven years old has not the faculties of mind sufficiently developed. Every one of us is aware, that we have learned more at twelve or fourteen years of age, in one month, than during the whole period of our previous scholastic pursuits; and that persons at the adult age will acquire more information in one year, than during all the former time they had spent at school.

But I cannot agree with those who maintain, that a boy or lad should not be sent to school sooner than his twelfth or fourteenth, any more than with those who will recommend removal at the sixteenth, year, as is now almost the general custom.

Common observation proves, that activity of body and mind is characteristic of childhood. Nature has implanted this in the human constitution. The exertions of a child are almost incessant; it cannot remain quiet; it is in constant motion, which invigorates its body by accelerating the circulation of the blood for the nutrition of every organ. It is therefore unnatural to confine a child of three years old, two or three hours in one posture, as is

usual in schools, thereby depriving it of that exercise, which is so conducive to its development and health. No child under six, and, according to some, under ten years of age, should be confined and drilled at school. Precocious mental exertion often does irreparable mischief, though parents in general evince great solicitude, to exhibit their offspring as prodigies of learning. The sight of books is disgusting to most young children, because their understanding, at an early age, is incapable of comprehending the rudiments of their own language. Premature study is an irksome and highly injurious labour, and is never relished. A boy will learn more in a few months at the age of twelve or fifteen years, than during the whole period of his previous life. It is easy to account for this fact, when we consider that a boy who is not sent to school, but allowed to take exercise, has his mind and body well developed; whereas a child immured in school, from nine in the morning until three in the afternoon, has his growth arrested, and his health injured, is more likely to become a cripple, or to be cut off by the diseases of early childhood. He is, in truth, debilitated both in mind and body. Nevertheless, the young mind should not be neglected; but it may be enlarged and instructed by being engaged in the study of natural history, or the various productions of the world around it. An hour's instruction at home ought not to be exceeded during the first three or four years; and due allowance must be made, for the difference of infantile intelligence. Some children have no taste for learning, and will never become distinguished under the ablest masters. It is therefore cruel and barbarous to inflict corporal punishment, in this, or indeed in any case, on children. The barbarity of a brutal pedagogue has often laid the foundation of tedious or incurable disease, and, in some cases, has caused death.

Humanity compels me to notice the baneful system of discipline, generally practised in our boarding and public schools.

In most schools, children of all ages, from five years old, are obliged to rise at six o'clock in the morning; there is no distinction made between the young and the old, the delicate and the robust. The period of study is about an hour or two, and then there is a short morning walk. After breakfast, which is about nine o'clock, the toil of the day commences, and continues until two or three in the afternoon. During this time, girls are subjected to the most unnatural and injurious discipline; they are compelled to sit in one position; and should they, in consequence of fatigue of certain over-exerted muscles, which is inevitable, swerve from the perpendicular, they are invariably subjected to some artificial contrivances to remedy this natural consequence. Back-boards, collars, stocks, stays, and weights, are put in requisition. When the girl bends forwards, which she must inevitably do after over-straining the muscles of the back, (and her mistress should do the same thing were she to sit upright for ten minutes,) a back-board and weights are employed to remedy the evil. Should she lean to one side, a weight is attached to the opposite arm. When the muscles of the neck are fatigued, and the head falls forwards, a steel collar with two sharp prongs is placed on the neck and under the chin. While all this torture is being inflicted, the dancing-master beautifies the feet by placing them in stocks, or in iron shoes. Need I denounce this unnatural and injurious system? Every one endowed with common sense—every member of our profession, must condemn it. The result of this plan is inevitable deformity of the spine; and hence there are few girls who escape it. Boys are not subjected to this barbarous discipline; their symmetry happily claims no attention; they change their position as often as nature dictates whenever the muscles are fatigued; they run about, when allowed to take exercise, they strengthen their constitutions and escape deformities. When girls are allowed to take exercise, they are marched in regular order—in regular rank and file; their slow gait must be according to strict rule; they walk up and down some dusty road; they march with a solemn pace, as if at a funeral; for to run or jump would be contrary to all etiquette and polite usage, and would gain for each transgressing individual, the title of romp. When these unfortunate children return to their miserable abode, they are allowed abundance of bread and treacle before dinner, on the grounds of economy; the same description of food is finally placed before all at dinner; likes and dislikes are out of the question; no allowance is made for the difference of taste; and woe betide any unfortunate creature who murmurs discontent. After dinner there is a short walk allowed, then study, next tea, and finally bed.

The attitude of girls at study, needle-work, writing, drawing, the piano, and harp, has a tendency to distort the spine; and make crooked and weak backs. Brothers of the female victims, who have the same constitutions, escape, for the reasons already assigned. Girls are either placed on a stool that has no back, or on a chair which has a perpendicular slender one; the first relieves the back more than the second, but both are bad, because the individual ought to be allowed to change her position whenever it is irksome. Strong stiff stays are also injurious. Tight lacing prevents the growth of the chest, impedes the breathing and action of the heart, causes palpitation, and renders the compressed parts a load on the lower part of the spine, which bends to one side. Want of proper exercise and tight lacing, are the causes of spinal curvatures in girls; and hence we can scarcely see a young lady with a straight back. Active peasant girls, on the contrary, are models of symmetry and beauty; because they are not subjected to the causes just described.

M. Rousseau, who has written admirably

upon the education of children, maintains that they should never be questioned about things for which it may be their interest to deceive. It is contrary to one of the fundamental principles of our unequalled constitution, that any man should accuse himself; and the same rule, founded on reason and justice, should apply to children. It would be well if parents and preceptors bore it in recollection, when they call upon children to accuse themselves of some petty delinquency, as breaking glass, &c. In such cases the mischief is done, generally, by accident, or unintentionally; and we cannot repair it by chastisement or cruelty.

The attention of a child should not be fatigued by long study. It is better to acquire one idea, than load the memory with twenty at a time. Mr. Edgeworth taught a child to read any word in the English and Latin languages in the space of eight hours—not successive hours—but at the rate of six or seven minutes per day. He also taught a child, of four years of age, to pronounce any word in the English and French languages in the same space of time. He holds, that more information would be communicated by this method in large schools, in one-tenth of the time required by the usual plan of teaching. The plan of education suggested by his sister, Miss Edgeworth, is perhaps the best ever proposed; it is infinitely superior to that of Pestalozzi, which commences so soon as the infant is capable of perception, which inflicts a premature and excessive action of the dawning intellectual faculties, injures the nervous system, and consequently every function of the body and faculty of the mind, and therefore is injurious to the growth and health of children. Bodily exercise ought to follow that state of rest in which children are while learning their lessons.

Few children have a taste for study, especially at first; and many lose their health, because premature and excessive mental exertion causes enervation, deranges the whole functions of the body, induces feebleness, and arrests development. Infantile aversion to learning is also increased by the erroneous systems and severity of the majority of pedagogues. Many masters attempt to exact too much, and expect impossibilities from children, which inspires great disgust, and sometimes so much fear or terror, as to injure the best constitution. The truth of this statement was admitted by many celebrated writers. I shall mention one example only.

We find that Cæsar said of the Germans, they were robust in body, on account of the negligence with which they treated the mind; they were under no restraint, were not obliged to study, but allowed to follow the dictates of nature from an early age, to enjoy and to take exercise; and that this was the chief cause of their great stature, and that robust vigour, which excited the admiration of other nations. It is universally allowed by our profession that premature mental exertion is bad.

The intellectual faculties are differently developed, according to the vigour of individual constitution; and hence some children will make a much greater progress in learning than others. It sometimes happens that children whose faculties are not the most precocious are generally most robust; but there are numerous exceptions to this position. I fully agree with those who consider severe and precocious study a great obstacle to the health of man.

I dwell upon this point, because the present age is distinguished for its ardent desire to diffuse knowledge; and this disposition impels most parents to render their children at a very early age prodigies in literature and even the sciences, at the expense of health and long life. Parents now adopt the adage,

Ante barbam, docet senes;

or to give a free translation, the child teaches his grandfather.

I feel convinced from some observation, that children should not be sent to school until they are five or six years old. Before this they can acquire a vast deal of knowledge and information, by learning the names, uses, and properties of the immense number of objects that surround them.

The first rudiments of learning should be taught by parents, while children are of a tender age; perhaps after the seventh year. There are many superior advantages in paternal education. The follies, vices, and bad conduct, acquired in schools by imitation, are all avoided and prevented.

It is urged, however, in favour of education in public schools and colleges, that it sharpens the wit and enlarges the mind more than parental instruction. The truth of this statement must in general be admitted; but still such institutions are open to serious objections, on account of the numerous vices which are learned by young children from their companions. The discipline in most public schools and Colleges, is highly objectionable and unnatural. There is no allowance made for difference of age or vigour; and in some of our public schools the stronger boys are allowed to tyrannise over the weak, and, in some instances, to inflict such corporal injury as to cause death. It is exceedingly unaccountable on what grounds the masters of schools sanction such abuses; but "the schoolmaster" who is now abroad, does not appear to have as yet visited them.

Though there are many parents too strict and severe towards their children, there are others who indulge them too much, by gratifying their importunities, and rendering them self-willed, peevish, and fantastic, to the great injury of their health. We have all observed examples of "a spoiled child," and have noticed its delicacy and debilitated constitution. Many bad methods are still employed in the correction of children. They are often frightened by being shut up in dark apartments, threatened with cannibals, giants, ghosts, &c,

and their tender imagination is so excited, that convulsions, and even death, have too often been induced. Nurses and servants are highly reprehensible for such detestable and dangerous conduct. I have known instances in which children awoke suddenly at night, screamed violently, and appeared extremely terrified, in consequence of dreaming of the frightful fables told them by their nurse. We even observe that the bad effects of such impressions continue to the age of puberty, and sometimes later; as many children are afraid to sleep in an apartment by themselves, or to enter it without a light; and there are some adults who have the same unfounded fears. Children should never be frightened, either to tranquillise them, or a mode of correction.

Another error in the management of children is committed by parents, when they caress and show more affection to one child than to another. This excites jealousy and envy, and is prejudicial to health. Parents, who have perused good works on moral education, should also study those on physical education, to ensure to their offspring a sound mind in a sound body. But, alas! how few parents, however enlightened they may be, have the slightest knowledge of the management and preservation of the health of their children. Besides the numerous errors described in the preceding lectures, many more deserve exposure, but I shall notice the greatest of them only. Some parents are for ever "drugging or doctoring" their children. No medicine should be administered to children, without competent medical advice, whenever this can be obtained; because all medicines are injurious to children, unless when ill; and great judgment is necessary in prescribing them. Mr. Locke has left us an excellent comment on this error—(*On Education*). The diseases of infants are discovered with difficulty, because the subjects of them are unable to describe their sufferings, though every mother and nurse undertake their management, and often cause irreparable mischief. There is no want of medical practitioners in this kingdom at present, as the profession is much too crowded, and therefore there is no difficulty in obtaining proper advice for the diseases of children; the poor even can procure it at hospitals and dispensaries. Having now concluded the hygiene and physical education of children, I shall next proceed to describe the nature and treatment of infantile diseases.

Infantile Medicine.—The term infantile medicine is applied to that branch of the healing art, which relates to the nature and treatment of the diseases of infants and children. The term infant is applied to man from the period of birth to the time he walks, when childhood commences; but some physiologists use the former term from birth to puberty; while others divide this period of life into infancy until the seventh year, and second infancy from that period to puberty. The Latins comprehend both in the word *pueritia*. It was known to Hippocrates, that accurate and faithful observer of nature, that diseases were peculiar to different ages, and consequently that they differed in the first and second infancy. In the first infancy, both sexes are subject to the same diseases, as both have a conformity of organisation and functions, with the exception of the genital organs. It is about the end of the seventh year, that there is a marked difference between the moral and physical states of infants of both sexes, which is greatest at puberty. The father of medicine divided infantile diseases into two classes, which correspond to those changes or crises which mark the development of infants to the age of puberty, or the fourteenth or fifteenth year in this climate. The first he extended from birth to dentition, and the maladies of this class were chiefly those connected with the digestive and nutritive systems; and according to Etmuller (*Valetudinarium Infantile*) these arose from a particular alteration in the digestive system. The second embraced the process of dentition, and extended from the sixth or seventh month to a year and half, or two years. The irritation and pain in the gums during dentition, cause congestion of blood in the brain, which may be followed by hydrocephalus (water in the head), convulsions, derangement of the digestive system (stomach, bowels, liver, kidney, urine, &c.) causing emaciation, large head, abdomen, and joints, and exciting scrofula, or enlargement of the glands, both internally and externally, or that form of the disease called rachitism, or rickets. It is easy to explain the causes or reason why these diseases are excited by dentition. Every part of the body is connected by nerves, the irritation of a single branch of a nerve will derange the whole nerves of the body, and consequently every function in the animal economy, as all functions depend upon nervous influence or supply in the different parts. Thus toothach in the adult will cause loss of sleep and appetite, derangement of the bowels, of the senses, vision, olfaction, audition, gustation, and palpipation (touch), as well as of the intellectual faculties; or a slight wound on the finger, or any other part, will induce convulsions, or tetanus, or rigid spasm of every muscle in the body. It therefore follows, that a host of diseases may be excited by dentition or any local irritation, and this is universally admitted by the profession. Hippocrates stated in his *Apohrisms*, sect. 3, that during dentition there were cutaneous eruptions, fevers, convulsions, diarrhœa—that infants were liable to many diseases during the first forty days, to others within the first seven months, and to some from seven months to puberty. He did not, however, give a general view of the etiology or causes of infantile diseases. The causes, assigned by all his successors, were vague and incorrect, until Sthal and Hoffman accurately explained the diseases of different ages, by the

predominance of certain organs, or, in other words, by temperaments. This is the source whence to deduce our prophylactic (preventive) and curative indications; and the hygienic and therapeutical means most proper to fulfil them. It also leads us back to generation, to the hereditary diseases of parents, and to the organisation of infants. There cannot be the least doubt, I apprehend, as to the resemblance of the features, and every part of the body, internal and external organs, between parents and children. It is this resemblance which proves the analogy of tastes, dispositions, vices, virtues, talents, and diseases between parents and their offspring. From this similarity of conformation between the organs of parents and infants, we must conclude, that the constitutions and disposition to diseases are transmitted from the former to the latter; and that the latter may be developed during infantile growth. Some deny the existence of hereditary diseases; but the records of medicine leave no doubt of the fact. Infants have been born jaundiced, affected with syphilis, and small pox, as I have repeatedly witnessed; and, in after life, have been affected with certain diseases of their parents, as of the liver, lungs, kidneys, &c. It is perfectly impossible, in the present state of science, to explain the causes of the malformations and diseases of the fœtus in the womb; and a good-sized volume might be occupied with their description. I might occupy ten lectures with the account of these; but this would be of little use to you in practice. Suffice it to state, then, that repeated instances are recorded of the absence of all parts of the body, of the greater portion of the skull and brain, of some portion of the spinal marrow, of one or both eyes, ears, nostrils, arms, lower limbs, of the mouth, anus, urethra, vulva, imperforation of the digestive tube, malformation of each of the viscera in the head, chest, and abdomen. In fine, there is no form of infantile deformity, which you may observe, but has been already described.

Infants are born with hereditary, and connate, or congenital diseases, or such as they labour under at birth; and they are liable to many others common to adults, until they arrive at the age of puberty. I shall, therefore, confine myself to the pathology and treatment of connate or congenital diseases, and of all others which occur to the age of puberty. These will embrace most of those described in the works on the practice of medicine and surgery. The principles and practice of infantile medicine, however, differ materially from those adopted and employed at the adult age, and therefore demand attentive study and reflection. The peculiarities of the infantile and adult constitutions are widely different; and the diseases must be treated differently. In the treatment of diseases of infants, we must always remember their peculiar constitution; and that, at every age, some one or other of the organs of the economy predominates over, and influences, all the rest.

The constitution of infants at birth, is characterised by a great proportion of white fluids, a mobility or weakness of the muscular, and an excess of susceptibility of the nervous and digestive, systems. The head is more voluminous in proportion than that of the adult, and the nerves are much more easily disordered. The trunk and the limbs are soft and delicate, the bones imperfectly ossified, the whole body almost a gelatinous mass—a bundle of nerves—a ganglion. The sensibility of the skin, of the mucous or lining membranes of the respiratory, digestive, and excretory organs, is also intense and easily excited. Some physiologists have contended that the cerebral and lymphatic systems predominate at birth; while others ascribe the predominance to the digestion. Hippocrates, Etmuller, Capuron, &c., entertain the latter; and most writers since the time of Sthal, including Bichat, the former opinion. It is difficult to arrive at a decided conclusion on this dispute, because we observe some infants, whose vivacity, rapidity of sensations, and cerebral affections unequivocally predominate over the digestive system, and others in whom the reverse occurs.

It is clear, however, that the vivacity of sensations, the avidity with which the infant exerts its organs of sense, and the remarkable influence of the digestive organs at this age on the brain, and the vast number of nervous disorders to which it is subject, prove the superabundant vitality of this organ. But all have observed the very excitable state of the digestive organs in infancy, by the continual want of aliment, the rapidity of digestion, and the disposition infants have to eat incessantly. The greatest care, therefore, is necessary in selecting aliment for infants, as the ingestion of improper articles of diet readily excites gastric and gastro-intestinal irritation, inflammation, and ulceration; colic, cholera, diarrhœa, lientery, &c., &c. The employment of improper food is one of the commonest exciting causes of infantile diseases. Most nurses give too much aliment, and of an improper kind, as I have already proved to you in describing lactation and the solid aliment proper for infants. The application of cold air to the skin and mucous membranes, is another fertile cause of diseases of infants. It is to be recollected, that the skin at birth is almost a kind of mucous membrane, which receives the impression of cold with pain, the transpiration, or insensible perspiration, is suppressed, and catarrh, coryza, or cold in the head, croup, and quinsey are induced. We also observe that portion of mucous membrane, which covers the anterior surface of the globe of the eye and eye-lids (conjunctiva), is irritated by the air, or by the discharges which sometimes may come in contact with it during parturition; and hence ophthalmia takes place in some cases of a purulent description, which,

unless properly managed, may cause loss of vision.

The mucous membrane of the bronchi, or air passages, is easily excited by cold air; and hence croup, hooping-cough, and inflammation of the lungs are readily induced.

Some infants have the lymphatic system predominant, as those who are pale, the glands enlarged, the abdomen tumid, the vivacity in general diminished. Children so affected have less energy of the brain, are taciturn, sad, and scrofulous or rachitic. In these, the glands of the neck, groins, chest, and abdomen, are irritated by cold, improper food, or internal inflammations. Nutrition is arrested on account of the enlargement of the mesenteric glands, which are often impervious to the chyle; emaciation follows, especially of the limbs and body; the head and abdomen enlarge; the bones are altered in structure; the child becomes rickety or scrofulous; and will often perish unless treated with the preparations of iodine, and nutritious aliment. When the abdomen and head are enlarged, and the rest of the body emaciated, the disease is called *tabes mesenterica*, and *consumption* by parents.

Adverting to the dangers to which an infant is exposed at birth, Professor Capuron gives the following graphic description:—"Man, said an ancient philosopher, appears to come into this world but to suffer. The father who begot him, the mother who conceived him, often transmit to him the germs of diseases, which continue to impregnate him during pregnancy. Arrived at the term of viability, the fœtus cannot be born without suffering pain, and a crisis more or less tumultuous, which exposes him to great dangers, even to death, at the portal of life. When the infant begins to respire, behold the mark of new dangers! a crowd of external agents supervene, without ceasing, to chill and derange his frail organisation. Errors in diet during physical education, want of parental love, ignorance or prejudices of nurses, the storm of dentition, accidents which menace the period of weaning, epidemic and contagious diseases —such are the obstacles capable of arresting man at the commencement of his career."—*Traité des Maladies des Enfans.*

The helplessness, wants, and liability to diseases of new-born infants, are felicitously described by Lucretius (*De Naturâ Rerum, lib.* 5,) in these words:—

"Tum porro puer, (ut sævis projectus ab undis
Navita,) nudus humi jacet, infans, indigus omni
Vitali auxilio, quum primum in luminis oras
Nixibus ex alvo matris natura profudit,
Vagituque locum lugubri complet, ut æquum est
Cui tantum in vitâ restet transire malorum."

The diagnosis, or discrimination of the diseases of infants, is extremely difficult. I have already observed, that disease or disorder in any organ will derange the whole functions of the body, and cause such a variety of symptoms, that it requires great discrimination and a perfect knowledge of the principles of medicine, to enable us to form an accurate opinion. I have often been consulted in cases which were supposed to be diseases in the intestinal canal, when the mischief was in the head, and *vice versâ*. Infants have not the power of speech to communicate their sufferings, or if they are able to reply to our questions, little or no reliance can be placed upon their statements. In order to dissipate, as much as possible, the difficulties of diagnosis, we should, as in all cases of disease, listen with attention to the history given us, and then explore or examine all parts of the body, the brain and spinal marrow (cerebro-spinal system) the circulatory system (pulse), the respiratory, the digestive, the secretory, or alvine and urinary, and the muscular or locomotive system. We should first observe the attitude and movements, the expression of the countenance, the state of the eyes; and ascertain if there be any foreign matters between the lids, in the auditory canal (ear), in the nasal fossæ (nostrils); examine attentively the temperature of the scalp, the carotid and temporal arteries, the gums, tongue, mouth, throat,—abdomen by pressure on all its surface, which will enable us to detect enteritis (inflammation of the bowels), hernia, or rupture, and also learn whether there be prolaspus recti (falling down of the bowel), whether the testicles have descended into the scrotum, and we should finally inspect the limbs, joints and surface of the body, apply gentle percussion on the chest, and employ the stethoscope. The cries of the infant will also assist us in our diagnosis, and it is easy to distinguish those of pain from those of passion.

When the *brain* is affected the scalp will be hot, the carotid, temporal, and vertebral arteries will be pulsating violently, the infant will be constantly moving its head on the pillow, raising its hand towards the seat of disease, attempting to pull off the night-cap; there may be drowsiness, or excessive restlessness, the face will be flushed, the countenance anxious, the brow knitted, the eye-lids half closed, the eyes turned upwards, the pupils dilated or contracted, or, in popular language, the black of the eye will be enlarged or diminished, the head may be large, the fontanelles or openings unossified and pulsating, and there will be an abundant growth of hair. The infant will scream in its sleep, grind its teeth, and may be affected with strabismus, or squinting, or with total loss of vision; the eyes may be red, sparkling, or rolling rapidly. In such cases, the respiration will be more or less impeded, the skin hot, the appetite lost, the bowels confined, and the patient will repose on the side or back, and there may be convulsive twitchings of the extremities, and the thumbs flexed on the palms of the hands, with the fingers firmly clenched over them. This train of symptoms will be observed in hydrocephalus, during teething, and in certain dis-

eases of the bowels. When the process of dentition has caused it, the infant will put its fingers and every substance it can to its mouth, there will be tumefaction, or swelling of the gums, and a copious flow of saliva.

When the *lungs, or air-passages*, are inflamed, there will be fever, cough, and difficult respiration, and the exact tissue, or part affected, can only be discovered by the stethoscope, or auscultation, with the aid of percussion. Cough is a symptom of a multitude of different diseases of the respiratory organs, and prescribing for it alone is doing the patient a great injury, and in many cases, allowing his life to be sacrificed. There are some few old-fashioned practitioners who decry auscultation, because they are too lazy to study it, and others, who are incapacitated by defect of hearing, but there is no really scientific member of the profession, of the present schools, but will admit, that the discovery of the stethoscope has been one of the greatest ever made. I rejoice to add, that most of our Examiners in the Medical Corporations require candidates for diplomas to be well acquainted with auscultation. When the *alimentary canal*, including the stomach and intestinal tube, are irritated or inflamed, the infant will flex, or bend, its lower limbs on the abdomen, there will be heat of skin, pain on pressure of the abdomen, furred tongue, a brownish fur on the lips, picking of the nose or lips, disinclination for food, sometimes vomiting, desire for cold drinks, depraved motions from the bowels, and a vitiated condition of the urine.

The junior practitioner must remember, that the number of respirations in a minute, made by a young infant, are 35 or 40, double that of adults, and the pulse is from 130 to 140 during the first year, and hence little reliance is placed on this last diagnostic. The indications of diseases, given in the preliminary part of Dr. Hooper's Physician's Vademecum, 1833, will afford considerable assistance to the junior practitioner in the diagnosis of infantile complaints.

TRANSLATION OF M. ALIBERT ON THE DISEASES OF THE SKIN.

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Dermatoses Eczematoses.—SPECIES II.

Erysipelas.—This inflammation shows itself on the surface of the integuments, chiefly on the face, arms, and thighs, but other parts of the body are not exempt, by a yellowish-red colour, and but rarely of a deep red. The redness disappears on the pressure of the finger. There is heat, and a painful sense of burning and itching. The febrile symptoms occur at first in some cases, but secondarily in others. It terminates by desquamation or the formation of scurf, on the twelfth or fourteenth day in simple cases, but more serious results often follow.

There are three species of erysipelas. The simple, the phlegmonous, and the œdematous.

The simple form we have already defined.

The phlegmonous is marked by a double inflammation of the skin and subjacent cellular tissue. This form chiefly appears on the face, the cellular structure here being more vascular and delicate. It also very often attacks other parts of the body. In this form the patient encounters the double risk of phlegmon and erysipelas. There is a throbbing sensation in this form which is not experienced in the simple; the heat may be even less ardent.

The œdematous form is commonly known by the term white erysipelas. The skin is struck with atony, and presents a softness to the finger in pressing it, and retains the form of the substance applied to it. The colour of the skin partakes of a livid redness. The disease occupies at once the cutis and the subjacent cellular structure, into which an effusion of serum takes place. There is little redness or heat of the skin, but the tumefaction is very considerable.

General Remarks.—Erysipelas has received a multitude of names. Van Helmont termed it fiery abscess. Others gave it the names rosa Anglicana, ignis sacer, ignis Persicus, ignis sylvestris, ignis Sancti Antonii, &c., all of which have been applied to other diseases. Very trifling diseases obtain these names from day to day.

Erysipelas is a very common disease, which occasionally shows itself at all periods and in all places. It not only attacks the human race, but shows itself among our domestic animals. Sheep are subjected to it, and in them it shows itself on the belly or chest, is often of a malignant kind, and sometimes ends in gangrene.

Erysipelas is not merely a disease confined to the skin. Bichat has shown the aptitude of the integuments to be attacked by it. It may fix itself in the coverings or linings of vital organs.

Simple Erysipelas.—SPECIES I.

The precursory symptoms of the disease are common to other forms of cutaneous affections. Nausea, bitter taste in the mouth, anxiety and

restlessness, headach and heaviness, starting in sleep and oppressive internal heat, a frequent and hard pulse, giddiness and disposition to delirium, also symptoms denoting a bad state of the first passages, and if the disease attacks the face the drowsiness is increased.

The inflammation afterwards concentrates itself on a particular point, and here the integuments are particularly swollen and distended, and are of a reddish lemon colour (rouge citronné). The skin is shining and smooth; and if the pressure of the finger disperses the redness, the latter instantly returns. The patient experiences a sharp burning sensation; but, after some time, this is changed to itching, and the inflammation declines. The cuticle is raised, as if by the action of a blister, it breaks, detaches, and separates itself, and a yellow serum flows from the part, becoming dried and attached to the surrounding epidermis. The disease has been always found most dangerous when attacking the head, from its proneness to spread to the membranes of the brain; and some have entertained the notion, from the circumstance of delirium accompanying the early stage, that the disease even originated in the membranes covering the brain.

We now stop, after describing the disease in its simpler forms. The disease may increase gradually during three or four days; we then see it stationary for twenty-four hours. Then come the periods of its subsidence and termination. When the redness continues for an indefinite period afterwards, vesicles occur from time to time, containing a clear limpid fluid, often sufficiently viscous to dry on and adhere to the skin. Subsequently, again, the contents of the vesicles become yellow, and the same process of desiccation takes place. It is probable, in this case, that deeper-seated inflammation continues to go on, and furnish the discharge from the surface.

I cannot correctly state the precise period when the disease arrives at vesication. It is uncertain, and so is the duration of the attack altogether. In milder cases it disappears gradually. Sometimes it goes through its progress in the space of two or three days with the assistance of spontaneous perspiration; sometimes it continues twelve or fifteen days without diminution. Now and then it degenerates into gangrenous ulcers: this termination is very uncommon, notwithstanding the livid tint which the skin sometimes assumes between the sores. The livid appearance usually vanishes as the constitutional symptoms improve in character.

Erysipelas, more or less intense, presents various characters, according to the part of the body it attacks. The slightest cases are those where it attacks the extremities. The febrile symptoms in such cases are slight, and amount to nothing. The inflammation spreads in a mild manner, the sensations of heat, itching, &c., are comparatively mild, resembling the sting of the nettle. It is generally little to be feared, but sometimes the suffering is great. If it occurs on the foot it spreads rapidly to the leg, to the integuments of the tibia, and there is great tenderness on pressure of these parts, which are distended and inflamed.

I have alluded to a form of erysipelas, which some German authors have qualified by the epithet—"de foudroyant" (erysipelas syderans). Dr. H. de Chégoni has seen lately a serious case of this kind in a man fifty-five years of age, a mason, occupied in his trade, repairing the vaults for the dead, in the Hospital "Du Val de Grace." At the termination of his work he felt himself attacked suddenly; one of his legs and one of his arms were attacked at the same time. There were no febrile symptoms, but the appearance of the skin was frightful and malignant. His urine passed involuntarily, and other symptoms of a most alarming kind immediately followed. The eruption took on a livid appearance, and in the course of the next day the patient died.

Erysipelas attacks the mammæ of females, and is commonly accompanied with much pain and suffering. The breast is red and swollen, and sometimes suppuration takes place; and if, as is the case in all glandular affections, this does not occur, induration of the parts and much inconvenience result, these organs remaining in an indurated state for a long time. Dr. Baron has observed cases of erysipelas in infants, commencing at the umbilicus and extending over the abdominal region. Sometimes it arises in the neighbourhood of the genital organs, and accoucheurs say it exhibits a tendency to gangrene. Dr. Billard thinks, in such cases, that it depends on disorder of the first passages, and is very often complicated with enteritis.

Phlegmonous erysipelas is, according to our author, the second form of this disease. It is a double malady, comprehending the symptoms of erysipelas and phlegmon alike. Like the preceding, it may occur in every part of the body, because there is everywhere cellular tissue. Those parts where the distribution of nerves is most liberal are most frequently its seat. Hence the face is so frequently attacked. The thorax and abdomen are next in succession as most likely to suffer from it. Simple erysipelas has usually less dependence on disorder of the gastric functions than this. The symptoms of the latter, in this form, consist of great nausea and vomiting. There is more constitutional disturbance, and the painful sensations in the seat of the inflammation are much aggravated. The febrile action is proportionably more violent and approaching more completely to those indicating the formation of matter.

The two forms are easily distinguished. The phlegmonous exhibits a more intense redness; the skin is more elevated, and resists more completely the pressure of the finger. Every thing shows that the inflammation is deeper seated, the pain becomes circumscribed, the heat is excessive and pungent, and lancinating pains are felt. The pulse is hard and frequent. Resolution sometimes takes place about the fifth day, but more commonly suppuration results. In the latter event, shivering and throbbing in the part give notice of it, and the matter should be discharged by puncture. But the termination of phlegmonous erysipelas is not always so favourable. It may happen that the inflammation extends to deep-seated parts under the aponeurotic expansions from muscles, and between the bodies of the latter, and when this occurs, the suppuration extends so considerably that it would be of no advantage to the patient. The surrounding parts are painfully distended, the sufferings of the patient are redoubled, and all the symptoms increased; the pulse is hard and small, and by itself denotes the danger of the case, the bulk of the matter increases, the muscles are separated from each other by the suppurative process*, the skin, especially deprived of nourishment, collapses; its connexion with the subcutaneous structure, being totally destroyed, it becomes of a bluish hue, and when the case is of long continuance, the patient, worn out by diarrhœa, colliquative sweat, and hectic fever, dies a martyr to the disease.

Diseases of other kinds may take place from the effects of this. When low fever accompanies it, the patient dies in a short period from mortification, preceded by the usual symptoms of that event. Sometimes it wears an epidemic character, as in the instance where it desolated Toulouse in 1710.

Phlegmonous erysipelas is especially to be feared when it attacks the head; a red spot first shows itself, spreading very soon over the neck and scalp. A patient presented himself with a painful spot on the left ear, it was followed by active inflammation and severe headach. Three days after, the first affected spot was punctured, and matter discharged, but the surrounding inflammation extended itself. Several pustules formed on the other parts of the head. We attempted to promote suppuration by poultices and fomentations, but the patient died from metastasis to the brain, where matter was found in considerable quantity, on examining the body after death. The great danger of these kinds of erysipelas depends on their disposition to attack the brain.

Œdematous Erysipelas at its commencement scarcely ever shows itself in a form deserving the name of this disease. It is the consequence of another disease, and is formed by the effusion of fluid into the cellular tissue. Breschet has shown its analogy to dropsy of the cellular membrane. Schroeder had made the remark before. In St. Louis I have observed that this form of the disease is accompanied with some heat of skin, and redness, and pain. There are phlyctenæ formed occasionally, but not so distinct as in the other forms of the disease before mentioned. In cases of scurvy similar phlyctenæ occur of a blue colour and containing bloody serum.

In calling this affection a form of erysipelas, we have said that the skin is weak and without the power of resisting the pressure of the finger, but it is in other cases hard and unyielding.

As belonging to this division I venture to class a disease which I have described elsewhere which seemed to be for a long time not understood. I allude to the *sclérémie* of new-

* Les muscles se séparent de leurs points d'appui.

born children. M. Gardien has confirmed my ideas, he witnessed a case where it ended in suppuration.

"Concrete œdema," and "d'érysipèle dur des petits enfans" are the terms used to designate this disease by M.M. Souville, Baron, and Billard. We know that venous blood is essentially concerned in producing morbid fulness of vessels, and that at the earlier periods of life, the skin and cellular tissue are sometimes too copiously supplied. The suddenness of the exposure of the skin of the new-born child to the atmosphere, is often followed by inflammation which does not, from the weakness of the subject, very suddenly show its usual characteristics. It assumes first the appearance of the œdematous erysipelas. It is sometimes marked by red or bluish patches on the surface, dryness of the skin, and the absence of perspiratory moisture; sometimes there is desquamation of the cuticle, but there is always evidence of the existence of fluid in the cellular tissue. There is now under my observation, in a man who has been subject to it in a wandering form, a similar disease. It made its first appearance near the ankle of the left leg, from which it gradually extended along the leg and thigh on the same side. Other parts of the skin afterwards evinced it, and the patient became much alarmed. Both the lower extremities presented an ivory hardness, the skin is of a pale red and shining appearance in every part which is attacked.

Erysipelas is in its first attack and progress very insidious, and apt to return with violence when the patient appears to be on the high road to recovery.

The Etiology of Erysipelas.

To investigate thoroughly this part of the subject, we must attentively look at its different seats at its commencement. We have already said that it takes place in the vascular structure of the skin. The vessels of the surface are the evident seats of the disorder in the first instance, from the increased heat and redness which precede other and severer symptoms. Their exposed distribution explains this; deleterious agents of all kinds, mechanical and chemical, are constantly affecting them. The analogy between erysipelas and the other forms of disease, under the head D. eczematoses, fully entitles it to the place we have assigned it; it is from its characteristics entitled to the first rank. Young men are most frequently the subjects of it, and those of plethoric habit of body. It often follows suppressed hæmorrhages, or discharges which have been exercising beneficial effects on the system. Stahl and his school have particularly noticed this fact. The suppression of the menstrual fluid or the discharge from hæmorrhoids often produces it. Exposure to the heat of the sun or the frosty air of a severe winter, certain habits of life, as those of the epicure, who freely indulges in stimulating diet and wines, are powerful predisposing causes.

Poisonous or irritating substances, taken into the stomach or externally applied, exposure to a burning sun, the acid juices of plants, such as the rhus toxicodendron, &c. In short, it may be produced by thousands of circumstances.

The most formidable forms are those which follow gun-shot wounds, and those which attacking the head spread to the membranes of the brain. Particular trades, those always being such as compel exposure to heat on the part of the artizan, produce the greatest number of instances. Emotions of the mind sometimes appear to be a cause. In one instance a criminal, sentenced to death, had his life prolonged for forty days by its timely visitation.

Treatment of Erysipelas.

This must depend on a serious consideration of the situation and circumstances of the patient. Bleeding is necessary where fulness of habit exists, and the pulse is hard and full and other signs of power and excitement show themselves. Leeches to the interior of the nose are to be recommended where the head is affected, and all other measures calculated to empty the vessels of the head. The discernment of the practitioner is the only legitimate guide, for signs of debility may exist when opposite measures may be called for. Emetics are useful, for the disease often arises from disorder of the primæ viæ. A bilious habit generally exists. Emetics were found most useful by Desault and Stoll of Vienna. Tartar emetic is the best form in a state of solution, the disturbance it creates in the alimentary canal is always found beneficial. Copious diluents, ptisanes of different and simple materials are requisite. External applications consist of cataplasms or emollient fomenta-

tions. In the phlegmonous form incisions are necessary to allow of the discharge of matter.

Foreign Medicine.

On the Causes and Treatment of Icterus.

According to M. Piorry, the obstruction to the passage of the bile may be situated, first, in the liver; second, in the great trunk of the hepatic duct; third, in the ductus communis choledochus; fourth in the intestines; for these may be considered as an extension of the biliary ducts, and the constipation, which occurs in them, is one of the causes of icterus, since it determines the stagnation of bile in the canals from which it is absorbed.

Bile in icterus, or at least its colouring principle, is contained in the blood. It is true that M. Deyeux has not found it in one case, but M. Orfila has met with it, and according to others simple inspection demonstrates the fact. At first (as in the case of jaundice mentioned in No. 109), the serosity of the blood is yellow, and afterwards that produced by blisters, perspiration, and the urine is coloured with the same. In many cases, in patients who have suffered from icterus, M. Piorry has found the bronchial discharge yellow, and in the case above alluded to, the saliva was green; the colourless tissues, such as the sclerotic, become yellow, the skin also participates in the same colour, whilst, on the contrary, the fæces are discoloured. Thus the stagnation of the bile in its reservoir, or the disappearance of this fluid into the successive portions of the excretory canal, and lastly, the presence of the yellow ingredient in the fluids and solids, offers, according to the author, sufficient proof that it is the bile which is thus scattered throughout the whole system. To say that jaundice may be compared to ecchymosis, is to make use of an analogy which is deceitful, and does not enter properly into the merits of the case; and to suppose that the bile can be formed before its arrival at the liver, is to use an hypothesis which is not in accordance with that which we see in a great majority of cases. Pursuing these inquiries, M. Piorry considers that the following are the indications to which, in treating the disease, the attention should be principally directed: 1st. To inquire into the nature and seat of the obstacle which causes icterus; and here he recommends bleeding if it depends upon hypertrophy of the liver, purgatives if the cause be constipation, and leeches if the duodenum be inflamed, as in the cases cited by M. C. Broussais. 2nd. To dilute the bile with water, for the purpose of facilitating its flow, and the escape of calculi if any such exist. 3rd. To give large quantities of fluids to remedy the existing icterus.

He adds to these drinks saline purgatives, or diuretics; and another case of icterus, in ward St. Landry, has since yielded not less promptly than the one before alluded to, under treatment founded on the above indications.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

By-Laws relating to the Examination of Candidates for Letters Testimonial or the Diploma.

[The following regulations, with regard to the preliminary and medical education of surgeons, are infinitely superior to those required by the Royal Colleges of Surgeons in London and Edinburgh, or the Faculty of Physic and Surgery in Glasgow; and ought to be immediately adopted by the institutions just named. Candidates for the diploma or letters testimonial of the Dublin College, undergo several examinations in ALL the medical sciences, (not merely in anatomy and surgery at half an hour's sitting, as in London,) and must be really well acquainted with medicine in all its branches. Moreover they generally become graduates in physic, and are eminently qualified as physicians and surgeons. The midwifery diploma is another improvement, which the London, Edinburgh, and Glasgow corporations should grant as soon as possible. "Nunquam sera est, ad bonos mores via."—Eds.]

Half Yearly Examinations.

I. The president, with the vice-president and the members of the Court of Censors and Assistants, or a majority of them assembled together, shall appoint, by a majority of voices from among themselves, four or more members, with the president or vice-president, to examine the registered pupils as to their proficiency in their studies, every half year, in the months of May and November, of which examinations due notice shall be given by sum-

mons, and by advertisement in the newspapers.

II. The pupils shall be divided into four classes, and each class shall be examined in the presence of the members and licentiates of the College, for such length of time, not being less than one hour, as the Examiners may think proper, and the name of every pupil, who shall answer such examination to the satisfaction of the said Examiners, shall be enrolled by the secretary in a book provided for that purpose.

III. The first class shall be examined as to their knowledge of the principles of physiology, the descriptive anatomy of the bones, ligaments, muscles, and joints, the first principles of surgery, and elements of Chemistry.

IV. The second class shall be examined as to their knowledge of the anatomy and physiology of the vascular and respiratory organs, including the descriptive anatomy of the heart and lungs, and the relative and surgical anatomy of the arteries and veins, of the nature and surgical treatment of wounds in general, hæmorrhage, fractures and dislocations, and of the practice of pharmacy and the materia medica.

V. The third class shall be examined respecting their knowledge of the general composition of animal structure, the anatomy and physiology of the organs provided for digestion, chylification and secretion in general, including the structure of the skin and mucous membranes, and the descriptive anatomy of the abdominal viscera and absorbents, of tumours and diseases of the bones and joints; of pathology, and the principles and practice of medicine in general, and the nature and treatment of febrile and inflammatory diseases in particular.

VI. The fourth or senior class shall be examined respecting their knowledge of the anatomy, physiology, and pathology of the brain and nervous system, and of the organs of sense, and the urinary and genital organs, of injuries of the head, and of operative surgery and medical jurisprudence.

VII. Candidates shall be liable to be examined respecting their knowledge of any of the preceding subjects, or of any other subject not here enumerated, at their final examination for letters testimonial, as heretofore.

VIII. Pupils who become candidates for letters testimonial, subsequent to the 1st of January, 1835, shall be admitted to examination for such letters testimonial, if they shall have passed a half yearly examination in the fourth class.

IX. Pupils who become candidates for letters testimonial, subsequent to the 1st of January, 1836, shall be admitted to examination for such letters testimonial, if they shall have passed a half yearly examination in each of the third and fourth classes.

X Pupils who become candidates for letters testimonial, subsequent to the 1st of January, 1837, shall be admitted to examination for such letters testimonial, if they shall have passed a half yearly examination in each of the second, third and fourth classes.

XI. Pupils who become candidates for letters testimonial, subsequent to the 1st of January, 1838, shall be admitted to examination for such letters testimonial, if they shall have passed a half yearly examination in each of the first, second, third and fourth classes.

XII. The Court of Censors shall be authorised to examine candidates for letters testimonial, who have been unable, in consequence of absence from Ireland, or some other equally excusable cause, to answer the half yearly examinations required by the above by-laws; and the discretionary power vested in the Court, respecting the examination of candidates who commenced their education previous to the 1st of January, 1829, is not repealed or altered by these by-laws.

Examination for Letters Testimonial.

XIII. Every registered apprentice shall be admitted to an examination for letters testimonial, if he shall have passed the half yearly examinations reqnired by the by-laws, and if he shall have laid before the Court of Censors the following documents:

1. A certificate signed by the president or vice-president and two of the censors, that he has passed an examination as to his acquaintance with the Greek and Latin languages in the following books: viz., the works of Sallust, the first six books of the Æneid of Virgil, the Satires and Epistles of Horace, the Greek Testament, the Dialogues of Lucian, selected by Walker, and the first four books of Homer's Iliad; or a

certificate from his tutor that he has entered as a student into Trinity College*.

2. His indenture of apprenticeship, regularly registered, with a certificate signed by the member or licentiate to whom he has been indented, that he has fully and perfectly served such apprenticeship for the full term of five years.

3. A receipt showing that he has lodged to the credit of the President, and for the use of the College, in the Bank of Ireland, the sum of thirty guineas.

4. Certificates of attendance on three courses of lectures on anatomy and physiology, three courses of lectures on the theory and practice of surgery, and the performance of three courses of dissections, accompanied by demonstrations; also, certificares of attendance on two courses of lectu.es on chemistry, one course of lectures on materia medica, one course of lectures on the practice of medicine, one course of lectures on midwifery, and one course of lectures on medical jurisprudence; with such certificates of attendance on the practice of an hospital or county infirmary as may satisfy the court that the candidate has had sufficient opportunity of acquiring practical information.

5. A thesis, essay, or dissertation in Latin or English, fairly engrossed, according to a prescribed form upon any of the following subjects:—anatomy, physiology, surgery, practice of medicine, chemistry, materia medica, midwifery, or medical jurisprudence; or, in place of such dissertation, a series of cases collected in the hospital in which the candidate has attended, illustrated by comments or observations.

XIV. Every candidate who has not served an apprenticeship shall be admitted to an examination for letters testimonial, if he shall have attended lectures or hospitals for three winter seasons, at least, in Dublin, London, Glasgow, or Edinburgh; if he shall have answered the half-yearly examinations required by the by-laws; and if he shall have laid before the Court of Censors the following documents:—

1. A certificate signed by the president or vice-president, and two, at least, of the censors, that he has passed the examination as to his proficiency in the Greek and Latin languages, as prescribed for the registered apprentices, or a certificate from his tutor that he has entered Trinity College.

2. A receipt, showing that he has lodged to the credit of the president, and for the use of the College, in the Bank of Ireland, the sum of thirty guineas.

3. Certificates showing that he has been engaged in the study of his profession in some hospital or school of surgery or medicine, for the full term of five years.

4. Certificates of attendance on a surgical hospital containing at least fifty patients, during five winter seasons of six months, or three years, if such attendance shall not have been perfected during the winter seasons.

5. Certificates of attendance on three courses of lectures on anatomy and physiology, three courses of lectures on the theory and practice of surgery, and the performance of three courses of dissections, accompanied by demonstrations; also certificates of attendance on two courses of lectures on chemistry, one course of lectures on materia medica, one course of lectures on the practice of medicine, one course of lectures on midwifery, and one course of lectures on medical jurisprudence.

6. A thesis or series of cases as enjoined for registered pupils.

Examinations of Candidates for the Midwifery Diploma.

XV. The mark, distinguishing practitioners in midwifery in the printed lists of the College, shall not be affixed to the name of any member or licentiate of the College, unless he shall have obtained the license or diploma of the College authorising him to practise that branch of surgery, as hereinafter specified; or unless he shall have received some recognised midwifery diploma, previous to the 1st of May, 1831.

XVI. A Court of Examiners, consisting of a chairman, deputy chairman, and six members, shall be elected by ballot, on the first Monday in January in each year, to examine

* The tutor is one of the Fellows of the University; and the person obtaining his certificate, must have passed a more extensive classical examination than that of the College of Surgeons.—Eds.

such members or licentiates as become candidates for the diploma in midwifery; any four of which Court, with the chairman or deputy chairman, shall be competent to hold such examination.

XVII. Every candidate for the diploma in midwifery shall be admitted to an examination, if he shall have laid before the Court the following documents:—

1. A receipt, showing that he has lodged to the credit of the president, and for the use of the College, in the Bank of Ireland, the sum of five guineas.

2. Certificates of attendance on two courses of lectures on midwifery, of three months' duration each, or one course of six months'.

3. A certificate of attendance on an established lying-in hospital for a period of at least six months, or a certificate that he has been a resident pupil for six months in some established dispensary for lying-in women, and diseases of women and children, devoted to this branch of surgery alone, such hospital or dispensary to be approved of and sanctioned by the Midwifery Court.

4. Satisfactory evidence that he has conducted thirty labour cases at least.

XVIII. Candidates for the midwifery diploma shall be examined on the anatomy and physiology of the female generative system, the theory and practice of midwifery, and on the diseases of women and children; and if approved of by the Court, shall receive a licence or diploma to that effect, to which the College seal shall be affixed. Should a candidate be rejected, he shall not be again admitted to an examination until a period of three months shall have elapsed, and he shall then be obliged to produce satisfactory evidence of his having been engaged in the study of this branch of surgery subsequent to such rejection.

General Regulations.

XIX. No certificate shall be received for attendance on lectures delivered in Ireland, unless from teachers in schools permitting the visitation of the Court of Censors, and receiving their sanction. Neither shall certificates be received from teachers or professors in colleges or other institutions for medical or surgical education in Great Britain or Ireland, which colleges or institutions refuse to receive, as qualification for a degree or license, the certificates issued by professors in the College of Surgeons.

XX. No certificates shall be received from teachers who deliver lectures upon more than one distinct subject, as hitherto allotted to professors in colleges in universities. This regulation shall not, however, exclude the certificates of two or more teachers who deliver conjointly, separate, perfect, and distinct courses on anatomy and physiology, and on the theory and practice of surgery.

XXI. No certificate shall be received for attendance on lectures on anatomy and physiology, unless such lectures shall have been delivered upon at least five days in each week of the usual winter session, between October and May; nor on the theory and practice of surgery, unless delivered within the same period, on at least three days in each week. The two courses delivered in London, and there called autumn and spring courses, shall, however, be considered equivalent to one winter course of six months, as delivered in Dublin and elsewhere.

XXII. Every candidate presenting certificates of attendance on lectures or hospitals, previous to his examination for letters testimonial, shall be liable to be examined respecting their authenticity; and if he shall refuse to answer thereupon, or if it shall appear from his answers, or from any other information obtained by the Court of Censors, that he has not attended such hospital or lectures with regularity, or according to the regulations laid down by the College, or for the full time stated in such certificate, he shall not be admitted to an examination for one year; and should it be proved that he has presented a forged certificate, or a certificate obtained by causing some person to personate him, and attend for him, he shall never be examined; and if such fraud shall be discovered, after the candidate shall have obtained letters testimonial, he shall be expelled, and such letters shall be withdrawn, and shall be given up by him to the College, on demand in writing, signed by the secretary, or in default thereof, proceedings shall be had against him on his bond.

XXIII. The examination of every candidate for letters testimonial, shall be held in the presence of the members and licentiates of

the College, or such of them as choose to attend, and the secretary shall, by regular summonses, give at least four days' notice of such examination.

XXIV. Every candidate for letters testimonial shall be solemnly examined on two several days in anatomy and physiology, in the theory and practice of surgery and medicine, in chemistry, and in the materia medica; candidates shall be expected to perform such surgical operations, or make such dissections on the dead body, as the Court of Censors may require; or they shall be called upon to explain any anatomical preparation which the examiner may lay before them.

XXV. In case a candidate shall be rejected, and shall appeal to the Court of Assistants, such appeal, stating that he considers himself aggrieved by the decision of the Court of Censors, shall be lodged within eight days from the date of rejection, and the candidate shall be submitted to examination within fourteen days from the date of such rejection. The examination before the Court of Assistants shall be conducted in every respect as the examination before the Court of Censors.

XXVI. A candidate for letters testimonial, who shall have been rejected, shall not be admitted to another examination, except upon his appeal, in less time than one year from such rejection, and he shall then be required to lay before the Court satisfactory evidence of his attention and opportunities of improvement, subsequent to the period of his rejection.

XXVII. The Court of Censors shall be authorised to examine candidates for letters testimonial who have not been educated in strict conformity with the above by-laws, but who shall produce evidence of having received a professional education equivalent to that required by the College, provided such candidates shall have commenced their professional education previous to the 1st of January, 1829. The Court shall also be authorised to receive certificates issued by competent teachers previous to the 1st of May, 1829, notwithstanding any regulation to the contrary in the above by-laws.

APOTHECARIES' HALL OF IRELAND.

Notice of Qualification required from Candidates for Examination.

THE Court of Directors and Examiners of Apothecaries' Hall of Ireland, in pursuance of an act of parliament, passed in the thirty-first year of the reign of his Majesty, George the Third, entitled "an Act for regulating the Profession of an Apothecary throughout the Kingdom of Ireland,"

For Certificate of Apprentice,

1st. Resolved, that persons seeking to become qualified to be apprenticed to the profession of an Apothecary, shall produce testimony of being fifteen years of age, and shall undergo an examination in Latin, comprising the following Books:—the first six Books of the Æneid of Virgil, the Cataline and Jugurthine War of Sallust, and the Odes, Satires, and Epistles of Horace; in Greek, the Gospel of John, Dialogues of Lucian (Walker's edition), and first three Books of Homer.

For Diploma of Licentiate.

All Candidates for the Diploma of Licentiate of the Apothecaries' Hall of Ireland, shall submit to the Court the following testimonials of qualification, four days previous to examination;—1st, the certificate of permission to be apprenticed, obtained at former examination. 2nd, Indentures of apprenticeship, for seven years, to a Licentiate of Apothecaries' Hall of Ireland, with a certificate from said Licentiate, that the period has been duly served, also of moral conduct. 3rd, Certificates of having attended at least one course of lectures on each of the following subjects:—chemistry, materia medica and pharmacy; botany, practice of medicine, anatomy, and physiology. The certificates of attendance upon lectures received by the Court of Examiners as qualications are expressed as follows:—

Chemistry, Materia Medica, and Botany.—By Professors to Universities, by the Professors to Apothecaries' Hall, or by Lecturers in the approved Schools in Great Britain.

Practice of Medicine.—By Professors to Universities, Professors to Apothecaries' Hall, or by Lecturers in the approved Private Schools of Great Britain and Ireland.

Anatomy and Physiology.—By Professors to Universities, Professors to Royal Colleges, or by Lecturers in the approved Private Schools in Great Britain and Ireland.

Each course on chemistry, materia medica, and pharmacy, practice of medicine, anatomy and physiology, to consist of not less than

sixty lectures, and on botany not less than forty.

By order of the Court,
WILLIAM MADDEN, *Sec.*

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, March 1st, 1834.

DR. GREGORY in the Chair.

Paraplegia without Disease of the Spine.—Diagnosis of Disease of the Brain.—Strychnine in Paralysis, Hysteria, Dyspepsia, and Neuralgia.

A QUESTION asked by Mr. Costello, with regard to the subject of petitioning Parliament for Medical Reform, led to some discussion on this topic; after which, some time having passed in solemn silence,

Dr. Gregory related the following case, which had lately fallen under the notice of Mr. Turnham, the Secretary, and which appeared of great importance, since it went far to confirm the opinion of Dr. Baillie, in regard to the existence of paraplegic symptoms without disease of the spinal cord. This case was one of paraplegia existing independent of injury to the spinal marrow.

Charlotte Smith, aged 10, of 8, Upper Rupert-street. Her father is a healthy man, of good constitution, has been twice married; by his first wife he had a family of healthy children; his present wife appears, however, to possess a strumous diathesis; her offspring are all the subjects of some disease; one labours under the effects of rachitis, one has died of epilepsy, to fits of which two are still subject. The subject of the present narrative was possessed of good health up to her eighth year, was a child of amiable disposition, and was very attentive to those studies to which children of her age and condition are usually directed. Her father was, however, induced to remove her from school, in consequence of perceiving a growing languor, both of body and mind, and from her complaining of severe headach. These symptoms, and others of an insidious character, continued for about a twelvemonth, when they became aggravated, and a strabismus of both eyes coming on, induced her father to apply for relief at the Westminster General Dispensary, where she was admitted as a patient under Dr. Granville, during the winter of 1832. He ordered leeches to the head, with a mercurial aperient, and wrote on the letter that there was disease of the cerebellum. A month or two after this she was transferred to Dr. Davie, who requested me to attend to the case for him, which I did from that time to her death. The strabismus had then merged into complete amaurosis, the pupil being excessively and permanently dilated, and insensible to the strongest light; voluntary motion and sensation became gradually impaired in the inferior extremities; and these symptoms becoming aggravated, the result was a perfect paraplegia; the urine and fæces were now, and until her death, passed involuntarily; the former of these excretions was remarkably fœtid. There was a partial paralysis of the upper extremities, but this never became complete, indeed they were the subjects of occasional slight convulsions. The pain in the head was much increased in violence, particularly in the region of the occiput.

The treatment, adopted by Dr. Davie, consisted of blisters behind the ears, kept open by savine cerate, leeches repeatedly applied to the temples, and an evaporating lotion to the whole head, as well as calomel and jalap internally at least twice in the day. These remedies were continued for several months, with greater or less regularity, without the least improvement, as, in spite of them, the violence of the symptoms increased. Convulsive paroxysms, in which she suffered the greatest pain, now attacked her at intervals of various durations, her sleep not unfrequently being molested by them; at other times she lay in a remarkably quiet state, a placid smile being constantly observable on her countenance. Throughout her illness the circulating and respiratory systems were but little affected, nor were the nutritive functions impaired. A fortnight before death she was attacked with a convulsive fit of longer duration than usual, after which a comatose state ensued, which lasted for two or three hours; on her recovery from this condition her appetite was lost, and she gradually sunk till the 14th of Dec. 1833, when she suddenly but quietly expired.

Autopsic examination, forty hours after death.—Upon opening the cranium and removing the hemisphere of the brain, the roots of the lateral ventricles were found to be ex-

traordinarily elevated, and showed, through their semi-transparent substance, the presence of a large quantity of fluid, which soon escaped, to the amount of six or eight ounces. The cavities of the anterior and posterior cornua of the ventricles had become remarkably apparent, from the distending effects of the fluid. In the posterior left lobe of the cerebrum there was a mass of caseous scrofulous matter, about the size of an egg; it was situated in close contact with the pia mater. The cerebellum was also found to be almost entirely in the left, and to a very great extent (about half) in the right lobe, converted into the same substance. Upon being cut into, this was found to be of a much firmer and denser consistence than is possessed by the healthy structure of the brain, and to be of a dirty yellow colour. Upon elevating the base of the brain, it was detected that the arachnoid and pia mater, in this situation, were much thickened, and rendered opaque by the organisation of much effused fibrine, in which the roots of the nerves were involved. The optic nerves appeared to be much softer than in their normal condition. The spinal cord was remarkably healthy, nor did its membranes possess any marks of unusual vascularity.

In the *thorax*—the heart and its appendages were healthy; the lungs had some small vomicæ, more particularly at their summits.

In the *abdomen*—the liver was remarkable for its large size, and almost equal development on both sides of the body. In its substance, as well as along the course of the colon, were numerous cysts, filled with scrofulous matter, much softer however than that in the brain. The tissue, both of the uterus and ovaries, was converted into the same soft caseous-like matter, with which the cavity of the former was completely filled. The kidneys and other viscera were healthy.

Mr. Costello wished to place by the side of this case one which seemed to resemble it, since, although the inferior half of the body was in a complete state of paralysis, yet, on examination, no lesion of the medulla spinalis was found. A man, æt. 42, of spare habit of body, about twelve months since, according to his custom, after beating his coat on the leads of the house, leaped down a few steps into the kitchen, which was the attic floor, when he felt something snap; a few hours after there seemed to be a slight pressure on the lumbar region, which continued to increase; during the night he found that he had lost the use of his lower extremities, and that the power of expelling his urine was gone. He was bled by a surgeon, after which the bladder resumed its functions, but only for a short time. In the morning Mr. Costello saw him, and drew off his water. Issues were, after depletion, applied to the sides of the lumbar vertebræ, where the pressure, at first felt, had now changed to pain. A remarkable circumstance was, that this pain did not remain permanently fixed in any one spot, but gradually passed down from one vertebra to another, and, previous to his death, again ascended in the same gradual way. For a time his health seemed to improve, the emaciation, which was rapid, stopped, and his appetite increased; now, however, pus was observed in the urine, and, judging from this, and the circumstance of the patient's having two years before complained of pain in the lumbar region, together with the total absence of any irritation in the bladder, it was supposed that the presence of this secretion depended on some disease in the kidneys. The locomotive powers, for a time, slightly improved, but without being accompanied by any amendment in the sensitive organs. This improvement was, however, only delusive, for shortly afterwards the patient died suffocated. Mr. Brodie, by whom the case was also seen, thought that there would probably be found ramollissement of the cord; and, in answer to the objections of Mr. Costello, on account of the rapid appearance of the symptoms, adduced some cases of ramollissement occurring rapidly, related by Lallemand.

Autopsy.—The brain was perfectly healthy; the spinal marrow and sheath were injected, and, in the lumbar portion of the canal, clots of crassamentum adhered to the bones, whilst the serous portion of the blood floated; it was probably from the absorptions of portions of the blood that the pain in this region was to be accounted for; there was no ramollissement in any part of the canal, and the substance itself, independent of the injected state, appeared healthy.

Dr. Johnson said, there could be little doubt but that there could be extreme disorder of function, which might even amount to paralysis, without leaving any permanent structural disease; it was not uncommon to find paralytic

symptoms in children lasting a short time and then suddenly disappearing, and in such cases it was not possible to suppose that permanent disease existed in the brain.

Dr. Gregory said, that Dr. Baillie, with all his anxiety to establish this fact as a pathological principle, had never been able to meet with dissections proving the point.

Mr. Costello made allusion to the work of Cruveilhier, on the subject of Disease of the Brain, which he spoke of in high terms of commendation.

Mr. Johnson could not go to the length which Mr. Costello did in lauding this author; he did not think it always possible to predicate from the symptoms the exact situation of lesions of the brain; and, in illustration of this, he mentioned an instance in which lesions of, and effusions into, this organ were found after an injury, although there were no symptoms which indicated such disease.

Mr. Chinnock did not think cases, similar to that mentioned by Mr. Johnson, in the least affected Dr. Baillie's theory, since, in the cases upon which the Doctor had founded his opinion, chronic disease had invariably existed. He quite agreed in what had fallen from Mr. Johnson in reference to M. Cruveilhier, and he was the more induced to do so from two cases which had fallen under his notice, in one of which, although paralysis exists and had existed some time, no appearance of disease or other symptoms of lesion could be discovered. He had been induced, in one case, to give strychnine, but from what he had seen of its merits, he certainly should not again make use of it.

Mr. Greenwood made some remarks on the value of pathological investigation. In speaking of strychnine, he thought it should only be applied where there was a torpid action of the brain.

A few observations on the difference between meningeal and general apoplexy having fallen from some of the members.

Mr. Chinnock related a case of paraplegia, in which most of the eminent practitioners of London and Paris were consulted, and were unable to discover the cause of the disease, or any effectual remedy. Strychnine had been tried without effect.

Dr. Gregory referred to a case in which a patient, after taking strychnine, was affected with spasm of the tongue. From the experience in the medicine which he had had, he certainly should not be inclined any more to use it.

Dr. Ryan observed, that Mr. Chinnock's case was not a fair one for strychnine, as it had defied all remedies, and was not sufficient evidence against the value of the medicine alluded to. He had tried strychnine in several cases of hemiplegia, dyspepsia, hysteria, chorea, and in a few patients affected with neuralgia, with the best effects. He thought the dose generally used was too large; he commenced with one-twelfth of a grain, and met no patients as yet who could bear more than five times that quantity without inconvenience. M. Magendie and Dr. Bardsley of Manchester had given it in much larger quantities. It was difficult to procure the medicine genuine. He placed the greatest confidence in it in disorders of function or purely nervous affections, such as those he had mentioned.

Dr. Gregory thought the remarks of Dr. Ryan, as to the administering small doses of the medicine, of importance. Some preparation, in which it might thus be more easily given in such small doses, was desirable.

Dr. Ryan said, in answer to a question, that it was in functional, not organic, disease that it should be prescribed.

A member wished to ask Dr. Ryan if he had used the alcoholic extract of nux vomica, and in what doses? In one case he had seen it used, when it produced symptoms of poisoning, which, however, went off after some hours.

Dr. Ryan replied in the negative. He said it was too much the custom of late years to expect to find the cause of death on autopsic examinations; and many seemed to forget the existence of a cerebro-spinal system in man. The question generally is, what are the morbid appearances? The numerous disorders of function, as frequent and as painful as lesions of structure, called for attention every hour, and if they proved fatal, no morbid appearances will be found on dissection. This was generally the case in the nervous disorders to which he alluded, though there were exceptions. In such cases strychnine in small doses would be found one of the best remedies. He had employed it in dispensary and private practice, in at least one hundred and fifty cases of various disorders, with the most astonishing success.

Mr. Greenwood was always sorry to hear any one rise and deprecate the pursuance of pathological investigation, to which we were so much indebted for our knowledge on most points.

Dr. Ryan rose to order, and wished to explain that no one felt more interest in pathology than he did, but he contended it should not be studied to the exclusion of therapeutical agents. We could not investigate the nature of diseases too much, nor should we neglect to enlarge our remedies. To the mere pathologist he would apply the axiom of Celsus—

" Morbi non eloquentiâ, sed remediis curantur."

The meeting then separated.

THE

London Medical & Surgical Journal

Saturday, March 8, 1834.

POWER TO CONFER MEDICAL DEGREES IN LONDON.

Before we resume our remarks of last week, upon the necessity of vesting the power to confer Medical Degrees in some body distinct from the existing Corporations, or any School of Medicine, and governed by different principles, we cannot but notice the delicate and ingenuous manner in which the same subject has been since treated by a cotemporary; and by exhibiting the naked form of his project, without the drapery his modesty has thrown over it, we shall enable the public to judge of his sincerity in this new guise it is his fortune to assume.

Since our last article was written, a report has been made to the proprietors of the London University, in which it is stated, that " the Council have not yet overcome the difficulties which impede their attainment of a charter of incorporation, but that they have taken measures to bring the subject before the Privy Council." A charter has, of course, been eagerly sought for, ever since the first establishment of the University; and when we consider that the bulk of its subscribers and supporters, however excellent subjects, are not exactly of the Church-and-State class, and that they cannot but be jealous of the *privileges* acquired by an University degree, and may have some desire to give their families a liberal public education, with all the advantages of eminent teachers and of unbounded competition, without sending their sons out of the kingdom;—it is not very atrocious that they should seek as liberal a power of conferring degrees in arts, as is possessed by the unrivalled orthodox universities—*sui amantes sine rivali:* and if these sentiments were not *too bad* in the reign of perfection before Reform, we cannot see why they should be stifled in the year 1834. A few years ago Medical Reform, upon general principles, was the dream of visionaries. All that is changed; and with it all mere palliations are now useless. But at the time we allude to it was not very unreasonable for the great interests, connected with the University, and severed by conscientious motives from the chartered establishments, to demand that the University of London might imitate its rivals at Oxford and Cambridge, in the power of conferring medical degrees: and objectionable as it would have been, for many reasons, to concede such a power in imitation of even the lordly Universities of England, there are evils it would have remedied. We are not in the secrets of the London University; as Journalists we have experienced the petulant discourtesy of one of its professors,—but we neither love nor hate; and, in our strictures upon its claims, we profess and hope to practise perfect impartiality. As to the general amount of its claims, to give degrees as a literary and scientific school, we know nothing: and indeed—medicine apart—except as concerns some privileges accorded to gra-

duates of the English and Irish Universities, on their admission to the legal profession, occasioned principally by the rules as to residence which are inapplicable to the London University, its degree can confer no advantage, honour excepted, not already conceded to it, since the Presbytery of Scotland have recognised its lectures. But the power of giving medical degrees it never can acquire. The times are *now* ripe for a more wholesome system of medical legislation; the whole state of the case is altered; the question with the University is no longer one of rivalry, but of existence; and the Government has *now*, not the power only, but the will also, to abolish altogether the monopoly of teaching, instead of palliating its evils by raising an additional privileged school to abuse, in its turn, its delegated trust. We firmly believe, that no influential person, connected with the University, whose opinions are worth considering, has harboured any such expectation since there was a probable chance, now happily realised, of a general investigation into the condition of Medical Education in the United Kingdom, with a view to its efficient reform. We have no secret source of information:—we believe it is well known, that the Lord Chancellor has turned his powerful intellect to the wants of the profession, and that his opinions, as to the proper remedy, are far from favouring the narrow project of relief we have been canvassing;—although there were not, at this moment, a Committee of the House of Commons sitting in judgment on our grievances, we think the deliberate caution, with which the application of the University has been received by the Privy Council, is sufficient warrant that nothing rash and inconsiderate, touching the profession, would be attempted under his Lordship's advice.

This notification of their proceedings by the Council has elicited an article from our cotemporary, with an epigram for its title, and malice, envy, hatred, and all uncharitableness for its contents. When we hear of a "proposed University in London, not the London University," from the Medical Gazette, if we think of consistency, we may in vain ask—

"How can these contrarieties agree?"

and if the venom of the article attracts our notice, it is as vain to ask, who poisoned the shaft? seeing there are more than one engaged in the trade. Here is a specimen of the calumny with which a journal, under the patronage of the College of Physicians, asperses honourable men. It asserts that "some of the proprietors of the establishment in Gower-street have chosen the present moment again to step forward,—or rather to *steal with silent and noiseless tread*,—to the *closet* of the minister, and endeavour by *private solicitation* to obtain the boon they have so long coveted, and thus virtually to forestal the result of the parliamentary investigation, which is already in progress. True, this request is indicative of that *habitual modesty* which characterises all their proceedings, &c., &c., &c." Again, even Parliament is disqualified from legislating touching a charter at all, because "no inconsiderable number of those who will be called upon to legislate are actually proprietors of the institution which it is intended to benefit, and thus have a direct pecuniary interest in the result." And once more—"*We may be permitted, without being very uncharitable, to surmise that the contingent effect upon shares, now at a discount of seventy-five per cent, may by possibility have some influence on the votes of honourable members.*" Subsequent allegations of *deception* and *imposture* are trifles to this! We shall leave the miserable man, who could think or express himself so, to the repro-

bation—not of his conscience, but of the profession. This being so, what is the scheme—the *quid pro quo*—of the Medical Gazette?—Monopoly afresh! "There exist in London numerous schools of medicine, in which some of the greatest men of the past age formerly taught, and which are *now adorned by successors not unworthy of those whom they have followed.*" (Is Dr. Macleod at St. George's?) These schools in other places, emphatically called "*great schools,*" and which clearly indicate *the hospital schools*, should be the "*recognised*" schools or colleges of the "*One Great University.*" And so, no private lecturer, be his talents ever so great, or ever so well attested—be his private school ever so well attended—the unbribed consequence of his industry and talents—has any chance in the mart for teaching with this forestaller. But thoroughly to expose the drift of this new fangled system in favour of the hospitals, we must let our readers into a secret manœuvre of the last week. A meeting of *hospital lecturers* was convened and held,—we know not by what authority, we know not where, we cannot specify the day,—to petition against the grant of a medical charter to the University of London, of which there was not the slightest apprehension; and, one thing leading to another, the happy thought of petitioning for a monopoly to themselves occurred to some choice spirits; and one of the fraternity,—need we explain the rest?—threw out a feeler to grope the way for this dark deed.

Upon mature reflection, we repeat our firm adherence to the thoughts upon the constitution of the NEW Board for conferring medical degrees, which were submitted to our readers last week. The recognition of lecturers we touched on but slightly: it requires further development. No person should be recognised as a lecturer till after some years' professional practice: perhaps it may not be worth while to make an exception in favour of mere anatomy. The lecturer should undergo a strict additional examination in the medical subjects on which his certificate would be receivable, beside being required to prove his qualifications in such collateral branches of the physical sciences as may be requisite for the proper cultivation of his branch of the profession.

With this simple demand of a proper degree of knowledge, there should be no other restriction whatever on the teacher. At present, ill as the Apothecaries' Hall is managed, its recognition of lecturers is conducted on sound principles.

It is most deplorable to reflect how little is done for the art of healing *as a science* in this country. A man, who rises to eminence in practice, owes his good fortune to a thousand accidents of manner and connexion, which much outweigh the value of professional skill; and when, at length, a young man of talent does succeed to acquire a decent competence by professional exertions, his time is frittered away by the distractions of practice, and he is unfitted for the labour of original research. It is somewhere remarked of the physicians cotemporary with Harvey, that no man above the age of forty admitted the truth of his splendid discovery. With all due respect for our enlightened seniors, we suspect the observation might be repeated if another Harvey were to appear. By making the situation of a lecturer the honourable consequence of recognised and distinguished professional knowledge attested by examination, the great body of students would have the best possible instruction; and young men would have another channel open to fame and independence than the accidents of good fortune. With the same view, prizes

of value for treatises or discoveries should be annually offered.

Some apprehend it would interfere with the current of private charity, to take from the subscribers to hospitals and dispensaries the election of medical officers. On the Continent, appointments to public charitable institutions, being in the gift of government, are bestowed upon the most worthy, after a public examination. It is not necessary to point out, what an impulse to exertions such situations, all of which are moderately paid, hold out to young students. We do not consider it impossible to establish a similar rule in our domestic charities; for the number of subscribers made by medical candidates for corrupt purposes, is but an occasional and scanty supply to the immense sums annually given to these establishments, and to the really charitable there can be but one object;—to elect the most deserving.

Whilst, however, hospital appointments are in their present condition, it is a reason the more for refusing hospital schools any monopoly in teaching.

ROYAL COLLEGE OF SURGEONS.

THE College of Surgeons has been lately the subject of a double attack;—first, that it purposes, as we announced a considerable time ago, to lay out a large sum of money, about five-and-twenty thousand pounds, in rebuilding its Museum and Library; and next, that it has acted with unreasonable severity, in rejecting some late applicants for its diploma,—and both charges are connected with the present investigation as to Medical Reform. The outlay of money will, it is conjectured, so much enlarge and strengthen the foundations of the College in Lincoln's-Inn Fields, that it will be difficult to remove them to the site of the New Faculty College that is to be: and it is presumed that the present rigour of their examinations is a ruse to deceive the Committee. We have barely room for a word on both matters. The question is not now how the funds have been acquired: there is no charge of embezzlement against its members. But we are not lynx-eyed enough to discover a breach of trust in appropriating a portion of them,—even a large portion,—towards the building of a new Museum, or the enlarging of the Library; nor can we divine how this new Museum and Library will control the interference of the Committee and the legislature with the College of Surgeons. The Museum and Library will be equally serviceable under the new regime, and the situation is not a bad one.

If the motive of their supposed rigidness in examining at present be truly assigned, we detest the motive, and laugh at its folly; but if their examinations, in times past, were scandalously negligent, whereof there is no doubt, shall they even now, at the last moment, say, of their existence, persevere in their neglect of a sacred obligation, and pass unqualified persons, *because* such have passed hitherto? The truth is, that, like the building scheme, which was adopted a considerable time ago, we have reason to know the examinations of the College had become much stricter some time before a Parliamentary Committee was a matter of certainty.

EFFECTS OF TARTARISED ANTIMONY IN DILATING THE OS UTERI.

BY JOHN LANGLEY, ESQ., SURGEON.

AT three o'clock, P.M of Friday the 21st ult., I was called to attend a young woman of plethoric habit and rigid fibre, 21 years of age, in labour with her first child. I was then informed she had been suffering severe pains during the day, which having increased in intensity and frequency, her attendants deemed it necessary to send for me. On visiting her,

I found she had pains of such unequivocal character, occurring every five or six minutes, that induced me to press an examination per vaginam, believing, from their nature, the labour must have progressed to an advanced stage; but, to my surprise, I found the os uteri with difficulty admitting my finger, extremely rigid and unyielding, the fœtal head presenting, and pressing firmly upon it; the pelvis sufficiently capacious; the bowels had been frequently and freely evacuated; but she experienced a most distressing inclination to pass urine, without the power. Accompanying this state, there was a hard and frequent pulse, dry tongue, and hot skin. To relieve the insupportable suffering from obstructed micturition, with difficulty I drew off rather more than a pint of urine, which so far gave relief; still the apparent, and no doubt real, suffering of my patient was excessive, the pains assuming a more than ordinary violent character, I determined forthwith to bleed her freely, which proposition panic-struck her mother and self, both of whom positively and resolutely refused a compliance with my wishes, and in such a manner as rendered a perseverance unavailing, notwithstanding I described, in strong terms to both, the risk they incurred from such contumacious conduct. In the hope of inducing a relaxation of the contiguous parts, I threw into the rectum four injections of thin warm water gruel, at intervals of about an hour; still the same relentless rigidity of the os tincæ, and all the parts concerned in parturition. Reflecting upon the relaxation which supervenes upon the spontaneous vomiting which so frequently occurs, from sympathetic gastric irritation, during the last stage of uterine dilatation, I thought myself justified in anticipating, or rather imitating, nature in her operation, and decided upon giving small doses of tartarised antimony, which I did in quantities of one-sixth of a grain every twenty minutes in a little gruel, unconsciously to my patient. The second dose produced considerable nausea and gentle diaphoresis; and, upon again examining, I found the os uteri in a more favourable state. I gave a third and fourth dose, the latter of which excited vomiting, accompanied with profuse perspiration. From this moment an unusually rapid dilatation of the os uteri took place; the head descended upon the perinæum, and the external parts yielded most favourably to the passage of the head, and my patient gave birth to a fine living child at nine o'clock.

I do not hesitate to affirm, from analogy in similar cases, that many hours of suffering and anxiety were saved to my patient, and which I alone attribute to the effect produced upon the muscular system by the administration of the antimonial.

36, *Tottenham-street, Fitzroy-square,*
Feb. 24th, 1834.

French Hospital Reports.

HÔPITAL SAINT ANDRE DE BORDEAUX.

Affection of the Superior Portion of the Medulla Spinalis cured by Electricity.

— Girard, a cook by trade, had made many voyages, and had generally enjoyed good health. In two or three voyages he had been seized, without any known cause, with severe symptoms of paralysis of the upper limbs, which were cured by prompt antiphlogistic treatment — blisters and demulcent drinks. During the last voyage which he made to India, the same symptoms occurred and were combated by the like treatment, but without the same success. His general health, whilst under the care of M. Moulinie, Surgeon-in-Chief to the hospital, was good, the sensitive and locomotive powers of the upper limbs being only affected. There is a constant feeling of pricking and numbness in these parts, and motion can only be performed with great difficulty. General bleeding has been practised, and sixty leeches have been twice applied opposite the origin of the brachial plexus of nerves; purgatives, composed of aloes and jalap, have been given, and dry frictions; anodyne and stimulating fomentations have been used, but no treatment hitherto has arrested the paralysis. Recourse has therefore been had to the employment of electricity; one of the conductors of the electrometer of Lanne was placed on the upper part of the spine, and the other conductor alternately in either hand. This mode of treatment was had recourse to seven times during twenty-two days, and for the space of ten minutes each time; at the end of this period locomotion and sensation in the limb was completely established, and the patient has since returned to his employment.

The phenomena observed during each sitting could be divided into local and general. The first consisted in a nervous excitement of the upper limbs, so that the patient could use more force and could execute some few movements. This excitement gradually diminished after the first use of the electricity; the pricking sensation disappeared after the second exhibition, and the sensibility became more normal; the circulation was accelerated, and the skin, at first dry, became moist.

Italian Hospital Reports.

HÔPITAL MILITAIRE DE CALVI, CORSE.

Gun-shot Wound of the Arm — Amputation — Torsion of the Arteries.

A MAN was brought into this hospital, from the prison, with a gun-shot wound in the arm, which had been occasioned two days before whilst resisting the police. There was no hope of preserving the limb, for not only was the fracture comminuted, but gangrene had already commenced in the surrounding parts. M. Ferrus therefore proceeded to amputate the arm, but, to his dismay, on attempting to apply ligatures, found that they were not sufficiently strong to be tied. No others being at hand, torsion of the arteries was practised with a common pair of forceps, and, fortunately, was not succeeded by any hæmorrhage. The stump rapidly healed, and the patient is now confined in the prison at Toulon awaiting his trial.

British Hospital Reports.

ST. BARTHOLOMEW'S HOSPITAL.

Stricture of the Urethra—Calculus in Vesicâ.

An elderly man, upwards of seventy, was admitted with a stricture of the urethra, under which he has been labouring during the last two years. His existence during this time has been rendered very miserable, in consequence of his being compelled to void urine every hour with a catheter. Mr. Earle sounded the man, and felt two or three small stones in the bladder. Mr. Earle injected the bladder, and soon after there was a discharge of fluid from the rectum, which led him to believe that there was a fistulous opening between the rectum and urethra (an opinion which he has since abandoned). When the patient becomes more comfortable and easy, the operation of lithotomy will be performed. (This is a case in which Mr. Earle thinks the high operation would be preferable to the lateral one.) The operation of lithotripsy could not be successfully performed in this case, as the patient would not be able to expel the particles of stone, the expulsive power of the bladder being considerably diminished.

APOTHECARIES' HALL.

NAMES of gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, February 27th.

Cornelius Bland . . . London.
Ralph Augustus Busby . .
Silvester Eastes . . .
George Philip Gill . . London.
Joseph Willcox Haddock (*as an Assistant*)
John Jacobs . . . .
William James . . .
Boniface Langley . . .
Peter M'Taggart . . .
William Woodham Webb .
Samuel William Webb . .
James Wills . . . .

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON.

Westminster Medical Society . . .	March 8,	8	P.M.
Royal Geographical Society . . .	— 10,	9	P.M.
Medical Society of London	— 10,	8	P.M.
Zoological Society (*scientific business*) .	— 11,	8½	P.M.
Medico-Botanical Society	— 11,	8	P.M.
Medico-Chirurgical Society . . .	— 11,	8½	P.M.
Institution of Civil Engineers . . .	— 11,	8	P.M.
Geological Society .	— 12,	8½	P.M.
Society of Arts . .	— 12,	7½	P.M.
Royal Society . .	— 13,	8½	P.M.
Society of Antiquaries .	— 13,	8	P.M.
Royal Institution . .	— 14,	8½	P.M.
Anniversaries of the Royal Geographical Society	— 13,	1	P.M.
Medical Society of London	May 8,		
Royal Asiatic Society	— 10,	4½	P.M.

BOOKS.

A SERIES of Anatomical Plates in Lithography, with References and Physiological Comments, illustrating the Structure of the Different Parts of the Body. By JONES QUAIN, M.D., Professor of Anatomy and Physiology in the University of London. Fasciculus IX. Feb. 15, 1834. J. Taylor.

The Principles and Practice of Obstetric Medicine, in a series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children. Illustrated by numerous Plates. By D. D. DAVIS, M.D.

M.R.S.L., Professor of Midwifery in the University of London. Part XXIX. J. Taylor.

Observations on the Ulcerative Process and its Treatment, particularly when affecting the Leg. By William Eccles, Surgeon. 12mo. London: 1834. Highley.

The Magazine of Botany and Gardening, British and Foreign. Edited by James Rennie, M.A., Professor of Zoology, King's College. No. II., Vol. II. Feb. 1834. Henderson.

Of Monopolies in Learning; with Remarks on the Present State of Medical Education, and on the Constitution of the Scotch Universities. By Andrew Buchanan, Graduate and Regent of the Faculty of Medicine in the University of Glasgow. Glasgow: Griffin.

The Dublin Journal of Chemical Science, &c. March.

The Archives of Medicine, &c. Edited by Dr. Hunter Lane. March.

CORRESPONDENTS.

Several communications have been lately received, which are so illegibly written, that no use can be made of them. We request our numerous friends to attend to this intimation.

Medicus.—There will be a radical reform in every branch of the profession.

A Lecturer.—We have alluded to the private meeting of certain lecturers without having those in London apprized of it, and their petition to the Privy Council against the London University. This hole and corner junta will find to their sorrow that the demise of their monopoly is at hand.

W. C.—We know the difficulty, but it may be overcome.

G. T. D.—Is it not worth treble the amount?

Justus—Gracchus—Fairplay.—There will be a power of granting degrees in London; but it will not be conferred on any medical school to the injury of the rest; or on the College of Physicians, even when it will be modernised. The examiners should be elected by ballot from the recognised lecturers in London, every six months, and the examinations held half yearly. A Reformed House of Commons will not sanction either an old or a new monopoly.

A Licentiate.—Our correspondent asks us, what improvements in science or therapeutics have been made by the College of Physicians and Apothecaries' Hall? We answer, not one.

M.R.C.S.—In what better manner can the College expend some of its funds than in enlarging its Museum and Library? No member can reasonably find fault with this. The Theatre does not afford room for half the members, and who will complain of its holding double the number it does at present?

A. T.—All the communications have been forwarded, as well as the French 4to of M. Double, to Mr. Warburton.

An Inquirer.—The Fothergillian gold medal, of the Medical Society of London, was awarded to Mr. Clement of Shrewsbury; and the silver medals to Dr. Negri of Poland-street, and Mr. Cole of Charlotte-street, Fitzroy-square.

Z.—We have received similar complaints against an Examiner at Apothecaries' Hall, who, it is said, which we do not believe, seems disposed to reject every one. We should like to know, however, whether he was ever examined himself, and recollects the feelings of a candidate, or whether he was in practice before August, 1815.

J. H. C.—Lugol's preparations as published in No. 108. The tincture of iodine is decomposed by water or bitter infusions.

METEOROLOGICAL JOURNAL.

MONTH. Feb. 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
28		51	55	47	29·91	29·92	78	78	W.S.W.	W.S.W.	Cloudy	Fine	Cloudy
29		48	51	45	29·94	29·94	80	80	W.	S.E.	Rain	——	——
Mar.													
1		51	56	48	30·20	30·17	80	80	S.W.	W.	Cloudy	Cloudy	——
2	☾	53	57	45	30·17	30·17	78	78	N.W.	W.	Fine	Fine	Fine
3		49	55	47	30 17	30·17	77	76	S.	WS .W.	Cloudy	——	——
4		54	55	50	29·90	29·80	75	76	W.S.W.	W ..W.	Fine	——	——
5		53	55	43	29·56	29.62	78	78	W.S W.	W.S.W.	Rain	——	Cloudy

50, *High Holborn.* William Harris and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

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LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXX., DELIVERED APRIL 2, 1833.

Gentlemen,—My next duty is to enter upon the surgical consideration of diseases and injuries of particular organs and regions of the body; with reference, however, only to cases which I have not had the opportunity of explaining in previous lectures. I will commence with *wounds and injuries of the head, and their consequences.*

The observations which I shall have to deliver upon this important subject, will relate

1st. *To superficial injuries,* i. e. *wounds and contusions of the scalp;*

2ndly. *To fractures of the skull;*

3rdly. *To wounds of the brain;*

4thly. *To compression of this organ;*

5thly. *To concussion of it;*

6thly. *To inflammation of the brain and its membranes from external violence.*

1st. *Superficial injuries.*—Gentlemen, no doubt all of you are aware that a free intercourse subsists between the vessels of the pericranium and those of the dura mater, through the medium of the diploe of the skull. Now, it is partly in consequence of this communication that inflammation of the parts on the outside of the cranium is apt to be propagated to the dura mater. Hence all surgeons agree in setting down injuries of the scalp, especially contusions and contused lacerated wounds of it, as more serious cases than similar injuries merely affecting the common integuments of other parts of the body. Indeed, it is a maxim in surgery, that no wound of the head is so trivial, as not to require the strictest attention.

The scalp is often the seat of erysipelas, which, in certain constitutions, will be brought on by a very slight cut or contusion; the inflammation spreading rapidly, and soon involving not only the scalp, but the forehead, eyelids, and greater part of the face. Too often also, notwithstanding the most judicious treatment, delirium, succeeded by coma, comes on, and the case has a fatal termination.

I know of several instances, in which the removal of very small encysted tumours from the head led to the production of phlegmonous erysipelas in so violent a form, that the loss of life was the result.

Contusions of the head frequently give rise to an effusion of blood under the aponeurosis of the occipito-frontalis. The swelling is generally soft in the centre, and hard at its circumference; hence the feel of it may lead an inexperienced surgeon to suspect that the accident is a fracture of the skull, with depression of the bone.

But, gentlemen, some tumours, occasioned by extravasated blood, lie immediately under the scalp, and cover all the upper part of the head, raising up the scalp in a manner that creates an alarming degree of disfigurement. In general, however, these accumulations of blood under the scalp from blows on the head, subside very favourably under the use of a few brisk purgatives, and the application of lotions, containing a proportion of the muriate of ammonia, diluted acetic acid, and camphorated spirit in them.

But should inflammation and abscess not admit of being prevented, fomentations, poultices, free openings, and washing out all the matter and putrid blood with a syringe and tepid water, is the proper treatment.

When the scalp is wounded, or severely contused, the hair should always be cut off immediately; and, I may say that, in many cases, it is a matter of prudence to shave the whole scalp, not merely that the wound may be rightly and conveniently dressed, but that every part of the outside of the head may be seen and duly examined.

Hæmorrhage is, of course, to be stopped, and the wound freed from extraneous substances and clots of blood. These are rules which, as I have repeatedly told you, apply to wounds in general.

Frequently the *scalp,* is not merely *wounded,*

but *lacerated, bruised*, and *more or less extensively separated from the subjacent parts.* In many instances, not only is the scalp thus torn and detached, but a portion of the skull is completely denuded, the aponeurosis of the occipito-frontalis muscle and the pericranium being torn up together with the scalp.

Here all the raised portion, or flap, of the scalp, however torn and irregular it may be, should never be cut away, but be immediately replaced, and laid down upon the exposed portion of the cranium. The scalp, as I scarcely need remind you, gentlemen, is exceedingly vascular, and nature is more successful in repairing its injuries than circumstances might sometimes lead you to anticipate. At all events, the chance of its preservation and reunion should be taken; for, if you succeed, you materially lessen the risk of necrosis of one or both tables of the skull. You thus expedite the patient's cure, and obviate the deformity which would ensue, either from cutting the flap away, or leaving it more or less displaced from the parts with which it was naturally connected.

If slips of adhesive plaster and a bandage be not sufficient to maintain such flap in the proper position, you ought to avail yourselves of the assistance of the interrupted suture; but as few stitches as possible should be made, because they are a source of irritation, and, in this situation, very likely to promote the occurrence of erysipelas. For the same reason, when they have been employed, they should be cut and withdrawn at an early period, that is to say on the removal of the first dressings.

When *erysipelas* follows wounds of the head, it is to be treated according to the rules which I have delivered in a former lecture on this species of inflammation. Cold washes ought to be applied to the head, copious venesection practised, the free use of leeches not omitted, and the exhibition of calomel, James's powder, and saline aperient medicines, actively followed up in the early stages of the case. When abscesses seem likely to form under the tendon of the occipito-frontalis muscle, and to bring on sloughing of that aponeurosis, a free incision down to the bone should be made without delay. It is an observation, made by Dupuytren, that in phlegmonous erysipelas of the head the integuments hardly ever mortify, like the skin of the leg from the same disorder; and the reason which he ascribes for the difference is an anatomical fact, namely, that in the leg the integuments receive blood only by ramifications from the tibial and fibular arteries, which lie very deep, while the skin of the head has the occipital, temporal, and frontal arteries directly under it; consequently it is not so easily destroyed by the mischief produced under the aponeurosis of the occipito-frontalis muscle, as the skin of the leg is by similar mischief.

Gentlemen, when you begin to practise urgery, you will find that, in the *treatment of suppurating wounds of the scalp*, one object will constantly require your vigilance; namely, that of preventing the matter from spreading widely in the cellular tissue under the scalp, or in that under the tendon of the occipito-frontalis muscle. You must, therefore, be careful to make with promptitude the free openings required for this purpose, and apply pressure, with the view of preventing fresh accumulations.

Frequently, when a portion of the scalp has been separated from the subjacent parts, and replaced, it will unite at every point; but in other instances, the union may not be general, and collections of matter may form in certain places. Here one principal indication is to procure a ready outlet for the matter; for if you neglect to do so, it will not only destroy whatever union may have taken place, but diffuse itself to a great extent, and lead to a vast increase of mischief and danger. The loose cellular tissue, connecting the tendon of the occipito-frontalis to the pericranium, may be the seat of extensive abscess, and that aponeurosis itself mortify; yet the scalp itself will not slough, for it is highly organised, and has a most abundant supply of blood from the temporal, occipital, and frontal arteries. It lives, therefore, and conceals the extent of disease situated under it. The reason of what I am now explaining, has been well accounted for by Baron Dupuytren, who, in relation to the comparative risk of the skin sloughing in erysipelas of the head, and that of the lower extremities, makes some highly interesting remarks, the tenor of which I have already mentioned.

Fractures of the Skull.—When the solution of continuity is very fine, it is termed a *capillary fissure*—specimens of which I now show you—when more open, it is a *fracture.* The broken portion of bone may either continue on a level with the rest of the cranium, or be beaten in, or, as we say in the language of surgery, depressed. A depressed fracture is illustrated in the specimens which I now pass round. The inner table, being more brittle than the outer one, is sometimes much more extensively broken than the latter; and occasionally the violence applied to the head will fracture the inner table, and actually cause a depression of it, though the outer table may not be at all broken.

The old writers on surgery expatiated a great deal on the various directions and shapes of fractures of the skull, and amused themselves with giving different names to them accordingly; but all this was of no practical use.

The most important distinctions are into *depressed* and *undepressed fractures, comminuted fractures*, and *fractures of the inner table alone.*

In young subjects we sometimes meet with *indentations* of the skull, without fracture, a circumstance referable to the softness and elasticity of the bones of the cranium in the early periods of life; and sometimes you will

meet with cases in which the bones of the cranium are separated from one another at the sutures. The latter occurrence is not frequent.

Gentlemen, you should also understand that, when violence is applied to the skull, the fracture may not happen to the part which is *immediately* struck, but in some other situation more or less remote from it; this kind of accident is termed a *counter fracture*, or, more commonly, a *counter fissure*, of which there are several examples on the table. Fractures of the base of the skull are produced in this way; but not always, for a blow on the occiput or temporal bone may cause a fracture extending to the base of the skull.

Gentlemen, it was formerly the custom to inquire of candidates for a surgical diploma the symptoms of a fracture of the skull; and, I have no doubt that, in the times to which allusion is now made, certain replies of the most erroneous kind were expected and given. Vertigo, paralysis, sometimes stupor and loss of sense, circumstances specified by writers and lecturers, about thirty years ago, as symptoms of fractured skull, really denote injury of the brain, and not a fracture of the skull.

The simple solution of continuity in the bone, were it not accompanied by other mischief, would not be attended with any particular circumstances denoting its existence; and, in fact, every experienced surgeon knows that many fractures of the skull are, on this account, completely overlooked—never discovered; and the patients get well without a single bad symptom.

A mere crack in one of the bones of the cranium, *abstractedly considered*, is no more likely to produce any serious complaints than a simple fissure in any other bone; and, if symptoms of consequence do frequently attend the accident, they proceed either from the bone being beaten inwards, so as to press upon the brain, or from the mischief done to the parts within the skull by the same force that broke the bone itself. The same violence which breaks the cranium, may occasion a concussion of the brain, an extravasation of blood in or upon it, or subsequent inflammation of that organ, and its usual consequences.

A fracture, *without depression*, then, is not in itself productive of any dangerous effects, or of any symptoms peculiar to it, or by which its existence may be known. Hence, if the scalp be free from wound, the accident is not likely to be detected at all; but the want of precise information on this matter, I should say, ought to be of no importance in practice, because the treatment should be regulated by other considerations. Thus, if the symptoms indicate concussion, or compression, of the brain, or a tendency to inflammation of this organ, you are to act accordingly, whether the bone be broken or not. You are led to adopt rigorous antiphlogistic treatment, or to examine the bone, with the view of making a perforation of it, by entirely different reasons than the existence of a *simple undepressed fissure* or *fracture*. However, when the symptoms indicate pressure on the brain, and the part struck is denoted by a wound, or ecchymosis of the scalp, you are then called upon to make an incision, for the purpose of ascertaining whether any *fracture with depression* exists; and, if this should not be the case, such incision may still be useful, because, if the symptoms call for the trephine, the part that has been struck is generally the proper one for its application. It is hardly necessary for me to tell you, gentlemen, that it is the most likely situation for any effusion of blood, and for any splintering or depression of the the inner table. However, when you trephine under these circumstances, in the expectation of finding blood extravasated under the part to which the violence has been directly applied, you sometimes learn that this is not the case, and that the pressure is neither produced by an effusion of blood on the dura mater in this situation, nor by any fracture and depression of the internal table. Blood, in fact, is frequently effused in or upon the brain, in situations more or less remote from the part of the head which received the blow.

You are not to suppose, then, that fractures *without depression* are not often accompanied by bad symptoms, but only that the mere injury of the bone itself is not the cause of them. The same violence which breaks the bone may cause a concussion of the brain, an extravasation of blood in or upon it, or a subsequent inflammation of its substance or its membranes. But, gentlemen, fractures *with depression* are a frequent cause of dangerous symptoms, because they are attended with compression of the brain. But, it is a curious fact, that the symptoms do not appear to be constantly in a ratio to the degree and extent of the depression of the bone. Sometimes fractures with a manifest and visible depression of the skull are quite unattended with any bad symptoms, or any of those effects known usually to arise from pressure on the brain. I was called, the summer before last, to a hackney coachman, a patient under the care of Mr. Hooper, of the London Road, in one of whose parietal bones a depression as large as a crown-piece had been occasioned, yet he had no urgent symptoms of pressure on the brain, and ultimately got well without an operation.

Gentlemen, you are not therefore to employ the trephine in every example of fracture with depression, but only in those cases which are made urgently dangerous by the existence of such pressure on the brain as this organ cannot quietly endure. I may gentlemen, lay it down as a rule in surgery, *that you should never trephine a patient unless he be actually labouring under coma, paralysis, and other symptoms of compression in an urgent and dangerous degree.*

Fractures of the base of the skull are cases of so perilous a nature, that they are gene-

rally regarded as inevitably fatal. Whether the opinion be true to this extent is not an easy point to determine, because we never know positively, while the patient lives, whether the fracture has been of this kind or not; and if he recover, we have no opportunity of ascertaining the point by examination. Fractures of the base of the skull are produced by the application of great violence to the lateral parts of the head, or to the vertex and base, through the spinal column. If a person fall from a great height, and the top of the head come to the ground, the skull is operated upon by two forces—the resistance of the ground and the pressure of the body upon the base of the cranium: the bones are seldom displaced to any extent; the dura mater is generally lacerated; its blood-vessels and sinuses wounded; and blood consequently effused at the base of the brain. Indeed, such has been the degree of violence, that you generally find blood effused, not merely in this situation, but in others. I have opened several persons who died with fracture of the base of the skull, and the mischief noticed within the head corresponded in every respect to what I have now described.

Bleeding from the nose, mouth, or ears, when attended with other circumstances evincing the receipt of a violent injury of the head, and much consequent disturbance of the functions of the brain, has been frequently insisted upon as denoting a fracture of the base of the skull. But while, in some instances, such bleeding happens from slight injuries, not at all affecting the cranium or its contents, other cases are met with where, on dissection, extensive fractures are found of the petrous portion of the temporal bone, and of the sphenoid and ethmoid bones, though no bleeding at all had occurred from the ears, nose, or mouth.

Treatment of fractures of the skull.—If the fracture be unattended with depression, or with symptoms of a dangerous degree of pressure, either from this cause or from extravasation of blood, you must direct your views to the prevention of another source of peril, namely, inflammation of the brain, which may perhaps sometimes be caused by the mechanical irritation of the inequalities of the fracture, but generally by the same violence which broke the bone itself. The latter, at all events, is the view which I take myself. When the broken bone is not depressed, you can scarcely venture to trephine on the supposition that the inflammation of the dura mater and brain, which often follows such an injury, is owing to the mechanical irritation of the irregularities of the fracture; and, if this should not be the cause of the inflammation, as I believe it seldom is, then the infliction of additional mechanical injury by the operation would be the least rational and advisable measure that could possibly be adopted. Here, I believe, it is far more prudent to be content with antiphlogistic treatment, such as cold washes to the head, venesection, arteriotomy, leeches, the free-exhibition of calomel with tartarised antimony, saline purgative medicine, and only mere slops for sustenance. Nor should the antiphlogistic regimen be altogether discontinued till three or four weeks have elapsed; for the records of surgery prove, that a disposition to inflammation of the brain or its membranes lasts a considerable time after the application of external violence to the head; and such disorder has attacked and proved fatal to many, who, supposing all risk over, have returned, prematurely, to their usual mode of living.

A doctrine has, of late years, arisen, that fractures of the cranium, attended with a wound of the scalp directly over the injury of the bone, are accompanied by much greater danger than other fractures of the skull, uncombined with such a wound. In short, it is alleged, that there is the same difference in this respect as prevails between simple and compound fractures of the bones of the extremities. I cannot say that the observations, which I have had opportunities of making on this part of surgery, would have led me to adopt this opinion; but it is entertained by that highly respected surgeon, Sir Astley Cooper, whose views of every part of surgery have great experience for their foundation. The point is important, because the doctrine might deter us from examining the state of the skull by an incision, and applying the trephine, when the patient's safety, perhaps, depended very essentially upon such measures not being postponed. Surgeons who subscribe to this view of the subject will naturally be as much afraid of cutting down to a fracture of the cranium when there is no wound, as of cutting into a simple fracture of the leg, and making it compound. They will be inclined to avoid this proceeding, and of course to refrain from trephining, whenever the fracture is not accompanied by a wound; while, if the fracture happen to be already exposed by the accident, they would probably apply the trephine for precisely the same symptoms as they conceive would not justify it when no wound of the scalp exists. If I feel certain of anything in surgery, it is that *the decision for the operation of trephining should depend upon the symptoms of pressure on the brain being urgent, dangerous, and unequivocally manifested;* and, I believe, whether there be a wound of the scalp or not conjoined with a fracture of the skull, it is your duty under those circumstances always to examine the state of the bone, and not to let your conduct be at all influenced by any analogy, whether true or not, between these cases and simple and compound fractures of the limbs. If the doctrine be true, which I am by no means prepared to deny, it should certainly teach us not to use the knife without any real occasion for an inspection of the bone; yet it must not deter us from dividing the scalp, when such examination is urgently called for on the principles which I have already specified.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,
Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XII.

Pathology of Jaundice—Co-existence with a Flow of Bile—Case of Aneurism of the Hepatic Artery—Independent of Mechanical Obstruction—Colouring of the Various Parts—Effect on the Milk and Humours of the Eye—Yellow Vision—Icterus Infantum—Jaundice with Preservation of Health.

GENTLEMEN,—To-day we have to enter upon the consideration of a subject, the nature and extent of which claims for it a more than ordinary share of importance,—I allude to that form of disease which is termed jaundice. I have selected this disease for our present lecture, because I think we may look upon it as presenting a series of phenomena, which form a distinct link of connexion between affections of the liver and the digestive tube. In the first place, jaundice, and I wish to impress this upon your attention, is to be regarded as a symptom rather than a disease *sui generis*, and that it is a symptom which occurs in many diseases of a most essentially opposite pathological character. There is nothing, for instance, more different than disease accompanied by acute inflammatory action and disease without any inflammation at all; yet we may have perfect jaundice as a consequence of the one as well as the other. No diversity can be more complete than that which exists between the jaundice, arising from inflammation and organic lesion of the liver, and that which results from simple mechanical obstruction of the biliary ducts. It is, therefore, to be looked upon not as a disease but as a symptom, and we may define it by saying, that it is a state in which the solids and fluids of the body are tinged more or less deeply with bile. Generally speaking, this presence of bile in fluids and solids, where it should not be normally, is accompanied by the absence of that secretion in the place where it is naturally found, the digestive tube. Yet it is an interesting physiological fact, and one of practical importance also, that we may have plenty of bile in the stools, during an attack of jaundice, or *that we may have jaundice co-existing with even a copious flow of bile.* This is a strong proof in favour of the opinion, that some cases of jaundice have no connexion or dependence on the absorption of bile into the system, as, in the instances to which I have alluded, there is no mechanical retention of bile; the biliary ducts and gall-bladder are open, the bile passes freely into the intestines, and yet the whole body is jaundiced.

I have told you, that jaundice is a symptom which is produced by a variety of causes,—these I shall briefly enumerate. Without entering into the ultimate mode of action of these causes, and their separate effects on the economy, it will be sufficient for my purpose to mention them individually. The first of these causes I take to be mechanical obstruction to the exit of the biliary secretion. Under such circumstances one of these two things is supposed to take place, either that the bile, which is poured into the biliary duct and gall-bladder, and cannot get into the duodenum, is re-absorbed, or, according to another opinion, that the innervation of the liver is injured; in other words, that the liver is paralysed and unable to perform its ordinary functions, and that consequently it does not separate the materials of bile from the blood. The latter opinion has been advanced by men of high authority in the medical world, but when we find, on dissection, (as is not unfrequently the case in jaundice,) the biliary ducts and gall-bladder distended with bile, we cannot infer a paralysis of the liver as the cause of the disease, we must attribute it to the re-absorption of bile. I have taken mechanical obstruction to the flow of bile as one of the causes of jaundice. Now, you will find this to depend, in the first place, upon the presence of gall stones in the biliary or common ducts. A biliary calculus is formed in one of these ducts, it excites violent irritation, spasmodic pain, and often (but not always) jaundice. At my next lecture I will show some specimens of this obstruction. In the second place, the biliary ducts may, from various causes, become obliterated; they may be closed by adhesion, as the consequence of inflammation, or they may be impervious as the result of congenital malformation. In some cases children have been born without biliary ducts, in others the ducts have terminated in a *cul de sac.* A third cause of jaundice by mechanical obstruction is, where the flow of bile has been prevented by the pressure of tumours on the biliary ducts. Of this one of the most familiar instances is disease of the head of the pancreas, or malignant disease of the pylorus or duodenum. I have, on a former occasion, alluded to a case of jaundice produced by aneurism of the hepatic artery, one of the rarest pathological circumstances on record, and one which has not been hitherto described. So rare is it that, at a late meeting of the Academie de Médecine, that eminent pathologist, Cruveilhier, stated that he had never seen a case of it. I was so fortunate as to meet with an instance of this uncommon form of disease, and will take an early opportunity of exhibiting the preparation of it to the class. You will see by it how an aneurism of the hepatic artery may cause a complete obstruction to the flow of bile, and I shall be able to show you, that not only the trunks, but also the minute ramifications of the biliary ducts, are enormously dilated and filled with retained bile, and that these dilatations are continued up to to the peritoneal surface of the liver, forming as it were so many aneurisms by di-

latation of the biliary ducts themselves. The last cause of jaundice from mechanical obstruction, is that which depends upon the accumulation of scybalous matter in the bowels, a thing frequently met with in old persons. Dr. Marsh alludes to this form of the disease in his admirable paper on jaundice in the Dublin Hospital Reports, and brings forward cases in which the jaundice disappeared rapidly under treatment calculated to remove accumulations of hard fæcal matter from the intestines. So much for the varieties of jaundice which depend upon mechanical obstruction. Before I quit this part of the subject it will be necessary to allude to another form of the disease, which bears some analogy to those already mentioned, namely, the spasmodic jaundice. With respect to this variety there exists a great deal of doubt; some persons maintain that the ducts are muscular, and consequently liable to spasm like all other parts of the muscular system; others deny the existence of muscular fibres in the ducts; while a third party are of opinion, that the spasm resides in the duodenum, and that the contraction of its muscular fibres is the sole obstacle to the free passage of bile. It is of very little consequence which of these opinions we adopt; the fact is, that this is a form of the disease which we occasionally meet with in persons of an hysterical or hypochondriac habit, but what is its exact seat we cannot ascertain. The probability is, that it is spasm of the duodenum itself.

The next class of causes, giving rise to jaundice, are those which are connected with acute or chronic disease of the liver, as, for instance, the different varieties of hepatitis and the existence of morbid growths in the substance of the liver. Here, however, it must be recollected that the occurrence of hepatic disease in the acute or chronic form does not necessarily imply the existence of jaundice; in other words, there are some cases of disease of the liver in which bile is freely discharged into the digestive tube, others in which it is not, so that the non-secretion of bile and the consequent production of jaundice are to be looked upon as accidental complications. I have seen a case, in which there was enormous destruction of the liver from suppuration, where one of the lobes was almost entirely converted into a bag of purulent matter, and the other extensively diseased, yet the patient had not the slightest tinge of jaundice. We are ignorant, therefore, of the cause which determines the production of jaundice in one case of hepatic disease, and not in another; the question remains to be decided by future investigations. All we know is this, that it may occur or be absent in every form of acute or chronic disease of the liver.

The third great source of this affection is disease of the mucous surface of the stomach and duodenum, the most important, because it is the most frequent cause of jaundice. We are indebted to the researches of modern pathology for a correct notion of this form of the disease, and for the invaluable light thrown upon its treatment, which up to the time of Broussais had been extremely confused and empirical. Inflammation of the upper part of the digestive tube is an extremely frequent cause of jaundice, and this result is, generally speaking, *independent of any mechanical obstruction of the gall bladder or biliary ducts.* This phenomenon may be explained by calling to mind the various examples of sympathetic irritation, and by recollecting, that disease in one situation frequently produces disease in another, or, in other words, that we have an irrritation of the stomach and duodenum, in which the liver sympathetically partakes, and, as a consequence of this, the biliary secretion is arrested. In a former lecture I alluded to the strong sympathy which is known to exist between mucous membranes and the glands whose ducts open upon their surfaces. It is supposed by some that the irritation existing in the duodenum may be extended to the liver, producing paralysis of the functions of that organ and jaundice. It would appear also that the yellow fever of warm climates is only a variety of jaundice depending upon irritation of the gastro-intestinal surface. On this point the best pathologists seem to have made up their minds.

The last cause of jaundice seems to consist of the sympathetic action of the brain upon the liver, and this is an extremely curious circumstance. There are numerous cases on record of persons who have received an injury of the brain becoming jaundiced, and the same affection has been repeatedly known to supervene on powerful mental emotion. Thus we find that Murat, on learning that his queen had assumed the sovereign power at Naples in his absence, fell into a violent passion, and became almost immediately jaundiced. The close connexion which exists between the brain and the biliary system has been long known; it is unnecessary, therefore, that I should enter upon its consideration, for the purpose of accounting for an occurrence the nature of which must be obvious to all. You will, however, find that jaundice is in the majority of cases connected with disease of the gastro-intestinal surface, and that this is one of the most common causes of the sporadic jaundice of this country. I shall return to this subject on a future occasion when we enter upon the consideration of hysteria.

Before I enter upon a description of the separate forms of jaundice, it will not be amiss to premise a few general remarks. I told you at the commencement of my lecture, that we define jaundice by saying, it was that state in which the solids and fluids of the body were tinged more or less deeply with bile. Now, is this definition to be received without any exception? and does it embrace all the solids and all the fluids of the body? I have stated, that in some cases you will not be able to detect the slightest trace of bile in the stools.

This is, however, but an apparent exception; it is perhaps because the bile is too small in quantity to be able to overcome the diluting power of the ingesta, or that the portion of it which finds its way into the digestive tube is too small to be appreciable by our senses under these circumstances. The rule of universal colouring in this disease will not, I believe, hold good, at least there are certain fluids and solids which are tinged only in a very slight degree; but the majority of the textures and fluids have been observed to be more or less distinctly coloured. For instance, we find the jaundiced tint appearing in bone, cartilage, muscle, in the cellular membrane, in the central positions of the teeth, but not in their enamel. It is doubted whether the hair is coloured or not, but it is the opinion of many that it is, and a professional friend of mine has assured me that he has had unquestionable proofs of the colouring of the hair. The membranes of the brain are distinctly tinged. I have seen the arachnoid and pia mater decidedly coloured in a case of dreadful gastro-duodenitis, to which I shall call your attention on a future occasion. The substance of the brain, however, has not been found to partake in this universal discoloration. Frank, who is a good authority on this point, states that the substance of the brain is never coloured, though the membranes may, and most commonly are. In my experience of jaundice, I have found the membranes distinctly coloured, but never could see any tinge of yellowness in the *substance of the brain*. I have, however, observed that when a horizontal section of the brain had been made in such cases, the orifices of the divided vessels, which are denoted by bloody points in the healthy state, seemed to pour out a quantity of yellowish blood, but the substance of the brain appeared white and normal.

With respect to the state of the fluids, you will find the blood distinctly coloured; the saliva also is yellow; the urine is loaded with bile, it stains the linen, and chemical analysis shows that a large proportion of the biliary secretion is blended with it. The perspiration is also tinged with it; and if you apply a blister you find the exuded serum bilious. If a person, labouring under phthisis or bronchitis, should happen to get an attack of jaundice, the pulmonary secretions will be often tinged with yellow. The mucous secretions from the vagina and uterus are also discoloured; but it is an interesting and curious fact, that the milk during lactation seems to escape the general impregnation with bile, and is never tinged. This would appear to be a beautiful provision of nature to prevent the child from being injured. Frank, who witnessed two epidemics of jaundice, one at Mayence, in 1754, and another at Ghent, 1742, states that he has never seen the milk tinged with bile. Dr. Marsh, in his paper on jaundice, mentions that in the case of one unfortunate female a yellow fluid was squeezed from the breasts after death; but this cannot be considered as a proof of the existence of bile in the milk during life.

In jaundice the eye almost always presents a very distinct yellow tinge, and yet it is a curious and interesting fact, that the patients very seldom complain of yellow vision. Out of several thousand cases of jaundice, Frank only met with five in which this symptom was observed. The occasional occurrence, however, of yellow vision in jaundice, has excited a good deal of interest; and Drs. Graves and Elliotson, who have turned their attention to this subject, have made some ingenious and valuable remarks on this singular phenomenon. Dr. Elliotson's opinion is, that where this symptom is complained of, the cornea is in a state of irritation or inflammation, and that under these circumstances its vessels, which in their physiological condition are too small to allow of the passage of coloured fluids, become dilated, so as to carry bilious blood across the field of vision, and thus cause all objects to wear a yellow hue. To support this opinion, he brings forward the case of a jaundiced patient, who had a considerable degree of inflammation in one eye but none at all in the other, and who saw objects yellow with the inflamed eye, but of their natural colour with that which was free from inflammation. This case is, indeed, as far as it goes, extremely interesting, but I think it does not prove the point in question, namely, that the cause of jaundiced vision is irritation of the cornea, for it is a fact, that even when the cornea is deeply tinged, yellow vision is not of constant occurrence, nor does it affect all persons alike. One person sees objects in their natural colours; to another under the same circumstances every object appears to wear a yellow hue, and what is equally remarkable, this yellowness of vision is frequently intermittent; it is present to-day and disappears to-morrow. These are extremely curious facts.

The object of Dr. Graves on this subject, in the Dublin Medical Journal, is to explain the cause of the absence of yellow vision in certain cases of jaundice. He believes that the humours of the eye frequently escape the jaundiced tinge, and suggests that this may be a beautiful provision of nature for the preservation of sight. From his own observations he states, that the aqueous and, perhaps, the vitreous, humours escape. But, it may be objected to this, that when all the fluids, the blood, saliva, serum, perspiration, &c., are impregnated with bile, how is it possible that the fluids of the eye should escape?—Does it not seem very extraordinary?—It does, certainly; but that it is possible seems to be established by the following circumstances:—you are not to conclude because all the fluids which are found to exist in the blood are filled with bile, that the secretions, properly so called, which do not exist in the

blood, should be also tinged with bilious discoloration. This is the answer which Dr. Graves makes to this objection—I recollect two cases of malignant cancerous disease of the liver, which were some time ago in the Meath Hospital, and which presented symptoms of universal jaundice before death. In these cases we found fluids deeply impregnated with bile,—every thing, in fact, seemed bilious and discoloured; and yet, you will hardly credit me when I tell you, that, on opening the gall bladder, *it was found to contain a quantity of beautifully limpid fluid, perfectly transparent, and of a high refractive power.* Here, then, is a fact to prove that we may have intense general jaundice, and yet find in a sac, existing in a system so diseased, a quantity of fluid perfectly free from any bilious admixture, proving, at least, that it is possible that the humours of the eye may in a similar manner escape. Dr. Graves further remarks, that, even where the humours of the eye happen to become tinged, the alteration in the colour of objects may still escape the observation of the patient; because the change takes place gradually and insensibly. The patient does not think every thing he sees is yellow; he believes still that they are white, because the transition from one colour to the other has been so insensible as to escape his notice. This reasoning may, I think, apply to cases of yellow vision coming on gradually, but will not explain those in which it has been of sudden occurrence. The other cause which Dr. Graves adduces as tending to prevent a patient with a yellow cornea from seeing objects of the same colour is, the want of some standard of comparison to judge by. He has no means of comparing objects; and, though he sees this piece of paper, for instance, (yellow) he thinks it is white, because every standard he looks to, every other piece of paper he examines, presents the same tinge. Dr. Johnson states, that most of the jaundiced patients, whom he has interrogated, were sensible of the alteration in vision to a greater or less degree, and observes, that the power of appreciating varieties of colour is retained, though we look through a yellow medium not deeply dyed, though yellow, of course, is made to enter into this composition. You will see this observation in the Med. Chir. Review for October last.

I shall conclude this subject with an observation which suggests itself to me, and this is, that the alteration of colour and vision may arise from other causes than the mere jaundiced condition of the eye; and that it may (I believe this has not been taken notice of before) depend upon direct nervous influence. There are cases on record of patients labouring under typhus fever, who, without being in the slightest degree jaundiced, saw every thing yellow. There are also numerous instances of various colours, differing from the natural hues of the objects, being seen by patients in consequence of affections of the nervous system; and hence it is extremely probable that many cases of yellow vision in jaundice may depend upon a functional lesion of the optic nerves. I have one fact to bring forward on this subject of great importance. In the case of jaundice from aneurism of the hepatic artery, the patient saw every thing intensely yellow, until a few days before death, when all yellow vision subsided, and he saw objects of their natural colour, though the jaundice continued, if possible, more intense than ever. In this case there was no inflammation of the eye. I do not think that Dr. Elliotson's observations apply to all cases of this phenomenon. All that he has said is, that where the cornea is in a state of inflammation, there is a greater probability that there will be yellow vision in the affected eye or eyes; and this can be easily accounted for by the increased size of the vessels which the inflammatory process brings on. We may, however, conclude, that in some cases the alteration of vision may be owing to a yellow state of the humours of the eye, that in some it is the result of inflammation, and that in some it may be fairly attributed to a lesion of innervation. I think that the latter statement is borne out by the facts that there is a want of constancy in the occurrence of this phenomenon, that it is often of a more or less intermittent character, being one day present and another day absent, and that it has been observed in cases where not the slightest symptom of jaundice existed. We must also bear in mind, that some of the most remarkable nervous symptoms commonly occur in jaundice, such as coma, &c.; and we may inquire how far the occurrence of yellow vision may be looked on as an indication of an excited state of the brain, and so lead us to measures calculated to remove impending danger.

Let us now return to the more immediate consideration of *jaundice*. One of the first diseases of children is the *icterus infantum*, or, as it has been termed by nurses, the *yellow gum*. Children, shortly after birth, without any known cause, become suddenly jaundiced, and this, after continuing for some days, goes off, frequently without any treatment. This form of jaundice appears to depend upon some particular irritation of the intestinal canal, which seems to result from the circumstance of the digestive system being called into active exertion for the first time, and receiving a new stimulus from the mother's milk. It is a curious fact, that this form of jaundice generally disappears spontaneously. Now, it is remarkable, in this as well as in other cases, (when we recollect the nature of jaundice, and that there exists in the fluids of the body an irritating substance like bile) that the effects of an admixture of the biliary secretion with those fluids should not be attended with more striking symptoms. In some instances we shall have intense jaundice without any particular effect upon the economy. There is some itching of skin, ardor urinæ, a little de-

pression of spirits, and vertigo, which last for a few days and then disappear. Dr. Gregory mentions many cases of persons affected with jaundice who went about their ordinary business, and performed all the functions as if in a state of perfect health, eating, drinking, and sleeping in their usual manner. I have myself seen persons who laboured under this affection for more than a year, and yet had all that time their digestion good, their bowels regular, the flow of urine natural, and the circulatory, nervous, and respiratory systems apparently conformable to the standard of health. Dr. Blundell gives the cases of two children who lived for four months, apparently well fed and healthy; and, on opening their bodies, it was found that the biliary ducts terminated in a cul de sac, and that, consequently, not a drop of bile had been discharged into the intestines. Sir Everard Home gives a remarkable case of the total absence of the gall bladder, and no passage of bile into the intestines, occurring in connection with a perfect state of health. These are curious facts, and should be borne in memory. I remember two cases of protracted jaundice in the persons of two male servants, who were admitted into the Meath Hospital with symptoms of irritation in the upper part of the digestive tube. From this both recovered under an appropriate treatment, but the jaundice continued in one for eighteen, and in the other for sixteen, months. One of them, a stout, well-built, and fully developed man, came into the hospital some time afterwards in the apparent enjoyment of perfect health, except that he had still the jaundiced colour. He wished to be taken into the hospital to get cured of his jaundice, stating that, in consequence of the peculiarity of his appearance, he could not get a place any where, and was in a very distressed condition. From these facts it seems fair to conclude that the symptoms of other affections, occuring after jaundice, are owing to some other cause than the bilious state of the blood.

Gentlemen, I find that my time is nearly expired; I cannot, therefore, enter into the various causes of jaundice to-day; at our next meeting I hope I shall be able to conclude this subject, and then pass on to the consideration of hepatic disease.

CLINICAL LECTURES

DELIVERED BY

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At the Westminster Hospital.

LECTURE XI.

History of Mr. Guthrie's Instrument for Dilatation.

In order to have a dilating and dilatable bulb, I applied to Mr. Weiss, who did not at first see how it was to be done; but on my mentioning that I wanted something which could be enlarged like Ruspini's ball forceps, the application of this kind of mechanism struck him at once, and he soon made me some instruments which, although rude on the first essay (and these I have by me), soon became more efficient and polished in their appearance. They were composed of three blades, gradually separating by the action of a screw which turned in the handle. This same mechanism he soon after applied to a two-bladed instrument, and thus the forceps for removing a stone from the bladder made their appearance, and were first used with great effect, and were brought into notice by Sir Astley Cooper. I thought I had now obtained an instrument which could not fail of fulfilling all my expectations, and was only disappointed by finding it did too much. The opportunity of dilating was too tempting to be resisted, and the consequence was, that it produced irritation in so many cases, and did so much mischief, that I was forced to give it up, and I only now use it in some protracted cases in which I wish to dilate the neck of the bladder, and that not even of late, for the force with which the instrument acts cannot be readily estimated. When these blades act by a screw which turns in the handle at six or seven inches distance, they dilate, or are readily separated when there is no opposing force; but when there is any opposition, their separation is easily prevented, and the screw is turned more than would otherwise appear necessary before any effect is produced; if it is not turned sufficiently nothing is done; and if it is turned a little too much, mischief is the consequence, and that very easily; so that, although I might wish occasionally to use it, I soon found that I must give it up from prudential, or rather selfish pecuniary, motives.

At this same time I had under my care a little boy, who lived in St. Martin's Court, with a stone in his urethra, apparently too large to find its way along the passage to the orifice; and Mr. Weiss made for me another instrument of a different kind, which I now show you, for the purpose of catching and pulling it through. It is a model in miniature, or nearly so, of the percussor now used for breaking up a stone in the bladder by Baron Heurteloup; and with the adoption of the screw in the handle, and the teeth in the grasping part, it is nearly a model of Mr. Weiss's latest invention for crushing a stone in the bladder, without the alarm which the preparation by position, &c., and the shock of the blow, give rise to.

Foiled in having a steel dilating instrument, I was much pleased with the idea of one made of softer materials, proposed to me by Dr. Arnott, which was to be dilated by air or water. When he first showed it to me, it was merely a piece of bladder fastened on the end of a gum catheter, but which, on attempting to use, I found would not pass along the

urethra. The first improvement was the addition of a moveable piece of ivory, upon which one end of the bladder was tied, and which piece of bone fitted the end of a hollow gum elastic bougie, to which the other portion of bladder was carefully affixed. This ivory was soon changed to metal, and the bladder for the muscular coat of the gut of the cat, which is very strong and thin, and as this in one trial gave way, and the metal end was left in the urethra, the metal was now made to pass the whole length of the gum bougie, which was also changed for a metal tube. Thus far the improvements were made by me, and the instruments were used in my room, Dr. Arnott being present. He after this prosecuted his inquiries with his brother, Mr. Arnott, who in 1821 published his observations on the subject, without mentioning the share I had taken in the matter. It was not worth while noticing then, nor would it be now, if I were not giving the history of the different attempts I have made to improve this part of surgery, and that Mr. Ducamp, a French writer, published a work in 1825, describing this instrument, and laying claim to it as an invention of his own, but to which it does not appear to me that he had any right, except inasmuch as the instrument was unknown in France, but certainly not in England. As the gut became soft and yielded when wet, it became necessary to cover it with silk, or other unyielding materials, and again with a smooth substance. In prosecuting my experiments, I soon found that filling it with air was a very uncertain business, and used water instead, which answered much better. In one other case in which I used it, the bag slipped from the tube, and caused so much difficulty in withdawing it, that my patient took alarm, and left me, and in some others the effect was so uncertain, that it did not give the satisfaction I could wish. I now rarely use an instrument of this kind, either from its often failing, or being so troublesome, and placing the surgeon so much in the hands of the instrument maker, unless he has time and ingenuity to make them himself. I cannot say, however, that I think it has had all the justice done to it which it merits

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On the Destruction of Strictures by Caustic.

It is not my intention to enter into the history of the different kinds of caustic which have been employed by our predecessors in surgery, or of the methods of using them; you will find them related at length both in French and English writers, to whom I refer you. I shall confine my remarks to the methods at present adopted.

The caustics now used are two, the *potassa fusa* and the *argentum nitratum:* the first has been almost entirely abandoned with respect to the urethra, and the other has fallen into unmerited obloquy and consequent disuse. You must not, from this remark, suppose that I am going to advocate its restoration to practice, for I am going to do no such thing; it would not be prudent to do so, even if it were proper, for the prejudices of mankind have been so greatly and effectually excited upon this point, that they must be gradually allowed to subside; they will not admit of being taken by storm. Like most other prejudices they have some foundation in truth; and it was the *abuse* of the argentum nitratum and not the *use* of it which has given rise to them. When a surgeon of reputation cures a number of patients by a particular remedy or remedies, his professional character is gradually, nay, sometimes rapidly, augmented; more cases come under his observation, and many that are not susceptible of cure by the means he employs; he is nevertheless constrained, or nearly so, to use them; mischief ensues, alarm is excited; it soon spreads, is fomented by the adversaries of the plan, and a mode of practice, which is really successful in many cases, is often abandoned from prudential motives. I honestly confess I dare not say to a stranger, whatever his case may be, and however useful a few applications of the argentum nitratum might be, that I mean to use it. I dare not do so until after a few visits, and we become better acquainted, and have more confidence in each other, perhaps only after he sees that he does not make much progress. I should lose my patient if I did, who would go to another, and might be told it was the very worst thing in the world; an opinion he would not fail to repeat. Such is the prejudice against it among the younger men in London, that when a man says he has been cured by it, the remark is, how lucky you were to escape; I would not suffer any doctor to burn me for all the world. Nevertheless the argentum nitratum is a valuable remedy, when properly and carefully used in appropriate cases and not abused. It has been supposed, 1st, that the argentum nitratum takes off spasm and irritation; 2nd, that it can destroy a long and narrow stricture; 3rd, that it effects a permanent cure. The concurrent testimony of all writers establishes the first fact, and it is now almost the only object expected to be attained from its use. It is, however, capable of doing more when properly and carefully applied; and at some future period, when the prejudice which has arisen against its use shall have passed away, it will again take its place with other means, as a very effective remedy in certain cases of stricture. That it is capable of making a passage for itself, through a long, narrow and impassable stricture, which has become hard, gristly, and irregular, through time and repeated attacks of inflammation, I do not admit, and the attempt to do it, under such circumstances, has been frequently followed by the occurrence of great inflammation, the formation of abscesses, of fistulous openings in the perinæum, and between the urethra and the rectum, of inflammation and abscess of the

prostate and the bladder, and of profuse bleedings which, with all or many of the preceding train of symptoms gradually lead the unhappy sufferer to the grave. That the cure is more permanent than by other means may in some cases be the fact, but on the whole it is doubtful; and Sir E. Home, the great advocate for its use, in his later years and publications, admitted the necessity for the occasional passage of a bougie, in order to prevent a return of the complaint. According to his method, a bougie, the size or nearly so of the passage, was to be armed with caustic; and if one of this kind is used, it ought to be armed when the bougie is made, and not introduced afterwards, and the distance from the orifice to the stricture having been ascertained and marked upon it, the caustic bougie should be oiled or greased, which is the best mode when caustic is used. A bougie of the full size, or nearly so, of the urethra, is first to be passed down to the stricture to clear the passage, and after a minute or two withdrawn, when the caustic bougie is to be passed, and the end or point, in which the caustic lies, and is barely exposed, is pressed against the stricture for the space of a minute. The first effect is to coagulate the mucous secretion of the part, forming with it a whitish soft substance, which has often been mistaken for a slough; the second is by its stimulus to relieve and remove the irritation existing on the surface of the stricture, so that the person often feels much easier after a slight application, makes water in a fuller stream, and is greatly surprised to find that the desire he suffered from to pass it every hour or two has been materially relieved. Sometimes, however, the effect is the reverse, and particularly where the application has been more severe, or the irritation has been of a nature not to be relieved by it. The part becomes more painful, the desire to make water greater, whilst the passage of it is altogether obstructed, or it passes by drops with great suffering, until, by fomentations, opiates, &c. the increase of irritation and inflammation has subsided. It acts, therefore, sometimes like a two-edged tool, and this has been another reason for its disuse, but it partakes on this point only of the property, which all other remedies have of doing the same, and the fact inculcates the necessity for great care and gentleness in its use, whenever it is had recourse to. When the application is steadily continued to the surface of the stricture for a minute or more, its continued effect is that of a caustic, viz. the partial destruction of the part, which injured a dead surface, must be thrown off by the usual processes of inflammation and ulcerative absorption separating it from the living part behind. Where the stricture is slight and thin, or narrow, this will in general be effected without much inconvenience, but when it is thick and hard it will not often be done easily, but, on the contrary, the inflammation will cause a greater thickening of the part, and the long train of evils I have alluded to already, if not prevented by proper means and a speedy abandonment of the practice. If, however, the operation should be fortunate enough to succeed, the separation of the slough in the diseased part is often marked by a paroxysm of fever, or the occurrence of an alarming hæmorrhage. The rigors with which the febrile paroxysm commences are strongly marked, and I am sorry to say take place occasionally even before the slough separates for the last time. They frequently occur after every application, or every one which has been in the least severe, and in such cases forbid its continuance. They are dependent on a particular sympathy which exists between the urethra and the system at large, and will occur as readily from violence as from the application of any caustic whatever. I know a medical man who had suffered from Walcheren fever, and who almost invariably had a paroxysm whenever caustic was applied, or a large bougie was used so as cause irritation; and the first paroxysm was always followed by others at regular intervals, so as to reproduce his Walcheren ague, which was only cured by the administration of bark, &c., in the usual way. This sometimes takes place in a less marked manner; and whenever the return of an irritation or pain is periodical and regular, quinine will in general, in combination with bark and opium, be found the best remedy, when exhibited between the periods of illness.

The hæmorrhages from the urethra are caused by the sloughs separating and leaving the cells of the corpus spongiosum exposed, or by the ulcerative process extending to some small vessel, the canal of which is partially opened. These, it is said, cease of themselves, although not until a great loss of blood has been frequently sustained, and it has been recommended to let the parts alone. I cannot give you any opinion formed from personal experience, as I have never seen one of these bleedings from caustic; but I conceive that they should be met and treated like hæmorrhages from the same place from other causes, which appear to me to be of a similar nature.

The most alarming hæmorrhages I have met with have been from common causes; and I will mention to you two of them of the most prominent kind, as they also point out the practice to be pursued in such cases.

WESTMINSTER HOSPITAL.

The governors of this hospital assembled on Thursday, the 6th inst., in considerable numbers for the purpose of electing Mr. B. Lynn, the assistant-surgeon of the hospital, fourth surgeon, on the retirement of Mr. Lynn, sen. Those only appeared to attend who took an interest in the proposition, which was carried

nearly unanimously, and Mr. B. Lynn was declared a surgeon of the hospital, and the notification of the vacancy in the office of assistant-surgeon was made to the weekly board, in order that the election of that officer might take place, in the manner prescribed by the rules of the hospital.

The only remarks which relate to professional subjects were made by Mr. Guthrie; and as we have reason to believe the governors will adopt some of them, and as we hope they may, we give them as shortly as possible. He said, he should vote on the present occasion for Mr. B. Lynn's being made a surgeon of the hospital, because he thought that when a man had attained nearly fifty years of age, it was quite time he should cease to have the title of assistant prefixed to his name; for, however desirable it might be for young men to bear it, there could be no doubt of its being a very odious one for men of mature age, and he hoped the governors would take the whole subject of the surgical appointments into their consideration, and make such alterations in them, on going into the new hospital, as would remove many evils which existed, and which were alike disadvantageous to the poor, and to the interests of surgical science. By the present mode, a surgeon, when once elected, remained in the office for life, and retained the office long after he was competent to the performance of its duties. It was quite useless to say that a man of eighty or ninety years of age was equal to the duties required of him. The public would not allow, the governors themselves would not permit, a surgeon of that age to operate on them, and he thought it only fair they should act towards the poor as they would be done by themselves, and it was impossible to prevent a man, holding the office of an operating surgeon, from doing operations, long after the period they ought in justice to the poor to cease to do them, and when the rich never thought of applying to them for that purpose. Another evil was, that young men were kept out of situations they ought to fill, and would fill with greater advantage to the public; and they were kept out of them so long that they might almost be too old themselves to do the duty properly when they succeeded to them. He felt satisfied that the performance of operations, or of the other duties of a hospital, were of no personal use to a surgeon after sixty-five years of age; they neither added to his professional reputation, nor to the improvement of surgery; they only prevented young men from doing them, from improving themselves, from increasing their reputation, from having those opportunities which would enable them to advance the art and science of surgery. It was from the younger men, and those in the middle period of life, that improvement was to be sought. There were but few instances of men past seventy years of age doing anything personally for the advancement of surgery. He therefore hoped the governors would consider the propriety of making an alteration in the surgical department on entering the new hospital. That they would set an example which he trusted other hospitals would follow, and the benefits to be derived from it, he was satisfied, would be greatly and highly in favour of the public. He thought they might make a rule that every surgeon, on completing his sixty-fifth year, should be appointed a consulting surgeon, whether he liked it or not, and earlier if he wished it, and the governors considered him deserving of that honour; for he did not hesitate to say, that it was a great honour to be considered worthy of the office of consulting surgeon to a London hospital, and one which at that age, if he ever lived to attain it, he should be very proud of enjoying. The result of this arrangement would be, that young men from thirty to thirty-five years of age would succeed to the office of surgeons, and not men of fifty. For his own part he should wish to see three consulting surgeons and three surgeons to a hospital, rather than three surgeons and three assistant surgeons. The duty would be much better done, and the poor more efficiently taken care of. The surgeons would then be young men capable of doing their duty, and ought to be made to do it or resign, and he would only allow of one assistant when there were not three consulting surgeons, but never when there were. His wish was to see young men, or men in the prime of life, or at least mature life, in the office of surgeons of hospitals, and old men, or even elderly men, in that of consultants. As to the emoluments derived from the office of surgeons, he believed that was the cause of the evil, but it might be easily rectified. They were of two kinds direct and indirect. In some of the large hospitals he understood the surgeons received 700*l.* a-year from the fees of the pupils. In the Westminster Hospital it did not now exceed 140*l.*, and these sums might easily be divided between the parties, giving to the consultants, who came once a week, one-third, and to the surgeons, who came every day, two-thirds. He was satisfied the young men would be content, and he thought the older ones ought to be; and that it would be more honourable to them than to hold an office for the sake of the emolument of it, long after the public had decided they were unfit for the performance of the duties of it as operating surgeons. As to the indirect emolument, it was often great, very great. The governors, when they elected a man surgeon to a hospital, conferred upon him the greatest favour they could bestow. They placed him in a situation in which if he had anything in him, he might show it and distinguish himself, and all that any man could ask, was to have that opportunity given to him.

There was another evil attending the present plan, which he must mention at the hazard of detaining them too long. When an assistant-surgeon was elected, he might be a man of good promise although young, but

when his turn came to be made a surgeon, he might by no means be well fitted for the office, nor be deserving of it; nevertheless the friendly feelings of the governors would give him the situation, solely because he had been an assistant-surgeon, and greatly to the disadvantage of the poor, about whom they professed themselves to be so much interested. If they had no assistant-surgeons, except when the number of consulting surgeons was deficient, they would have older men, and men of more character and knowledge, competing for the office of surgeon, and which they could not do for that of assistant, for the place of assistant was often made a very disagreeable one. He hoped, in conclusion, the governors would be pleased to take his observations into consideration, in drawing up their future regulations, and expressed his readiness, in the absence of his colleagues, to propose to them, if it was their pleasure he should do so, Mr. B. Lynn as a supernumerary or fourth surgeon to the hospital, but which appointment, he trusted, would not be drawn into a further precedent, inasmuch as there would not be duty enough for more than three surgeons in the new hospital, and that a greater division of it would be injurious to what was his greatest object, the improvement and advancment of surgery.

TRANSLATION OF M. ALIBERT ON THE DISEASES OF THE SKIN.

BY SAMUEL PLUMBE, M.R.C.S.

Late Senior Surgeon to the Royal Infirmary for Children, &c.

On the Etiology of Erythema.

Erythema assumes so many forms that it is desirable to class its causes very correctly. Sometimes it is apparently sporadic. The epidemic form is often attributed to atmospheric agents, to the nature of the aliment, and to exposure to heat; but these explanations are not always sufficient, inasmuch as the disease attacks frequently those who are both well fed and well protected from heat, or the reverse. New potatoes, as articles of food, have been occasionally blamed for the mischief; but we see as many cases occur in persons who have not used them. Beer and wine in like manner have been suspected, and they contain nothing pernicious.

The causes of endemic erythema, or the pellagra, we have been at much pains in investigating as far as limited means allowed. The patient, before mentioned as the subject of this disease, has given the following account of himself.—He was born in a French province, and had arrived from Milan, having served only eight months in that neighbourhood. He had been accustomed from his youth to the labours of a peasant in his native country, his ordinary food being "Bouillie de blé noir." After he became a soldier he never enjoyed good health, was melancholy and retired in his disposition,—he felt like an exile from his native country. He went to sleep in this state of health in a situation exposed to the sun; he awoke with severe headach, great redness, and tumefaction of the skin. The latter cracked, and in a few days exfoliated. The joints of the fingers and wrists exhibited deep cracks, and the skin generally was of a dark or copper-like hue; in this condition Assalini and Husson pronounced it a case of confirmed pellagra.

Persons of all ages, and of each sex, are liable to be attacked with this disease. Labourers in the field are most subject to it. They live in a miserable manner in damp close houses; many of them through the winter on the moist kind of bread, sleeping amidst their cattle. They have bad bread, and equally bad water. We may add, that their labours towards the end of winter are hard, and they are constantly exposed to great variations of temperature. To obtain a free use of their limbs, they throw off parts of their clothing, and often take their meals exposed to a mid-day sun in the fields. Enfeebled by these habits the skin loses its power of resisting, or rather recovering itself from, the effects of heat *.

The erythema paratrime is easily known. It is most common among corpulent persons of either sex. M. Alibert, in this page, merely repeats what has been said before as to its known prevalence among such subjects, and infants who are not properly attended to.

The E. pernio, or chilblain, a half frozen state of the skin, is the most common cause of this form. It prevails most in marshy districts.

On the etiology of the E. *par adustion* there is of course little for our author to say. Persons

* A long list of authors on this disease are named by M. Alibert, some of whom we have ourselves consulted. Our countryman, Dr. Holland's account of it, which is to be found in the Transactions of the Medico-Chirurgical Society, is, we believe, the best extant translation.

exposed to heat by habit, such as smiths, resist its influence in an extraordinary degree. Of all animals man is most susceptible of the influence of caloric, undoubtedly from the prevalence of adipose matter in the composition of his diet, and his habits of drinking spirituous liquors. In the dissecting rooms it is constantly found that the cellular tissue of the bodies of drunkards burns with the greatest celerity. Spontaneous combustion in such subjects have taken place frequently to the astonishment of the spectators.

Treatment of Erythema.

There are cases of erythema which deserve serious attention; sedative applications are necessary, and they should be of a mild kind. If the stomach and digestive organs are out of order the first attention must be given to them. Lemonade, barley-water, butter-milk, chicken and frog-broth are to be depended on. If the disease arises from external causes,then bathing the parts with starch, or other mucilaginous solutions, should be had recourse to; these applications allay irritation of the surface. Poultices, or padding, soaked in a decoction of mallows, in milk, or in water, are also proper. When cases occur requiring attempts at resolution, ointment and lotions of lead are proper.

With respect to the epidemic erythema much quackery has shown itself. Each practitioner pursued his own hasty notions, and advocated them, but the examination post mortem disclosed nothing to support or oppose them. The disease was only fatal where the constitutional strength had been broken down by preceding diseases, as consumption, &c.

At St. Louis we found the emollient vapour baths very useful. The irritation of the skin was diminished by them, and when the skin became more quiet we employed aromatic fumigations and sulphur baths. Still, in general, we found gentle laxatives and general antiphlogistic measures the most successful. We have only to praise ourselves in our first trials.

The treatment of Pellagra consists of the exhibition of wholesome nourishing food. The meats of young animals, and broths of chicken or veal, milk, jelly, &c. In the case I have alluded to, the patient was starving, when he first arrived he was supplied with good food and recovered.

On intertrigo M. Alibert says that all greasy applications are useless; vegetables, decoctions of a soothing nature applied, warm and weak solutions of starch, &c. are useful, and warm bathing is in every case advantageous, and he properly remarks, that sloughing of the nates is well understood every where.

The treatment of chilblains, says M. Alibert, is often the office of empirics, or they are treated blindly by the associates of the sufferer; spirituous solutions, or infusions, are applied, or styptic astringent infusions, such as those of gall nuts, &c. In northern climates friction with snow is a well known proceeding (a proper precaution if not a remedy).

The readers of this Journal will excuse us from touching further on this part of M. Alibert's subjects. The phenomena of burns are well understood here, the methods of treating them have been almost settled among English surgeons, and M. Alibert does not offer any addition to their knowledge.

The solutions of the chlorurets of soda and lime are spoken of as lotions in chilblains, and in cases of burns as being valuable agents; as regards chilblains their employment is backed by a recommendation of other measures in conjunction, which in effect are nothing but the means of giving warmth to the chilled part, but which probably are the most powerful agents in the cure.

Foreign Medicine.

Births and Deaths in Paris and the Departments, during the years 1831 *and* 1832.

In the year 1832 the births at Paris were—

	In Wedlock.	Illegitimately.	Total.
Boys	8853	4721	13,574
Girls	8273	4516	12,789
Total	17,126	9237	26,363

In 1831 there were 29530 births.

The number of illegitimate children acknowledged by the parents in 1832 was 2157, those abandoned 7080.

	Marriages.	Deaths.
1831	6654	25,996
1832	8219	44,463

Of the deaths during 1832, 18,602 perished from cholera, 386 from small pox. In 1831, 482 individuals died from the latter disease.

Referring to the bills of births, marriages, and deaths for the whole of France, we see that in 1831 there were 986,709 births,

246,438 marriages, and 802,761 deaths, which gives an augmentation in population to the amount of 183,948.

It results from the preceding tables that, during the 15 years from 1817 to 1831, the births in France were 7,490,951 boys, and 7,041,247 girls.

Inquiries have been made with the view of ascertaining whether the difference of climate in the different departments has any influence upon the predominance in the births of boys, but such does not appear to be the fact. It has, however, happened during the 15 years' that, 22 times, the annual births of girls has exceeded that of boys in some of the departments, to wit, once in Les Ardennes, twice in Le Cher, four times in La Corse, twice in Herault, once in l'Isère, twice in La Marne, once in La Rhone, twice in l'Yonne, once in Les Hautes Alpes, once in Les Bouches-du-Rhone, twice in La Haute Saône, once in La Dordogne, once in La Manche, and once in Les Pyrénées Orientales.—*Gazette des Hôpitaux.*

Phosphoric Acid in Croup.

BY A. BOYER.

Numerous are the remedies which have from time to time been extolled for their power in arresting diphtheritis, and numerous have been the failures in their employment. It is only in the advanced stage of the disease that this particular kind of inflammation takes place, and it is rare, at this period, that antiphlogistics, emetics, antispasmodics, &c., have not been tried and failed. Considering that the topical application of nitrate of silver to the mucus in the larynx, which has been lately recommended, causes prompt coagulation of the albumen, and thus gives rise to thickening, the writer has endeavoured to find out some remedy which shall produce all the beneficial results of this caustic, without participating in its injurious properties. From the experiments which he has made, he considers that phosphoric acid, prepared by nitric acid, possesses such desirable qualities. After investigating the nature of false membranes, which he concludes to be albumen or coagulated fibrine, he proceeds to examine the causes of the action of phosphoric acid upon these animal substances, and its modifications upon the organism.

1st. Put in contact with the mucous membranes, phosphoric acid produces an acute but brief degree of inflammation.

2nd. Injected into the trachea of a dog, it only appears to produce slight pain.

3rd. Its application to other living tissues determines acute sufferings.

4th. If the action is not prolonged, its degree of causticity, although energetic, only occasions superficial scars.

5th. Placed upon albumen or coagulated fibrine, it dissolves them completely.

Alkalies and acetic acids also enjoy this property, but in a slighter degree.

From the preceding experiments we may conclude, that if diphtheritis, nitrate of silver, and hydrochloric acid act by exciting a new kind of inflammation, which replaces, or at least modifies, the original kind, the same reasoning ought to apply to the phosphoric acid, since its action upon the tissues is, in in this respect, precisely similar. It is, however, to be preferred to both these chemical agents, since it has been found to dissolve the false membranes; whilst, on the contrary, the nitrate of silver and hydrochloric acid augment their density. It is indispensable that this acid be entirely deprived of the nitric acid, which is used in its formation, since the latter partakes in the injurious properties of the two other remedies.

The author has made many experiments upon these different applications, and the result serves to warrant him in drawing the above conclusion.—[Want of space, however, forbids their insertion, although very interesting and conclusive.—Ed.]

Election to the vacant Chair in the Academy of Sciences, Paris.

M. Roux has been chosen member of the Academy of Sciences, vacant by the death of Boyer, on the 10th of February.

The number of voters was 55, of which there were 28 for M. Roux, 26 for M. Breschet, and 1 for M. Lisfranc.

Nomination of Surgeon to the Hôpital Cochin.

In consequence of the election of M. Guerbois to the Hôpital de la Charité, the situation of surgeon in the Hôpital Cochin becomes vacant. The candidates for the office are MM. Berard, jun., Manec, and Michon.

Tables of Doctors in Medicine and Surgery admitted in the three Schools of Paris, Montpellier, and Strasbourg, from the year 1796 *to* 1828.

Years.	Paris.	Montpellier.	Strasbourg.
1796 } 1797 }	—	54	—
1798	10	40	—
1799	8	57 }	
1800	18	71 }	96
1801	97	77 }	
1802	304	79 }	
1803	294	193	49
1804	216	80	18
1805 } 1806 }	34 } 153 }	79	42
1807	116	84	16
1808	150	80	20
1809	116	60	14
1810	104	56	13
1811	136	75	27
1812	187	84	32
1813	178	85	37
1814	208	127	30
1815	238	134	43
1816	232	84	26
1817	227	110	30
1818	203	124	20
1819	300	101	16
1820	286	100	14
1821	228	128	19
1822	247	122	21
1823	172	131	57
1824	274	108	48
1825	240	115	26
1826	240	108	48
1827	318	97	65
1828	266	100	40
Total	5860	1563	834

ON RUPTURE OF THE HEART.

BY JAMES DOUGLAS, A.M.,

Senior Physicians' Clerk to the Glasgow Royal Infirmary.

James Walker, æt. 67, clockmaker, was admitted into the Glasgow Royal Infirmary, Dec. 11th, 1833, under the care of Dr. Balmanno, by whose permission I report the case.

For some years past the right leg has been subject to swelling, and a month ago, after exposure to cold, both were severely affected. At present his legs, thighs, scrotum, and anus are œdematous, and pit on pressure; breathing is difficult, but not more so in the horizontal posture; respiration is audible to bottom of chest, but is marked by subcrepitous râle; expectoration is mucous; action of heart is violent and irregular; impulse is stronger than usual, and felt more widely, there being a distinct stroke above an inch to the left of the nipple, as well as in its usual situation; sounds are heard under the clavicles, and on the left side of the back, and have a flapping character; pulse 100, irregular; respiration 40; stools a little white; bowels regular; urine scanty and high coloured.

Diagnosis.—Great dilatation with hypertrophy of the heart; œdema of the lungs.

℞. Olei ricini, ʒvj.
— terebinth., ʒij. sumat statim.
Utatur misturâ scillitică in tussim.
App. vesicatorium sterno.
H. s. habeat T. opii ammoniat. ʒj.

12th.—Rather more urine; four or five stools; but breathing seems more confined and oppressed; pulse 70, feeble and irregular.

℞. Spirit. hordei, ʒvj.
aquæ, lb. iss.
sacchari q. s. sumat in die.

Bowels became loose for some days, with alleviation of dyspnœa, and by the 19th, under the use of digitalis, urine had increased to four pounds. On the subsidence of the diarrhœa powders with squill were prescribed, but, on the morning of the 24th, he suddenly fell out of bed and expired.

Inspection, 25th.—On removing the sternum the pericardium was seen enormously distended with blood, and, when opened, about four pounds were removed, partly coagulated. The heart was found enormously dilated and hypertrophied, dilatation being predominant, and both ventricles were similarly affected. At the apex of the left ventricle a rupture appeared transverse, being a mere slit, three-eighths of an inch in length. On slitting up the ventricle, ulceration of the internal membrane, and of the muscular substance, was found to have taken place, rendering the part so thin that it had given way. Some shreds of fibrine were entwined among the columnæ carneæ around the ulcer.

A black spot was observed on the surface, about three-fourths of an inch from the rupture, which proved to be another spot attenuated by ulceration, communicating with the former, blackened by effused blood, and nearly ready to burst also. Some communication was thought to exist between the ventricles at this point, but was uncertain. Thickening of

the cardiac pericardium had taken place over the spots, doubtless for the purpose of preventing, if possible, the fatal catastrophe.

The interior of the aorta presented numerous atheromatous patches, and at the bifurcation the common iliacs were almost completely ossified, and scarcely a trace of internal membrane was left.

The lungs were œdematous.

Rupture of the heart is so extremely rare, though cases of it are to be found in pathological works, that Corvisart never saw an instance of it, and Laennec and Dr. Hope have each seen only one. I have, therefore, thought the preceding case worthy of being made public, more particularly as several of the cases, already pointed out, are very inaccurately described. My attention being directed to the subject I made enquiry about similar cases, and have heard of three, which occurred within the last few years in Glasgow. One of these occurred to Dr. Balmanno, in the person of a young lady at the Lunatic Asylum, who fell down dead while dancing in the airing ground. The rupture was in the *left* ventricle. He believes the specimen was not preserved.

In the possession of Dr. Mackenzie, the deservedly well known surgeon to our Eye Infirmary, I have seen a preparation, exhibiting a fissure, nearly an inch in length, and in the direction of the fibres, as if they had been merely separated about the *middle* of the *left* ventricle. The subject was an old man, between 50 and 60, who fell down and expired suddenly, while in the act of opening his own door. The substance of the heart when recent was soft and yellowish, but there is no ulceration. The pericardium was gorged with blood.

In the Anatomical Museum of the Andersonian Institution there is a preparation exactly resembling mine. The rupture is in the *same situation*, also transverse, and of much the same size, and produced by internal ulceration; there is also a second ulcer, not so far advanced: about sixteen ounces of blood were found in the pericardium. The patient fell off his chair and died instantly.

In the Hunterian Museum there is a section of the wall of the *right* ventricle, which is said in the catalogue to be from an old man, who married his maid, and died suddenly the night after!!! It exhibits a rupture, about three-quarters of an inch in length, apparently transverse, and near the top of the ventricle; but the contiguous parts being removed the situation cannot be determined. Indeed, from the thickness, it is more like the left than the right. There is considerable ulceration inside.

To make any general remarks on the subject I shall not attempt, as enough may be found in the works of Corvisart, Laennec, Bertin, and Hope. I merely have thought it might be interesting to the profession to have a correct description of the cases of this uncommon lesion, which I have had an opportunity of accurately examining.

VESICAL MEDICATION.

On the Injection of Medicines into the Bladder.

BY MEDICUS.

The urinary organs present an important feature in cholera morbus, and in a disease so desperate in its character, every resource that gives a chance of exciting the kidneys into action, and at the same time rousing the system, is unquestionably justifiable, and such appears to me to be the throwing of injections into the bladder. The powers of digestion belong to the stomach, but the urinary bladder may be rendered available for the purpose of conveying remedies towards the cure and relief of disease, and these remedies, properly prepared and administered through this viscus, will not interfere with the digestive powers, nor yet will their effects be eluded, as often takes place when the stomach is extremely irritable and torpid. I am of opinion that the paroxysm of ague may be prevented and the disease cured as effectually by medicines thrown into the bladder as by remedies taken by the mouth; and I am also well satisfied that the venereal disease in many of its stages may be also thus cured. The nervous influence issuing from the brain to the pulmonary and abdominal systems is very great; the nerves of the spine, the intercostal, the par vagum, the great sympathetic, the accessory, the diaphragmatic, all spread their paramount influence over their viscera, and in which the bladder, rectum, uterus, kidneys, and ureters, eminently participate, and therefore remedies applied through the bladder are unquestionably

in many cases of desperate disease worthy of a trial. The sympathy between the uterus and mammæ, as also the stomach, kidneys, bladder, spinal marrow and brain, is strikingly supported through the same system. The skin, the stomach, the rectum, the lungs, have all been rendered subservient to the purposes of conveying remedies to the system, but the bladder, so intimately sympathising with the stomach, and vice versâ, and so generally connected with the economy of life, has been strangely neglected; and I here repeat my opinion, so far as medicine is concerned, that its influence may be thus advantageously extended to the system; and I should hope that, should the cholera again appear, this channel for applying remedies will not be overlooked. It was thought by the late distinguished Dr. Darwin, from observing the immediate connexion between the stomach and bladder, that a retrograde action of the lymphatics took place, but I am of opinion that no retrograde action of the lymphatics arises, as the intercourse is carried on by a set of absorbents, the office of which is to maintain intercourse with the bladder, and thereby relieve each other in cases of disease or emergency. While on this subject I may observe, that during the reign of cholera morbus the use of Epsom salts was prescribed by a certain board, and by the various members emanating from it. Between the year 1830 and the present period, having been physician to a charitable institution, I believe that a quantity of this medicine equal to 5 cwt. was prescribed by me, and in no instance was there an individual who took this remedy, when cholera was very prevalent, who was seized with the disease, so that I am far from concurring in opinion with those who regard Epsom salts as predisposing to cholera morbus, but, on the contrary, I am strongly inclined to think it a preventive, and in this respect worthy the attention of the profession.

London, Feb. 4th, 1834.

Review.

The Dublin Journal of Medical and Chemical Science, including the latest Discoveries in Medicine, Surgery, Chemistry, and the Collateral Sciences. No. XIII. March.

This periodical continues to maintain its high position. The number before us contains nine original communications, some of them of great practical interest. The articles are as follows: I. "On some Compounds formed by the Action of Chloride of Platinum and Chloride of Tin." By Mr. Kane. II. "Case of Urinary Calculi containing Human Teeth, removed from the Female Bladder." By G. W. O'Brien, M.D. III. "Medical Cases and Observations." By Mr. Riggs. IV. "Case in which a Foreign Body was supposed to be in the Trachea." By R. T. Evanson, M.D. V. "Two Cases of Popliteal Aneurism." By Mr. Collis. VI. "On Solidification of the Lungs in new-born Infants." By Dr. Joerg. VII. "Cases in which a Molar Tooth escaped into the Larynx after Extraction." By Dr. Houston. VIII. "On the occasional Occurrence of Mental Incoherence during Natural Labour." By W. F. Montgomery, M.D. IX. "Practical Observations on the Treatment of Diseases of the Lungs." By R. Little, M.D.

With respect to the calculi containing teeth as the nuclei, no rational conjecture could be formed of the manner in which the foreign bodies got into the bladder.

Mr. Riggs describes a singular effect produced by the ointment of tartarised antimony of a cartilaginous growth, about the size of a man's hand, on the Chest.

Dr. Evanson's case of a foreign body in the trachea is interesting. A child appeared to be on the point of suffocation. Mr. Crampton performed bronchotomy, but no foreign body was discovered. After a few days Mr. C. was expressing his astonishment to the parents, when the mother acknowledged she had removed a fish bone from the wound—it was that of a herring. Dr. Maunsel adds a case somewhat similar. A child was supposed to be labouring under croup; suffocation was threatened, bronchotomy performed, but death took place the day after the operation. On dissection, a herring bone was discovered in the ventricle of the larynx.

Mr. Collis relates the history of a case of double popliteal aneurism, for which he applied ligatures to both femoral arteries with success; and another case in which secondary hæmorrhage took place, and was restrained by pressure made with a newly modelled instrument, which is thus described:—

"The instrument which I made use of was one previously employed by Mr. Crampton, the surgeon-general, in a similar case, and

with good success. It consists of an iron hoop, about an inch and half in breadth, and sufficiently large to encompass the thigh; it opens behind, so as to admit of such dilatation as to suit a limb of any dimensions. This hoop has a slit in the anterior and internal part, into which is placed a moveable screw, with a pad attached. The pad is to be applied immediately over the compress, which has been put upon the artery, and then, by turning the screw, any degree of compression can be made upon the artery, whilst little or no pressure is made upon the other parts of the limb, and consequently no great obstruction, if any, is given to the collateral circulation. The hoop produced much inconvenience to this man, and was also the cause of inflammation, which terminated in abscess. This arose from the instrument being too narrow upon the part on which the limb rested, and I have now got one constructed with a broad flat surface; it is padded, and fits the under and outer part of the limb accurately, and on which the thigh rests without any inconvenience. To this are added two straps, one to surround the pelvis, and another the thigh, by which means the instrument is kept more firmly in its situation."

Dr. Joerg's account of Solidification of the Lungs, as the most frequent Cause of Death of New Born Infants, is deeply instructive. It is translated by Dr. West. The author observes, that the first inspirations, made by a new born infant, are, in consequence of the deficiency in its blood (a state resembling asphyxia by carbonic acid or other poisonous gases), naturally the most powerful, and at once expand the lungs so as to admit the rush of blood, so that the foramen ovale may close and become obliterated; in which case the infant respires regularly, oxygenizes the blood, and is able to cry and to drink. It is maintained that a difficult or too rapid delivery impedes respiration and induces organic disease in the lungs. The former, by compressing the brain (whether in the pelvis or by the forceps), weakens the infant to such a degree, that it respires imperfectly, and partially expands its lungs. The latter, too easy a labour, does not produce obstruction to the fœtal circulation, which would render a want of oxygen by respiration necessary. The consequence is that the infant only respires imperfectly, expands and fills its lungs with air partially, and is never able subsequently to remedy this without the aid of art. In all autopsic examinations made by the author for several years past, a portion only of the lungs, from the greater half to an eighth or a tenth part, was found filled with air, and was of a red colour, while the remaining portion was impervious, and of a liver colour. When death occurred soon after birth, the condensed portion was susceptible of inflation; but if the fatal event occurred several weeks after nativity, it was found carnified, and incapable of being inflated. Sometimes the part between the healthy and diseased partitions was inflamed, or contained vomicæ; and the bronchi in some cases were inflamed and filled with mucus. In general the foramen ovale was open, and polypi were found in the heart and large vessels. The brain was often congested, or contained effusions and abscesses.

The author comments upon these facts in the following manner:—

"From these facts, and from observations made of late years during the progress of the disease, we are warranted in describing its nature and termination in the following manner:—The solidification, or continuation in the fœtal condition of a greater or less portion of the lungs, so that during respiration their substance cannot be penetrated by the air. The blood, being still more incapable of penetrating, cannot be supplied with oxygen, and must consequently continue venous, and produce obstructions and dangerous congestions; while, at the same time, from its being unable to afford the stimulus requisite to the system for the continuation of its functions, an atonic senile condition obtains, attended with the utmost weakness, and complete atrophy, and terminating in death from hectic fever. The general morbid condition is, consequently, difficulty of respiration and impeded circulation, producing dangerous and even fatal congestions. Its terminations are,—1st, recovery; 2nd, secondary diseases; and, 3rd, death.

"I. *Recovery* ensues when the efforts of the infant to inspire are assisted by proper treatment, and the subsequent symptoms properly managed.

"II. *Secondary Diseases*:—(*a*) obstruction of the lungs, inasmuch as a portion of them remains condensed, which, without actually producing death, is very oppressive and dangerous: (*b*) chronic cyanosis, the foramen

ovale continuing open, and the infant being liable to constant suffering.

"III. *Death:*—(*a*) from apoplexy; in consequence of obstruction and congestion: (*b*) from suffocative catarrh, when the feeble respiration is not able to expel the mucus secreted in the bronchi, and the violent efforts at full inspiration produce bronchitis, and an over-abundant secretion of mucus, which the patient has not strength to get rid of: (*c*) from fever, the result of bronchitis: (*d*) from atrophy; the production of animal heat being prevented by the deficiency of oxygen, and the whole system paralysed by the want of its requisite stimulus.

"*Symptoms.*—When the infant comes into the world, the head is either found greatly swollen, (in which case abscesses often form in the part that has suffered from pressure, and inflammation or violent congestion of the brain ensues,) or else, though quite uninjured, and the delivery having been rapid and easy, it cries but feebly, breathes very short, and exerts the muscles of the thorax greatly; it is presently attacked with a faintness, and if it had been capable of drinking previously, now loses that power, the voice becomes hoarse and weak, and scarcely audible. Stertor and convulsions soon follow, the little patient becomes quite blue, the eye-balls turn, and the respiration remits, sometimes for so long as five minutes, till the scene at last closes with death. Should the illness continue for some days or weeks, a little short cough, the most certain sign of violent bronchitis, comes on; together with total weakness, atrophy, and hectic fever; and the child, at the very latest four or five weeks after birth, sinks under a violent attack of cyanosis, or bronchitis, or from the effects of the fever and atrophy.

"The best method of preventing the organic disease of the lung is, 1st, on no account to hasten the birth unnecessarily, because this never can be done without endangering the child; and 2nd, as far as possible to prevent too violent pressure on the head. The respiration of the new-born infant should be accurately observed, and the strength of its voice and manner of sucking attended to; and the moment we find the breathing too short, or the voice hoarse or feeble, and plaintive, or that the infant cannot suck properly, we must immediately exert ourselves to set matters to rights. In the first place, the medical attendant should immediately endeavour to blow air into the lungs, till the thorax is properly expanded. The navel-string must not be cut too soon; the chest and back should be stimulated by friction with the hand or a brush; they might also be sprinkled with cold water and sulphuric ether, and the soles of the feet rubbed with a flesh brush. The child should be put in a warm bath, and the friction contined till it is able to cry loud and breathe properly, should these means not succeed, recourse must be had to internal remedies. An emetic consisting of a few grains of ipecacuanha, a drachm of oxymel of squills, or a quarter or third of a grain of emetic tartar, should be immediately exhibited. Afterwards a quarter, or, in urgent cases, half a grain of calomel should be given, for the purpose of producing general excitement by stimulating the intestinal canal, as well as of diminishing the too copious secretion of mucus in the bronchi, and diminishing the cerebral congestion. The repeated employment of warm baths, either simple, aromatic, (by the addition of thyme or majoram, and calamus aromaticus,) or restorative, (composed of milk or some mucilaginous fluid,) contributes greatly to revive the system, and restore and promote the circulation. Sinapisms of about an inch in diameter are occasionally to be applied to the chest or neck. The most unwearied attention is requisite to restore and maintain the health of the little patient. By the proper application of the above remedies, by avoiding all the *lædentia*, and even by delaying as much as possible every birth that appears to be proceeding too rapidly, a great many lives may be saved; still the disease is a dangerous one from the very first, and requires great care and watchfulness throughout."

Dr. Houston's case, detailing the presence of a tooth in the bronchial tube, about one inch from its commencement, is deeply interesting. We are informed that after the tooth had been extracted it fell into the throat, and that difficult respiration had immediately succeeded. Several practitioners saw the patient, and differed as to the cause of his disease. Some could not believe that the tooth could have passed into the trachea; but dissection established the fact. It is surprising how a body larger than the rima glottidis could

pass into the trachea. Mr. Key described a case somewhat similar, in which a sixpence was found in the right bronchus, and from this, and some experiments on the dead body, concludes that the right bronchial tube is the usual seat of foreign bodies which pass through the larynx.

The next paper is on Mental Incoherence during Natural Labour. By Professor Montgomery. The learned and experienced Professor narrates several cases of slight and transient mental disturbance while the fætal head stretches the os uteri in passing throughout it. These cases are extremely interesting; and, as far as our researches extend, have not been described by preceding writers.

The last article is on the Treatment of Diseases of the Lungs, &c., by Dr. Little. The author has tried oil of turpentine in the class of cases of which he treats as a rubefacient, and speaks of its effects in the highest terms. He has employed it in hooping-cough, asthma, croup, bronchitis, and pulmonary consumption, with the greatest advantage. He advises moderate friction with warm turpentine, and cautions us against exciting too much irritation. We fully assent to his opinion on the efficacy of this remedy, and have for six years preferred it in all cases to blisters. In deep-seated inflammations, it is in our opinion almost absurd to wait for the action of a blister, which allows the disease to advance, while the counter-irritation produced by turpentine is almost instantaneous.

We congratulate our Dublin contemporary on the valuable practical matter afforded in the number before us, and hope for a continuation of it.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, March 8th, 1834.

J. T. Pettigrew, Esq., in the Chair.

Value of Auscultation—Pleuritis—Hydrothorax.

Mr. J. H. Johnson related with great minuteness a case of bronchitis followed by rheumatism. On percussion there was a dull sound over the inferior part of the left side, and egophony in the superior part of the chest. He concluded there were effusion and consolidation of the lining membrane. The patient was now in an adjoining room, and might be examined by the Society. It would be found, that there was still absence of respiratory murmur in the lower part of the chest, and a dull sound on percussion. The diagnosis was difficult, as many causes might induce the dulness of sound, such as purulent infiltration, medullary sarcoma, and diffuse tubercle. He considered the prognosis unfavourable. After many other observations, the president requested Mr. Johnson to introduce the patient, which was done, and several of the members examined his chest. He withdrew after some time, and the discussion was resumed.

Mr. Costello complimented Mr. Johnson for the ability and judgment he had shown in the diagnosis and treatment of the case, and was happy that so strong a proof was given of the importance of auscultation. He made this observation, as a physician of some eminence had that day declared to a patient of his, that the stethoscope was nothing but quackery. He would relate a case to show that hepatisation might be extensive, and continue for several months though ultimate recovery might happen,—the case was his own, the particulars of which were, that some years since, while he was teaching anatomy in Paris, he wounded himself, was seized with encephalitis, hepatitis, pneumonia, and hepatisation of the lung, which continued for several weeks, and even for some time after his convalescence.

Dr. Somerville was gratified at the talent shown by Mr. Johnson in the case introduced by him, and felt proud that a surgeon was such an excellent stethoscopist. He wished to ask him, which cases of consolidation he considered most likely to terminate favourably?

Mr. Johnson replied, it was very difficult to answer that question.

Mr. Costello wished to inquire of any member of the Society, whether he had observed, that in dissections of children who had died of pneumonia after measles, the inflammation was in general confined to the lower margin of the lung, as he had witnessed many such examples in the hospital for children at Paris, the remainder of the lung being in a normal condition.

Dr. Johnson said, that the case of the patient which was first introduced this evening

might terminate by contraction of the chest, and that life might be prolonged for some time. In reply to a gentleman, who asked him to detail his treatment, he wished to observe, that the patient was his son's, but, were he prescribing, he would place most reliance on mercury, iodine, nitrate and acetate of potass.

Mr. Hunt, Mr. Greenwood, and other gentlemen addressed the meeting; and it was announced that on Saturday next, 15th inst., a draft of the petition on Medical Reform, recommended by the Society, would be laid upon the table.

The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

Monday, March 10th, 1834.

W. KINGDON, Esq., President, in the Chair.

Cupping and Calomel in the Bronchitis and Peripneumonia of Children.

Previous to entering on the business of the evening, the President stated to the Society that, at the anniversary on Saturday last, medals were adjudged to Mr. Clement, of Shrewsbury, to Dr. Negri, and to Mr. Cole. That the subject for the Fothergillian medal for March, 1835, was "On the Pathology, Causes, and Treatment of Puerperal Fever." For March, 1836, "Diseases of the Larynx and Trachea."

Dr. Burne said, in reference to the late discussion on pulmonic diseases in children, that the red hepatisation was exceedingly rare, if ever seen, in pneumonia, but that the grey kind might occassionally occur; the most common inflammatory affection in children was bronchitis, for frequently when the substance of the lung was apparently affected the inflammation in reality did not extend beyond the bronchial tube; in such cases he had found the abstraction of blood by means of cupping glasses very useful. The loss of from two to six drachms of blood, taken by these means, had proved much more beneficial than the application of leeches, and generally succeeded very rapidly in relieving the congested state of the head and chest; when such relief was not obtained, mercury and emetics would not prove of much service. He had for some time constantly made use of this practice in a great number of cases, and from what he had witnessed, did not think that the tender age of the patient was any objection to its use. Amongst other cases, which the Doctor mentioned, was a very severe one, in which the cupping glasses were applied in the evening, and were followed in the course of a few hours with decided mitigation of the symptoms. Ordinary medicines were certainly given, but he considered that the benefit derived was entirely attributable to the loss of blood.

Dr. Whiting thought that it was almost impossible to draw the line of distinction between peripneumonia and bronchitis; it was not to be expected, that that degree of hepatisation, which was found in adults, should be be discovered in the bodies of children who died of inflammation, as this morbid appearance existed in cases which were of a chronic character.

Dr. Ryan agreed with Dr. Burne upon the unfrequency of pneumonia in children, but he could not coincide in his views as to the propriety of preferring cupping to the use of leeches; the irritation from the method, recommended by the Doctor, would be likely to occasion convulsions, since they had been known to occur from even the application of one leech. At one time he very much doubted the utility of applying a leech or two in bronchitis of children, but repeated experience had convinced him of the efficacy of the practice When he looked at the sensibility of young infants, and how readily any source of irritation induced convulsions and death, he thought that cupping indiscriminately might prove a very dangerous practice.

Mr. Dendy felt gratified that Dr. Burne had confirmed his observations on the species of hepatisation generally found in the diseases under consideration; he could not, however, coincide in the opinion that bronchitis was so much more common than pneumonia, as the stethoscopic signs were not in general those which indicated the former; he thought that the objections of Dr. Ryan referred rather to the abuse than to the use of bleeding, for although it was necessary to be guarded in the application of leeches, he could not think that it was from the irritation caused by them or by cupping, that convulsions were occasioned.

Dr. Ryan said that Mr. Dendy had mistaken his observations, which referred to the comparative merits of leeching and cupping

children when labouring under bronchitis. It appeared to him that we should consider the effects on a hundred infants, and not in a case or two. For his own part, he should certainly hesitate to employ cupping in cases of very young infants or children, as he had generally found leeching, followed by other remedies, generally effectual.

Dr. Williams confirmed the practice of abstracting blood in pneumonic disease; he had pursued this practice boldly, although not extravagantly, for upwards of twenty-six years, and had felt satisfied with the result.

Mr. Headland considered that he was indebted to Dr. Whiting for the promulgation of his views on the use of calomel, for, since pursuing this treatment, he (Mr. Headland) had been more successful in treating these cases; he did not think that the stethoscope was so valuable as some members seemed to consider, for the sounds elicited by it were not generally necessary to discover the disease; in reference to cupping, he stated that its use in young children was not of recent date, for he had some years since witnessed it made use of to a great extent; bleeding, however, was sometimes carried to too great an extent, for occasionally a directly opposite treatment was necessary; he had once attended a case which was considered one of acute pneumonia, but which had proceeded to such an extent, that the further application of leeches must have terminated fatally. Dr. Gooch prescribed aromatic ammonia, and succeeded in rescuing the child from death. These cases, which were apparently affections of the chest, frequently depended on disease of the brain, and he conceived that it was in such cases that calomel was so valuable a medicine.

Dr. Blick considered that it was in such cases, where inflammation of the brain existed, that bleeding was imperious.

Mr. Robarts related a case where the administration of calomel in large doses in a child, had been followed by profuse salivation. He had found the vinum colchici exceedingly useful, frequently by its use succeeding in giving much relief, especially where the breathing was very loud.

Mr. Howell had witnessed great injury ensue from the use of large quantities of calomel in children. He agreed with Dr. Whiting in his plan of treatment, but did not think it necessary to use it to so large an extent.

Dr. Uwins thought that the inflammatory condition which affected the bronchial tubes had more reference to the state of the nervous system than practitioners generally recognised. He had noticed that one of the rabbits in which Dr. W. Philip had divided the eighth pair of nerves died in a state which would be considered as bronchitis. The physiology of Sir C. Bell on the nerves of respiration was too much overlooked. A child had been brought to him labouring under pulmonary inflammation, occasioned by a blow at the back part of the brain, at the part where it is supposed the respiratory nerves take their origin. Recollecting the origin of the inflammation he confined his treatment to the application of a blister over the ligamentum nuchæ, and the use of simple medicines, and succeeded in curing the child.

Dr. Whiting had met with a case of a similar nature to the one related by Dr. Uwins. There was present more of the symptoms of pulmonary inflammation, and, in addition, there was exquisite pain at the nape of the neck. The sounds, on auscultation, did not corroborate the other symptoms of inflammation. Leeches were applied to the neck, and succeeded not only in relieving the pain in that part, but also in dispersing the pulmonic symptoms. He begged to differ entirely from Mr. Headland in regard to auscultation, as he considered this mode of distinguishing disease highly important. He had never stated that calomel entirely did away with the necessity for bleeding: but that more deaths occurred from peripneumony where calomel was not prescribed was undeniable, and where this medicine was used the children seldom perished. The sloughing mentioned by Mr. Robarts and Mr. Howell was not, in his opinion, caused by mercury, nor were they cases of ptyalism, but were instances of the disease mentioned by Celsus and others, called *gangrena oris*.

Adjourned.

MEDICO-BOTANICAL SOCIETY OF LONDON.

Tuesday, March 11th, 1834.

Dr. Ryan in the Chair.

Chemical Constituents in Tea—Extract of Cubebs in Gonorrhœa.

Dr. Sigmond read a paper by Mr. Judd, on the efficacy of the extract of cubebs in gonor-

rhœa, illustrated by several cases. The dose was from five to twenty grains, in pills, three times a day.

Mr. Everitt then delivered a lecture on the ultimate and proximate constituents of the different kinds of tea, which he illustrated by numerous experiments.

The Chairman then announced a vacancy in the office of Professor of Toxicology, by the resignation of Dr. Clendinning.

Dr. James Cadett was elected honorary secretary, in the place of Dr. Clendinning, who had resigned.

Dr. Sigmond announced that a paper on the extract of cubebs would be read at the next meeting, which would be held on the 8th of April next.

THE

London Medical & Surgical Journal

Saturday, March 15, 1834.

PROGRESS OF MEDICAL REFORM—EDUCATION.

It is generally understood that the Committee will not suffer the evidence of the witnesses examined before them to be published pending the investigation. This is the usual course with select committees, and very proper too where the investigation may affect, as in the present case, the character and honour of any man. Having, however, no option in the matter, we are content to submit with a good grace to the resolution of the Committee, nor do we ask any credit for not exposing ourselves to be called to the bar of the House for an infringement of its rules. We leave the *merit* of acquiescence to one of our cotemporaries.

Without violating any order, however, we may inform our readers that the *viva voce* examination has not yet commenced: it is understood that the work will begin in right earnest in the course of the next week; and, meanwhile, a mass of charters, by-laws, and so forth, has been collected, comprehending the whole *lex scripta* of the profession.

Though our lips must be sealed as to the particular evidence to be tendered to the Committee, we cannot see in what manner we are precluded by its operations from canvassing at the present time the state of the profession, or the nature of the remedies which seem to be indicated; nor does it argue in us the slightest disrespect to that body, or distrust in the impartiality of its investigation, or in the soundness of its judgment, that we persevere in criticising the defects and abuses of medical education and practice, with a view to their amendment. The Committee has yet to receive the opinions of practical men, to whom we should be happy to suggest a train of thought upon the subjects likely to be inquired into, whatever they may think of our conclusions. Whilst the violence of some in uprooting or upholding plainly indicates their respective objects—whilst one is incensed at the addition of a brick to the structure at Lincoln's-Inn-Fields, because of the increased labour of demolition; and another shudders at the possible desecration of the temple at Pall Mall East—we propose to ourselves the humbler task of examining our medical institutions, and, by contrasting them with each other, of pointing out their failings or merits, without arrogating to ourselves that all who differ from us are dolts or knaves. No time can be more proper for an impartial investigation than this important crisis. There is, undoubtedly, much information to be acquired by the Committee, which is out of the reach of any private individual; but much is also known, and there are many principles of medical education, of which the universal adoption may be reasonably contended for, although the full amount of corporation iniquity may not have been ascertained.

In our last number we published a

document, by which our readers will be enabled to contrast the education required of a Licentiate in Surgery in the Colleges of London and Dublin. A good deal has been said latterly of the new-born severity of the College of Lincoln's-Inn Fields. We have already stated our opinion that the College has been for some time touched with compunction at the disgraceful nature of its examinations, as compared with those of Dublin and Edinburgh. We acquit it, therefore, of the charge of sacrificing a young man of competent knowledge, for the sinister motive of recommending itself to the Committee: and if a person, who might have passed under the lax system of two years ago, is now *bonâ fide* rejected, he cannot complain that the College adheres in his case to its general rule, in not admitting him to further examination till six months have elapsed.

Taking, however, the severest form of its examination, or rather comparing the general course of education it requires with the by-laws upon education of the College of Surgeons in Ireland, we cannot but be struck with the vast disparity in the means of obtaining the same professional rank in the two parts of the same kingdom. The reason of this difference is very apparent. Both Colleges possess no other legal rights than those a Royal Charter can bestow:—so far they are on equal terms. But, by Act of Parliament, no surgeon can be attached to a county infirmary in Ireland, unless he is a Member of the College. These appointments are numerous all over the country, and respectably paid. There are, in that country, no instances of parish paupers hired out to be drugged at eight pounds a-year! The English College has no exclusive legal rights. The Irish College, by reason of its privileges, is enabled therefore to exact a stricter education than can be required at London, where candidates must be bribed to resort. There is another striking distinction in favour of the Sister Island, in that there is no competition between its College of Surgeons and its Apothecaries' Hall. The apothecary is not there presumed to be educated for general practice. Besides a knowledge of pharmacy little more is required of him than the simplest elements of medicine and surgery. On the contrary, in this country, the Company of the Apothecaries has alone the power of conferring legal rights, and, under this advantage, it requires of the mere apothecary a course of education as extensive as is exacted at Lincoln's-Inn Fields. From this rivalry between the two latter bodies, it is impossible for the College of Surgeons to improve its examination without risking a sensible loss of members, from the superior facilities offered by its powerful rival. These remarks, while they explain the degraded condition of our College of Surgeons in comparison with that in Ireland, manifestly point out the efficient remedy for the evil.

But omitting, for the present, any further comparison as to the nature of their governments, and of their examining bodies, (a most important particular this latter,) we are led to add, to what we have already written upon education in former articles, some remarks upon the mode of examination adopted in Dublin; and, in our opinion, worthy of universal adoption. The course of study—comprehending a perfect education in physic and surgery—embraces a period of five years. Before its commencement the student has received the average education of the schools in Ireland. This education is wholly classical; we confess we would wish to see the elements of the mechanical sciences have some place in the course.

It is not, however, to these points of

time and extent of study that we now allude. The great feature of improvement in the Dublin system remains still to be stated; it is this:—The course of study is divided into four sections; and in each of these must the student pass in classes a public examination, before he is allowed to be examined for his licence.

By this means the student's exertions during his noviciate are directed in the natural order of his studies, and his industry is kindled by the stimulus of public examinations; during which he is, in fact, not merely qualifying for the final adjudication of his right to practise, but also acquiring the public reputation of a promising and distinguished candidate for the honours of his profession. It secures, moreover, a thorough investigation in the whole course of the student's knowledge, and excludes the chance of an ignorant person passing, or one qualified being rejected. This admirable system in some respects resembles the manner of conferring degrees on the Continent, where a system of double examinations, first in the science, and subsequently in the practice of the healing art, is required.

To these comments, we have only time to add, that a complete knowledge of midwifery is exacted.

French Hospital Reports.

HÔTEL DIEU.

Wounds of the Radial Artery cured by Compression.

On the 26th of July, 1833, a fishwoman, æt. 40, presented herself at the hospital with an extensive wound, caused by the slipping of a knife, and situated in the first metacarpal space. There had been much hæmorrhage, which had reduced her to a state of great weakness. Pressure upon the radial artery arrested the flow of blood for a few moments, but in a short time the bleeding returned, and could afterwards only be completely stopped by applying pressure to both the arterial vessels in the fore-arm. In consequence of the direction and situation of the wound, which was very deep, M. Grisolle did not think that a ligature could be placed upon the two bleeding orifices of the vessel without great difficulty, he therefore rolled some pieces of plaister into two solid cones, the apices of which, being placed upon the radial and ulnar arteries near the wrists, were there retained by means of one or two circular straps of plaister, and one or two turns of a bandage; the interval between the two cones allowed the blood to pass freely through the veins, whilst the circulation through the two great arteries was completely arrested. This mode of treatment did not cause either pain or numbness, the hand preserved its temperature, and at the end of fifteen days the compresses were removed, as the wound was perfectly cicatrised.

HÔPITAL DE LA CHARITE.

Colica Pictonum cured by the use of Croton Tiglium, Purgative Enemata, and Opium.

Humbert Sebastien, æt. 30 was admitted into the ward St. Michael, No. 7, on the 20th of January, with all the symptoms of painters' colic, which had been increasing in severity since the 17th, on which day he was first attacked. This patient, who is employed in a white lead manufactory, was in the hospital in August, 1833, for a similar attack, which yielded to the treatment with croton oil, enemata, &c.

21st. The colic pains are spread over the whole abdomen, but are most acute near the umbilical region; when the hand is lightly placed on the parts the pain is augmented, but if a considerable degree of force be used relief is given. The pains occur in paroxysms, and travel along the spermatic cord to the testicle, which appears retracted. The patient has vomited twice, and the matter is green, and of a very bitter taste. The tongue is white, and the digestive organs are much deranged, and there is a feeling of fulness in the throat. In addition to the preceding symptoms, the man compains of very acute pain in the head, which is more particularly felt in the frontal and parietal regions, and

which generally comes on immediately after each paroxysm of the colic. M. Rayer prescribed two drops of the oil of the croton tiglium, a purgative lavement, and a draught, containing a grain of the extract of opium. The first dose of the oil was followed in the course of three hours by three copious stools, attended by violent pain.

23rd. The pains have now almost entirely disappeared, the pulse has risen to sixty, and the patient has slept three or four hours; the bowels have been opened seven or eight times since yesterday. Ordered barley water, linseed enemata, and emollient cataplasms upon the abdomen.

24th. Humbert is now almost entirely recovered; the pains are gone, and his appetite and powers of digestion have returned. He left the hospital on the 27th quite recovered.

Chorea principally affecting the left side of the Body, cured by Blood-letting and Sulphur Baths.

Rosalie Rouillard, æt. 17, came into ward St. Joseph on the 2nd of January, attacked with chorea.

In the month of last July, she received a violent blow in the right hypochondrium, which was followed for some time by difficulty of respiration and delirium. Towards the end of the month of August she was, however, perfectly cured. Shortly after this time she complained of violent pain situated in the supra orbital region on the left side of the head. This pain, which disappeared at the end of some days, was followed by involuntary contractions in the muscles of the left arm; the inferior limb on the same side was affected with the like phenomena, but less violently; the speech was also somewhat impeded. The menses appeared twice during the month of December. Soon the sight of the left eye was disturbed, contractions then attacked the whole of the muscular system of the left side, and finally the whole body was seized with all the symptoms of confirmed St. Vitus's dance.

The left arm has completely lost its sensibility, and the patient is extremely irritable, the least contradiction bringing on the paroxysms.

On the 3rd of January, M. Dalmas prescribed a bleeding from the foot.

6th. The convulsive movements are less frequent on the left side. A sulphur bath ordered.

7th. The movements of the arm and left thigh are rather more marked; the right side, however, is more tranquil; pulse full and frequent.

Since the 8th, sulphur baths, and four grains of aloes in two pills, have been prescribed. On the 16th a considerable amelioration has been observed. The involuntary movements are trifling, but return from time to time, especially when the patient is contradicted.

On the 28th of January she left the hospital perfectly well, after having been in it twenty-three days.

Excision of a Tumour from the Anus—Abundant Suppuration stopped by the use of Créosote.

The tumour from which this patient suffered was situated on the left side of the rectum, immediately above the sphincter ani, and was about as large as an egg, hard, irregular, very painful, and adherent to the intestine and to the sphincter muscle; a sinus communicating with this tumour opened externally at the thick part of the buttock, and gave issue to a yellow serous liquid. On the 1st of November, with M. Perrouneau, Dr. Bertholot removed this tumour, taking away at least a third of the sphincter, and half of the left wall of the anal extremity of the rectum, which was adherent to the tumour; as the disease extended as far back as the free edge of the larynx, it was necessary to enlarge the incision. After the operation two twisted sutures were used to retain the divided parts in contact, and the patient was put upon low diet; she went on well for a month afterwards, but, in consequence of the low diet and the excessive suppuration, she was reduced to a state of great weakness, and it was observed that the wound cicatrised very slowly. By applying a solution of the créosote, or immediate principle of tar water, to the wound, the suppuration diminished, the cicatrisation now proceeded very rapidly, and in twenty-seven days' time was perfectly healed.

HÔTEL DIEU D'AIX.

(*Bouches du Rhone.*)

Birth of a Monstrosity.

A woman, who had previously given birth

to three well formed infants, was confined on the 11th of September, 1833, and gave birth to a monstrosity, which was carefully examined by M. Bizot, and presented the following appearances. The head appeared to be in a normal state; the chest was contracted, and did not contain any viscera, except the thymus gland, the lungs and the heart being found in the abdomen; one of the inferior limbs had the heel in front, on the other leg it was behind, but the foot was twisted, and, from the disposition of the toes, showed that although placed on the left leg it belonged to the right side. There was neither perinæum, anus, scrotum, penis, nor any of the genital organs, but in place of the latter there was a small fissure of short extent, capable of admitting a sound. The liver was flattened, and adherent to the stomach, which was continuous with the duodenum as usual; this portion of the small intestines terminated in a cavity, into which also opened the bladder; no other traces of intestines were found, and the spleen and kidneys were also wanting; the pubis was seperated by an interval of an inch, and the bones of the pelvis were much distorted. The nervous system of the brain was in a healthy state, but the ganglions of the great sympathetic were not examined.

British Hospital Reports.

ST. GEORGE'S HOSPITAL.

Disease of the Lip.

Philip Phillips, æt. 60, was admitted with this affection. It has the appearance of an ulcerated sore, and is situated in the centre of the lower lip, of the size of a large nut, and having a granulated appearance. It is hard, and indurated in its texture; its surface is nearly flattened, and its edges of a purplish colour. He has had no medical or surgical advice for it up to the present time, and his general health has always been and still is in a very good state. He is unable to assign any cause for the origin of this affection; the only history of it that he can give is, that about seven months since he perceived a minute lump in the lip, which lump has been gradually increasing in size ever since until within the last six weeks, since which time it has remained stationary. He was ordered

℞. Decoct. cinchonæ, ʒ xj.
Liquoris arsenicalis, ♏ iij.
Liquoris potassæ, ♏ xxv.—Misce, fiat haust. ter in die sumendus.
Lotio nigra parti affect. applicand.

Shortly after his admission a triangular incision was made on the lip, which included the diseased part, and the edges were drawn together by ligatures. Some days after the operation the parts where the ligatures were applied assumed the appearance of ulceration; they were in consequence removed, and strapping and plaster applied in their stead. The ulcerated portions still had a suspicious-looking appearance, and the submaxillary glands became enlarged and painful. These appearances, however, subsided in a few days, the painful tumefaction of the glands decreased, and he left the hospital quite well in a few weeks.

Tumours over the Body.

A man, named Thomas Barnes, was admitted into Oxford Ward a few days since under the care of Mr. Brodie, having been troubled for some time past with the growth of various tumours over his body. On being examined, they were found to be of various sizes, structure, and consistence. They were situated principally on the arms and legs, and one of them bore a resemblance somewhat to a node. The man could give no precise time as to the period of their first appearance, nor any cause which might have been likely to produce them. Their average size was that of a large walnut, and they were generally moveable under the skin, and not very hard to the touch. They gave no uneasiness, neither did they cause any pain when touched or handled. The patient's general health was remarkably good.

Mr. Brodie remarked, that, as far as his memory would serve him, he had only met with two cases whose characteristic symptoms at all approached to the one now before him, and these derived much benefit from the use of the *liquor potassæ* internally. The patient was therefore ordered to take liquor potassæ ʒ j. three times daily in a glass of fresh small beer.

Mr. Brodie observed, that, with reference to this medicine, he had employed it in a vast number of cases of tumour either internal or external with very great success. It would frequently disperse abdominal tumours, the precise nature of which could not be accurately ascertained. A gentleman here asked Mr. Brodie whether it would not be worth while to try the value of this medicine in those cases of unusual and unnatural accumulation of fat in different parts of the body which sometimes occur. Mr. Brodie answered that it would be a remedy well worth trying in such cases. A man servant came to the hospital, some years since, as an out-patient under Mr. Brodie. He had two large pendulous masses of fat occupying the anterior surface of the neck, between the lower jaw and upper part of the chest, and posteriorly covering the nuchæ. This abnormal growth was a great calamity to him, as, from his appearance, no one would ever engage him as servant.

He took the liquor potassæ in doses of from ℥j. to ℥iss. ter in die for some time, and the growth of this swelling slowly diminished down to such a size as to prove no longer a source of uneasiness or disfiguration to him. Some time afterwards Mr. Brodie saw this man, and the tumour at the fore part and back of the neck had so nearly disappeared as to enable him to follow his usual occupation. Mr. Brodie had another case nearly similar to the above, in which the same good results followed the internal exhibition of the liquor potassæ. There also sometimes arise different collections of fat under the skin, unequal in size, and having no defined margin or edge; and in these cases the exhibition of this medicine is equally useful.

The patient has continued taking the liquor potassæ; no material benefit has yet resulted from it, there not having been sufficient time. He complains that the medicine "binds him up," and he was therefore ordered

℞. Pilulæ hydrargyri,
Extracti colocynthid. comp.,
Extracti hyoscyami, āā ℈j. misce. Fiat massam, in pilul. xij. divid., quarum sumat i. o. n. h. s.

Mr. Brodie observed, that this prescription was a very useful one, and of particular service to patients who were taking the liquor potassæ. The medicine has agreed with this patient very well hitherto, but no decided effect has as yet resulted in regard to the diminished growth of the tumours. He does not suffer in his general health, and his bowels are purged occasionally by a dose of house physic.

This case is an interesting one in many points of view, and we shall take notes of and report its future progress.

WESTMINSTER HOSPITAL.

Calculus Vesicæ—Lithotripsy.

Baron Heurteloup's very interesting, but difficult case of stone in the bladder (which we noticed on former occasions in this Journal) has proceeded very favourably, all the various obstacles which he was compelled to encounter being taken into consideration. The present is, we believe, one of the most obstinate cases which it has ever fallen to the Baron's lot to encounter. The nucleus of the stone, contained in the bladder, was of the most intense hardness, and for a long time resisted the most violent blows of the percuteur. There is, however, every reason to believe that it has been at length pulverised, and it is expected that one more operation will effect a cure. The patient (with the exception of being minus a little flesh) does not appear to have suffered in his general health, and he is impressed with a firm confidence in the efficacy of the operation. His bowels have been kept well opened, and he takes opium every night.

A very extraordinary circumstance, which occurred in this case a short time ago, may be mentioned here. The patient, when in the act of voiding urine, suddenly felt a very painful sensation in the urinary passage, just close to the orifice. On directing his attention to the part, he discovered a large stone of irregular dimensions, firmly settled in the urethra, within about three-quarters of an inch of the orifice. Having made several efforts to expel it, without success, Mr. Finch (the late house-surgeon of the establishment) was immediately sent for, who succeeded in extracting the stone with a dressing forceps. The size of the stone excited the astonishment of all present.

ST. THOMAS'S HOSPITAL.

Neuralgia et Erysipelas.

William Smith, æt. 32, admitted into William's ward, under the care of Dr. Elliotson, January 13th, 1834. Works at the docks; of good general health; subject to slight attacks of rheumatism for several years; within the last twelve months has complained of neuralgic pains, situated principally in the left leg and thigh, and the right arm and shoulder; pains are not of equal intensity; they are often felt shooting up the limb, in the course of the principal nerves. Ordered ferri carbon. 3ij. 6tis.

14th. Pains are somewhat abated.

20th. This morning he was attacked with shivering, and a blush of redness has surrounded the right eye-lid; bowels were opened yesterday by a dose of rhubarb and calomel. Ordered V.S. ad ℥xvj.; lot. frigida faciei applicanda; omit ferri carb.

21st. The redness has extended to the right ear which is much swollen, and to the side of the face; pulse not so full; no thirst. Ordered V.S. ad ℥x., abrad. capillitium; empl. lyttæ amplum nuchæ.

22nd. Blood buffy, but not cupped; erysipelas has spread towards the occiput; slightly rambling in his conversation.

23rd. Face more inflamed; bowels confined. Ordered hirud. xvj. faciei; calomel. gr. vj. statim.

24th. Bowels have been well opened; erysipelas has ceased to spread; occasionally rambles in conversation; the redness is less about the face, but more in the neck. Ordered Hirud. xij. collo.

25th. Is much better to-day; quite rational; redness not extended, and seems disposed to die away. A ring of nitrate of silver has been carried around the inflamed part of an inch in breadth.

28th. Erysipelas is diminishing.

Feb. 4th. Complained yesterday of cough and pain in the chest, and for which a blister

was applied. He is now better. The redness has quite left the head and face. A small abscess is forming on each lower eye-lid.

Cephalalgia et Vertigo—Erysipelas.

John Beaumont, æt. 47, has been ill sixteen months; ascribes the commencement of his illness to sleeping in a damp bed. Was first attacked with pains in the stomach and disordered bowels. In July last this ceased, and he then became affected with giddiness, singing in the ears, and an appearance of specks before the eyes. Bowels costive; does not sleep well, often starts up suddenly. Pulse 68, labouring; tongue moist, slightly red at the edges. Has always been relieved by bleeding. Ordered V.S. ad ℥xvj.; pil. hydrarg. gr. v. bis die; a slop diet.

From the present date up to the 25th of January, he had been complaining more or less of pain in the head, and had been bled from time to time, to the amount of eighty ounces; he is now complaining of debility, but has experienced considerable relief.

Jan. 13th. For the last two or three days the patient in the next bed has been suffering from erysipelas, and Beaumont has frequently expressed his fear that he shall catch it. This morning he had an attack of shivering, succeeded by great heat; and redness and swelling have appeared under the eyelids.

14th. Restless all night; very frightened and irritable; says he shall certainly die. Lot. frigida capiti applicanda.

15th. Redness and heat extending; delirium at intervals; pain in head, with heat of scalp; pulse quick and soft. Ordered abrad. capill.; hirud. xij. temporibus.

17th. Less redness and swelling of face; occasional delirium; very restless; cannot be kept quiet in bed; takes the cold wash off his face every few minutes. Ordered empl. lyttæ ampl. nuchæ; hirud. xx. collo; hydrarg. oxyd. novi, gr. iij. 6tis.

9, P.M. V.S. ad ℥xvj.

18th. Blood buffed; is becoming weaker. Ordered hirud. xij. temp.

19th. The debility increases; constant muttering delirium, but answers some questions coherently; pulse quick and weak; constant tremor, and subsultus tendinum.

20th. Much weaker; more delirious; difficulty of breathing. Ordered beef tea daily. Vin. rubr. ℥ss, 8 tis.

21st. Is more sensible this morning; complains of pain at the back of the head. Continue vin. rubr. 3 tiis.

11 o'clock A.M.—In the act of being moved from his bed the muscles of the face were observed to become convulsed, and he died suddenly.

Autopsy—No traces of inflammatory action were observed on the dura mater; the upper surface of the cerebrum contained several small deposits of lymph; pia mater on the surface and in the ventricles remarkably congested.

Tonsillitis—Erysipelas.

Benjamin Moore, æt. 67, a gardener, admitted into William's Ward, Jan. 30th, under the care of Dr. Elliotson. A fortnight since caught cold, and was seized with pain in the fauces and difficulty of swallowing. Has swelling of the tonsils; the lining membrane of the soft palate and pharynx are covered with a thick, viscid mucus, which when cleared away exposes the membrane of a dark purplish colour; great want of power in the system; pulse small, weak, and irregular; tongue dry and fissured, and covered with a dark brown fur. Ordered arrow-root, sago, &c.; garg. acid. muriat.; quinin. sulph., gr. v. 4tis; vin. rubr. ℥ij. 6tis.

Feb. 1st. Appears better to-day; swallows with less difficulty, but cannot take the pill. Cont. quin. sulph. ex. inf. rosæ.

3rd. Was restless last night, and this morning a blush of erysipelas has appeared on the right side of the face. Pulse very weak and irregular; slightly delirious; bowels open.

Ordered Vin. rubr. ℥ ij. 3tiis.—Strong beef tea.

4th. Has passed a restless night; more debility than yesterday; erysipelas extending.

Ordered nourishment, &c. to be given as often as possible. As he refuses his mixture the sulphate of quinine is directed to be mixed with the wine.

5th. Refuses to take his wine and medicine.

7th. Great debility; cannot be persuaded to take his wine and nourishment. Pulse scarcely perceptible.

8th. Is gradually sinking; frequent delirious muttering.

9th. He expired at six o'clock this morning.

Remarks.—We learn from these cases the different effects that are likely to follow from the supervention of erysipelas on other diseases.

In that of Smith, whose case was one of neuralgia, and free from all signs of inflammatory action, the constitutional and head affection under the erysipelas was mild, gave way to treatment, and the neuralgic pain became relieved; whereas, on the contrary, in the case of Beaumont, who had for a long time been suffering from inflammatory affection within the head, on the supervention of the erysipelas every symptom became aggravated, and not in the least subdued by the measures employed. On this point we may notice an observation of Dr. Elliotson's, that was delivered in his clinical lecture on this case:—"When erysipelas supervenes on disease of the head the patient is almost certain to die; I never yet knew a case to recover."

ST. BARTHOLOMEW'S HOSPITAL.

Aneurism of the Subclavian Artery.

A YOUNG man, about thirty years of age, of a stout form, but with a countenance particularly indicative of disease and anxiety, some years

ago, when ascending a shroud in a ship, suddenly felt a peculiar sensation near the clavicle, which he cannot describe, but which he considers as the original and first symptom of the present disease. Some time after this occurrence, in consequence of the appearance of a tumour close to the acromial extremity of the clavicle, he was admitted into this hospital. At that time he was kept on low regimen, and by means of quietude and strict attention to the antiphlogistic plan of treatment, the disease was completely kept under, and the patient would, in all probability, have been perfectly cured, had not very urgent and peculiar circumstances obliged him to quit the hospital at this most interesting and critical period.

He was also in St. George's Hospital for some time. The disease did not assume its present alarming appearance till within the last few weeks, when the increasing size of the aneurismal tumour compelled him a second time to come into this hospital. On examining the seat of disease we found the tumour situated under the sternal end of the clavicle; it was much diffused, and, from the history given by the patient, it appears to have progressed considerably towards the trachea. There was violent pulsation in the tumour; the pulse at the wrist was exceedingly indistinct, and sometimes almost imperceptible. His general health is not very much deranged. Leeches have been applied around the tumour, and the patient kept on very low regimen. The patient is anxious for an operation, but Mr. Earle (under whose care the patient has been placed) strenuously deprecates such a measure. Sir Astley Cooper, Mr. Brodie, and the surgeons of the hospital have seen the case, and have all expressed their opinions as unfavourable to an operation. Under these circumstances Mr. Earle is determined not to perform the operation for tying the artery, unless the patient be threatened with immediate dissolution. Strong hopes are entertained that a spontaneous cure may be effected in this,—by rest and low diet, an obliteration of the sac in consequence of the deposition of coagulum, may probably ensue. The chances held out by the operation are exceedingly precarious, and there are unfortunately very few instances in which an operation of this nature has succeeded. The proximity of the subclavian artery to the heart renders any operation on it lamentably dangerous and precarious.

We shall not fail to give the result, whatever it may be, of this case in a future number of the Journal.

MIDDLESEX HOSPITAL.

Phagedænic Ulceration of the Glans Penis.

Samuel Smith, æt. 54, admitted Dec. 24th, 1833, under the care of Mr. Mayo, for a foul spreading, sloughy ulcer of the penis, the glans being removed by the ulceration to the point where the inner membrane is reflected from the corona glandis, there only remaining several small portions resembling warts. There was some swelling at the under part of the prepuce, but this was partly accounted for by the circumstance of his having, at a previous period, had the prepuce divided for paraphymosis.

He states that, in the beginning of last June, a small sore made its appearance on the glans close to the orifice of the urethra, for which he applied to a surgeon, who administered mercury, and kept him under its effects for the space of five months, the mouth being sore all the time; however, instead of improving, the ulcer gradually got worse, extending itself all over one side of the glans; then partially healing on that side, the ulceration commenced on the other, and ran a similar course, until the whole of the glans was removed, excepting, as previously noticed, three or four warty projections.

During the progress of the disease he suffered so much pain when warm in bed, that he was obliged to prop himself up in a sitting posture, from which he always found relief. During the day, however, when the penis was suspended, he experienced no inconvenience.

Pil. calomel., gr. vj. h. s.
Haust. sennæ cras mane sumend.
Iodinæ, gr. 1½.;
Hydriod. potassæ, gr. iv.;
Aq. menthæ pip. ʒiss. M. ft. haust. ter die sumend.

Dec. 28th. Stomach slightly affected from the use of the iodine, which was therefore ordered to be discontinued.

30th. The affection of the stomach entirely subsided.

℞. Iodinæ, gr. $\frac{1}{12}$.
Potassæ hydriod. gr. iij.
Tinct. opii, ♏ vj.
Inf. aurantis, ʒ ij. M. ft. haust. ter die sumend.

Jan. 12th. He has been gradually improving in health since taking the last prescribed medicine, so that he is at present better in his general health than he has been for many months, but this may perhaps be partly owing to his regular and easy manner of living.

The ulcerated part has been either dressed with mild mercurial ointment, black wash, or the balsam of Peru, the last of which has, however, agreed much the best with it. Until within the last few days it appeared gradually healing, but since then it has shown a tendency to spread again, for the prevention of which it was this day touched with strong nitric acid: this caused acute pain for about three or four minutes, which then gradually abated, so that in half an hour it had entirely subsided.

Repet. med. nuperrimè prescripta.

4th. From the time of the application of the acid the part has put on a better appearance, looking, even as early as the next day, much more clean and healthy: it has gradually contracted, so that at present there is only a very small place remaining to be healed.

Continue the use of the balsam of Peru, as also of the last prescribed medicine.

11th. Since the last the part has by degrees put on a more irritated appearance, the tendency to spread recommencing, therefore the strong acid was again applied. Bowels very much confined; ordered to discontinue the iodine, and take

Pil. colocynth. c. cal. gr. xv. h. s.

Haust. gentianæ c. sennâ omni mane.

16th. The application of the acid produced the same beneficial effects as when first employed; however, as there still remained a small place between two of the projections which retained its angry character, the acid was once more used.

Perstet in usu haust. gentianæ c. sennâ.

22nd. Since the last application of the acid the part has almost entirely healed, there being now only a very minute spot to heal.

Mr. Mayo explained that there were two forms of the disease, one affecting persons of a full plethoric habit, attended with acute pain, and running a rapid course, and which was to be treated by bleeding; the other occurring in persons of a weaker habit, being slower in its progress, attended with much less pain, and best treated by the topical application of strong nitric acid.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON.

Royal Asiatic Society	March	15,	2 P.M.
Westminster Medical Society	—	15,	8 P.M.
Harveian Society	—	17,	8 P.M.
Medical Society of London	—	17,	8 P.M.
Phrenological Society	—	17,	8 P.M.
Horticultural Society	—	18,	1 P.M.
Linnæan Society	—	18,	8 P.M.
Institution of Civil Engineers	—	18,	8 P.M.
Royal Society of Literature	—	19,	3 P.M.
Society of Arts	—	19,	7½ P.M.
Royal Society	—	20,	8½ P.M.
Society of Antiquaries	—	20,	8 P.M.
Royal Institution	—	21,	8½ P.M.

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, March 6th.

John Bean	Colchester.
Henry William Coates	Salisbury.
William Cole, Jun.	Kirkley Moorside.
William Hallett	Dorset.
Paul Jackson	Newark.
John Fox Oxley	Pontefract.
Thomas Taylor	Bethnal-green
John Wood	Manchester.
Thomas Penman	Durham.

METEOROLOGICAL JOURNAL.

MONTH. March, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
6		46	53	46	29·78	29·81	77	76	W.	W.S.W.	Fine	Fine	Fine
7		53	56	46	29·97	30·03	74	76	W.	W.	—	—	—
8		50	58	43	30·08	30·11	77	74	W.S.W.	W.N.W.	—	—	—
9		48	55	46	30·16	30.16	75	75	W.	W.N.W.	—	—	—
10	☽	51	57	45	30·07	30·11	75	74	N.W.	N.N.W.	—	—	—
11		51	53	43	30·22	30·23	74	75	N.	S.E.	Foggy	—	—
12		48	54	45	30·26	30·23	75	76	S.S.E.	N.E.	—	—	Rain

50, *High Holborn.* WILLIAM HARRIS and Co.

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THE

London Medical and Surgical Journal.

No. 112. SATURDAY, MARCH 22, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,
BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXXI., DELIVERED APRIL 3, 1833.

Gentlemen,—In the time of the French Academy of Surgery, about half a century ago, it was customary to employ the trephine, or rather the trepan, in almost all cases of fractured skull, not merely for the removal of any urgent symptoms present, but with the view of *preventing their occurrence at all.* The absurdity of the latter doctrine received a very complete exposure from the facts and observations published by the late Mr. Abernethy, whose investigations into this difficult part of surgery contributed very essentially, as I think, to its improvement, more especially by showing in what cases the application of the trephine might do good, and in what instances the operation should not be undertaken. Even at the present day his advice is sometimes neglected, for I am continually hearing of persons being trephined under circumstances in which, according to the principles established by his researches, they cannot possibly be benefited by the removal of any part of the cranium. As far as I can judge, the nature of the symptoms actually existing should here be your guide; and, so far from admitting the wisdom of the old rule of trephining in anticipation of symptoms which are only apprehended, but may never occur, I should say that the plan is altogether contrary to the dictates of reason and experience. As Mr. Abernethy observed, if the brain will, in the first instance, bear a certain degree of pressure without ill consequences, whether from fracture or effusion—if it will, at first, bear it without the production of urgent symptoms, or irritation of the dura mater by the inequality of a fracture, why should it not continue to do so subsequently? It is said, however, that when the cranium has been struck with a sharp or angular body, the inner table is almost always splintered, and that such a case is a sufficient warrant for the application of the trephine, *without the presence of a single bad symptom*, or any disturbance of the sensorial functions; and that the operation should be done before inflammation has had time to come on. If you were certain that the inner table had been splintered, and if the symptoms were such as to indicate pressure on the brain from that cause, or an effusion of blood, the operation would be justified; but, without knowing even that such splintering exists, and without a single bad symptom denoting pressure on the brain, the plan of applying the trephine is not, as far as I can judge, at all advisable. It cannot be vindicated on any sound principles. Supposing the scalp were wounded, and the fracture of the skull comminuted, you would of course extract all the loose fragments, for they are already detached, and might cause irritation of the dura mater. This practice would be conformable to the general rules relative to the treatment of all wounds, wherever situated. But, if the pieces of bone were not completely detached, so that you could not remove them without an operation, and no bad symptoms existed, I should incline to the opinion of those surgeons who do not recommend an operation under these circumstances. Here is a skull in which a comminuted fracture happened; as there were no urgent symptoms the surgeon did not remove the fragments, yet the patient recovered in a favourable manner. I do not bring forward this fact to encourage you to leave loose pieces of the skull unremoved. I believe it is generally most advisable to take them away, particularly if the scalp be already wounded.

One consideration which influences me in defending the principle, that the trephine should not be used in injuries of the head, unless bad symptoms actually exist, and are of that description which may be relieved by this measure, is, that the operation itself—viz., the removal of a portion of the skull, and the exposure of the dura mater, are proceedings attended with some considerable risk of bringing on bad and even fatal consequences. The

late Mr. Ramsden was rather fond of operating; and I remember very well two cases in which he tried what the trephine would do for the relief of a long-continued fixed pain at one part of the head. A piece of bone was sawn out in each case; inflammation of the dura mater ensued; and in two or three days each patient fell a victim to the experiment.

Then, gentlemen, I must remind you, that the removal of a portion of cranium is often followed by a gradual protrusion of the brain through the aperture—that kind of swelling which is called *hernia cerebri*, and which almost always has a fatal termination.

Wounds of the Brain.—Many fractures with depression produce a laceration of the membranes, and even of the substance, of the brain. Modern experience proves, that this organ, important as are its functions, is frequently wounded without the event being immediately productive of those perilous symptoms which might be expected; but there is a difference in this respect, the reason of which is not at present satisfactorily understood. In some cases a comparatively slight wound of the brain gives rise to severe and rapidly fatal consequences; while in others, the same degree of injury, as far as can be ascertained, occasions no serious symptoms. However, I believe the history of this part of surgery will warrant me in representing wounds of the brain as generally attended with vast danger; and that, even if no bad symptoms occur directly after the accident, they mostly come on and prove fatal afterwards. Paroisse gives an account of twenty-two French soldiers, from whose skulls portions of bone with the scalp and slices of the upper part of the brain had been separated by sabre wounds. All these men ultimately died; but at first they had no bad symptoms, and actually performed a journey of ninety miles after the receipt of their wounds, one half of which distance they travelled on foot.

A French soldier was wounded at the battle of Waterloo: a musket-ball entered at the anterior portion of the squamous suture, lodged in the substance of the brain, and on the fifth day, after an enlargement of the wound, and the removal of several fragments of bone, it was extracted from the posterior lobe of the right hemisphere of the brain, where it had rested upon the tentorium. Headach and partial deafness of the right ear were the only bad symptoms. A recovery took place.

Gentlemen, you may be called upon to perforate the cranium for the removal of balls lodged within its cavity. Larrey relates some extraordinary examples of this practice; and it was he who first suggested the necessity of sometimes making a counter-opening in the bone for the accomplishment of this purpose, when the ball had passed to some point of the surface of the brain remote from the opening by which it had entered. He introduces an elastic gum catheter along the track of the ball, and makes a perforation with a trephine over the part where he feels that it is lodged. Now, one of these histories is very curious; for after having removed a portion of the skull with a trepan, he took out an iron ball, that weighed seven French ounces, which was lodged upon the anterior lobe of the right hemisphere and against the orbitar process and spine of the os frontis. The patient suffered a painful sense of weight in his head; and whenever he inclined it backward he was seized with syncope. Here, also, the case ended in the recovery of the patient.

You will find in the memoirs of the French Academy of Surgery various recoveries from most serious injuries of the brain; such cases as would *à priori* have been regarded as completely hopeless. If you look over the annals of surgery, you will be able to find numerous cases, in which the patients were cured, notwithstanding the brain had not merely been wounded, portions of it torn away, or separated. You may find, in one of the volumes of the Medical and Chirurgical Transactions of London, the particulars of the case of a boy, through whose frontal bone the linch-pin of a gun was driven with such violence, that it lodged in the anterior lobe of the brain. Directly after the injury, he walked several hundred yards, and then fell down, and was seized with convulsions. No suspicion was at first entertained of the passage of a foreign body into the brain. Venesection and other antiphlogistic measures were put in practice; and on the following day, the urgent symptoms had abated. The boy was treated on this system until the 27th day, when a piece of iron was noticed at the bottom of the wound, and extracted. It proved to be the linch-pin of a fowling piece, a substance of considerable size and weight. A cure ensued, with the exception of an amaurosis of one eye.

Gentlemen, in *the treatment of injuries of the head*, attended with a *wound of the dura mater*, or *substance of the brain itself*, if no particular symptoms or circumstances immediately demand the trephine, your chief reliance must be upon rigorous antiphlogistic treatment; the same plan as already advised for fractures unattended with urgent symptoms of compression. The external wound itself is to be treated on common principles; it is to be made clean, foreign bodies, or fragments of bone, are to be taken out, and its sides brought together.

Such cases commonly end fatally; but you must not absolutely despair of them, for the injury, and even a considerable loss of substance in the upper part of the hemispheres, may occur, as we find in the cases which I have quoted, without being necessarily fatal, or even productive of very alarming symptoms.

Wounds of the dura mater and brain are sometimes followed by hernia cerebri, which then often appears to have a considerable share in occasioning the patient's death.

Compression of the brain may arise from fracture with depression, from an extrava-

sation of blood within the cranium, or from a collection of matter in the substance of the brain or between the inner table and the dura mater, in consequence of previous inflammation, the symptoms of which must then precede those which usually accompany the injurious effect of pressure on the brain. You may have also compression of the brain by the lodgment of balls within the cranium, or by the formation and growth of tumours. When such pressure exists, it cannot be expected that the symptoms will be alike in all cases, because the pressure not only differs in respect to its cause, its degree, and its situation, but it differs also in another important point of view, namely, that relating to the kind and quantity of other injury, or mischief, with which such pressure may be conjoined. For, gentlemen, you will find in practice, that every case of pressure, following external violence, is not so clear as many writers would lead you to suppose; and that you will not always have mere pressure to deal with, but often pressure combined with concussion, with inflammation, or with a wound or laceration of the membranes or substance of the brain. In short, you will frequently have to exercise your judgment on what may be called *mixed*, or *complicated* cases, in which the symptoms do not correspond altogether to those either of compression, concussion, or inflammation singly. Yet, if you understand the general character of the symptoms resulting from each of these states, you will be in a great measure qualified to judge of the effects likely to be the result of their happening to be co-existent.

It might be thought that apoplexy would give us the best illustration of the symptoms of simple compression of the brain; yet this is perhaps not precisely the case, because apoplexy is often preceded by disease of the brain; and at all events as good an illustration of them is afforded by certain cases, in which after the receipt of a blow on the head the patients recover from the stunned state, immediately following the blow, and shortly afterwards begin to labour under the effects of an effusion of blood, gradually going on within the head.

Gentlemen, I will next endeavour to explain to you the *symptoms of compression of the brain*. These will be headach, stupor, and drowsiness; and while the quantity of effused blood is small, they may be the chief symptoms. Afterwards, when it increases, and the pressure on the brain is greater, there will be a *loss of all sensibility*, and of *all power over the voluntary muscles*. The eyes will remain half open, the retina will be perfectly insensible, the pupils will generally be dilated, and the iris quite motionless, even when a candle is brought close to the eye. You may pinch or prick the patient, and he is perfectly unconscious of it: the bladder, being paralytic, cannot empty itself; or its sphincter and that of the anus being in this state, the urine and feces come away involuntarily. The pulse is slow, and respiration carried on with difficulty and a stertorous noise.

The observations, already delivered respecting mixed or complicated cases, will let you at once perceive that, even when compression of the brain exists, and this in an unequivocal manner, the symptoms may be modified by the particular complications attending it. Thus, frequently, one pupil may be contracted, and the other be dilated; or the patient may be paralytic on one side, and convulsed on the other. Perhaps convulsive twitches of the muscles are rather symptoms of laceration of the brain, than of simple compression. They often attend fractures with depression.

In compression, there is usually no sickness and no vomiting. This fact is well exemplified by cases, in which the patient is free from these symptoms until he has been trephined, and then the removal of the pressure is sometimes immediately followed by the rejection of the contents of the stomach.

Another fact, which deserves notice, is that, when pressure exists only on one side of the head, the paralysis generally manifests itself in parts on the opposite side of the body. Complete hemiplegia is much more rarely the consequence of accidental injuries of the head, than of apoplexy; a difference, perhaps, referable in these cases to the difference in the situation of the effused blood.

With respect to paralysis, though it is a common symptom of pressure, various facts on record tend to prove that it may also arise from concussion. The observations of Desault, Dupuytren, and, if I remember right, those of Mr. Brodie, all corroborate this statement.

Gentlemen, you cannot pay too much attention to one circumstance, frequently throwing considerable light on these cases. I allude to the patient sometimes *recovering his senses, after having been stunned by the blow, and then relapsing into a drowsy condition, which is soon followed by all those symptoms already specified as denoting compression of the brain*. That these symptoms cannot depend upon concussion is manifest; for then the patient *would not have regained his senses for a time*, a fact, proving that the stunning, or the immediate effect of the concussion, had subsided. That the symptoms cannot depend upon a depressed fracture is equally manifest, because the *patient would have been senseless from the first, and have continued so without remission*. That the same symptoms cannot depend upon the lodgment of matter beneath the skull is certain, *because there has not been time enough for inflammation and suppuration* to occur. The real cause of the return of the loss of sense, then, under these circumstances, becomes tolerably evident; and is accounted for by the extravasation continuing slowly to increase, and to produce more and more pressure, and its usual consequences, notwithstanding it had not advanced sufficiently

at first to prevent the return of the mental faculties, on the subsidence of the immediate effects of the concussion which the brain sustained.

When no interval of sense takes place, but the patient lies insensible and motionless from the first, then you can only form a judgment of the cause of this state of the system, by the consideration of other symptoms. Frequently, cases of this kind are particularly unfavourable, as being complicated ones, combining sometimes concussion and compression together, and not only these evils, but a wound or laceration of the brain, and even a fracture at the base of the skull, or elsewhere.

Extravasations of blood between the dura mater and base of the cranium are mostly fatal. When the blood lies between the dura mater and tunica arachnoides, it is often widely diffused, so as not to admit of being effectually discharged. When situated between the cranium and the dura mater, however, it is circumscribed and may be discharged by a perforation of the bone.

There is frequently extreme difficulty in forming an opinion about the situation of extravasated blood, when symptoms indicate its existence. Generally we know not whether the blood lies on the dura mater or in a deeper situation, or under what part of the cranium. Now, if the symptoms be urgent, the rule is, that *you are to be guided in the choice of a place for the application of the trephine by any mark of violence on the scalp, or any wound, or fracture, showing the part on which the violence has acted ;* for it is directly under it, that the extravasation is frequently situated, though not constantly. You should also consider on which side of the body the paralytic effects show themselves, as the probability is, that the pressure is on the hemisphere of the brain of the opposite side.

Sometimes there is no mark of external violence on the head—no wound to guide you—no restriction of paralysis to one side of the body—no interval of sense. Here circumstances are desperate, and you have no choice, but either that of trusting to means calculated to stop the further effusion of blood in the head, viz., cold washes and venesection, or that of perforating the cranium without any kind of clue to the situation of the effused blood.

Under these circumstances, the generality of surgeons would be content with bleeding and antiphlogistic treatment; while others, knowing that when a considerable quantity of blood is effused on the surface of the dura mater, it is generally poured out from the middle meningeal artery, might feel disposed to trephine in the track of that vessel. Here is a skull, in which you see a fissure crossing the groove for the principal artery of the dura mater. Were there any guide to the side of the head on which the extravasation lay, this bold measure might be warranted; but, I believe, the generality of surgeons would rather confide in antiphlogistic treatment. Often the blood is on both sides, and sometimes not only so, but not under the part struck.

When dangerous compression of the brain arises from a fracture with depression, the indication is to elevate or remove the portion of bone forced below the rest of the cranium. For this purpose, you are to adopt certain modes of proceeding, which will be explained when I show the operation of trephining.

Also *when suppuration occurs on the surface of the dura mater, and produces urgent symptoms of pressure*, the same operation may be indispensable; but this case is generally not one of simple compression,—it has been preceded and is usually still accompanied by inflammation under the cranium, affecting not merely the dura mater, perhaps, but the brain itself.

Gentlemen, we have before us two preparations, which I will send round for your inspection. One is a cranium, in which you may observe that a small exfoliation has commenced, in consequence of suppuration on the dura mater. It is one of Pott's cases, as they are called, in consequence of his having particularly described them. In this instance, the trephine was applied, and the dura mater found red and spongy. But, gentlemen, the case was not one of simple pressure; for, besides the disease of the dura mater, the next preparation, taken from the same patient, exhibits a deeply-seated abscess in the brain, about an inch below that part of the skull which is undergoing exfoliation. You may also plainly see the thickened dura mater in that situation.

The patient, before exhibiting the symptoms of pressure, must have had those of meningeal inflammation,—he must have had severe pains in the head, shiverings, an accelerated pulse, and disturbance of the intellects, followed by coma, and loss of sense, and generally a puffy circumscribed tumour of the scalp, and detachment of the pericranium, corresponding to the extent of the abscess between the inner table and the dura mater. Or, if there were an external wound, its lips would have lost their vermilion colour, become pale, flabby, and swollen, and the discharge changed to a scanty fœtid ichor.

Such a case calls for the immediate perforation of the bone, and rigorous antiphlogistic treatment, copious bleedings, leeches, the repeated exhibition of calomel and James's powder, or of saline purgatives joined with tartarised antimony, abstinence and quietude.

Let us next, gentlemen, notice *concussion of the brain*. This has many degrees, as you may readily conceive, when you recollect the great difference which exists between its two extremes, the slight transient stunning, the sudden effect of a moderate blow on the head, and that complete disorganisation, which, at the instant of the injury, permanently annihilates all the powers of life.

When the concussion is slight, a temporary stunning, and a degree of headach, followed

by acceleration of the pulse, vertigo, and sickness may take place; but in general none of these effects continue long if depletion be employed. However, in some examples, a very slight blow on the head will bring on inflammation of the dura mater, and this sometimes long after the accident, when all apprehension of danger has ceased.

When the violence applied to the head is greater, the patient is immediately stunned, his extremities become cold, his pulse is feeble, slow, and intermitting, his respiration difficult, but generally without stertor, and his sensibility and power of motion are entirely abolished.

This is the *first stage of concussion*, or the first effects produced by severe degrees of it. Such a state cannot last long, for the patient either dies in a very short time, or the effects, which I have been describing, gradually subside, and are succeeded by others, which may be said to constitute the *second stage of concussion*.

In this the pulse and respiration improve, and, though not regularly performed, are sufficient to maintain life, and to diffuse warmth over the extreme parts of the body. The nervous influence is also now so far revived, that if the skin be pinched the patient is conscious of the injury; but he lies in a dull stupid state, quite inattentive to slight external impressions. In proportion as the first effects of the concussion subside a little more, he becomes capable of replying to questions put to him in a loud tone of voice. As long as the stupor remains, the inflammation of the brain is moderate, but as the former abates the latter seldom fails to increase, so as to bring on the *third* or *inflammatory stage of concussion*.

In this *third stage*, if the eye-lids be opened, the patient will shut them again in a peevish manner; the pupils are contracted, and a strong light is very offensive. The patient is sleepless, talks much and incoherently, and if not restrained will get out of bed, and act with frantic absurdity. As the delirium increases the pulse becomes small, very quick, and even rapid; and, if the inflammation of the brain be not checked, suppuration, or effusion, will occur within the head, preceded by rigors, and the foregoing symptoms change into others, arising from the pressure of the fluid on the brain.

The dangers, then, of concussion depend upon its original violence, which may be such as to kill the patient at once, or upon the inflammation of the brain and its consequences, which often follows this kind of injury.

With respect to the sickness and vomiting, they are generally early symptoms, and seldom continue after the patient has recovered from the first shock of the accident.

Gentlemen, concussion and compression are often combined; and this fact will explain why the symptoms frequently have not the simplicity you might expect from some descriptions given of them. Patients, who recover from severe degrees of concussion, sometimes remain variously and curiously affected by the accident during the remainder of their lives. Imbecility, loss of memory, and a marked change in the character are sometimes the permanent consequences. The patient may suffer loss of hearing, or partial paralysis. In consequence of an accidental concussion of the brain, a patient, previously a lunatic, has been known to recover his reason. In other instances, the patient, at first, can only remember circumstances with which the mind had been lately impressed, but afterwards recollects nothing but what happened in his childhood. Sometimes the effect is a total forgetfulness of a language, with which the patient was previously familiar. Mr. Liston attended a woman who recovered her hearing entirely from the accidental effects of a concussion of the brain. Last year I attended a lady in the Regent's Park, who met with a concussion of the brain. from her horses taking fright and running away with the carriage till it came in contact with some iron railings: in this example, the patient has not the slightest recollection of having met with any accident in the Park; nor does she remember the circumstance of the horses galloping away with her, or the fall of her coachman from the box. During my attendance on her, with Dr. Pinckard, she never adverted to the injury of her head, but repeatedly to a slight burn of her neck, which she had met with two or three days before the other more serious injury.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

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LECTURE XIII.

Jaundice from Gastro-Duodenitis—Researches of Broussais and Marsh—Without Hepatic Inflammation—Nervous Symptoms—Treatment—Yellow Fever—Its Occurrence in this Country—Predominance of Gastric Irritation in Warm Climates—Typhus Icterodes—Jaundice from Biliary Calculi.

Gentlemen,—We commence to-day with the consideration of that form of jaundice, which, taking *all* its cases into account, appears to be the most common. The pathological expression for this form of the disease is, that it is inflammation of the upper portion of the digestive tube, or in other words, that it is the result of a gastro-duodenitis. In this case an inflammatory affection of the stomach and duodenum acts sympathetically on the liver, and we have jaundice occurring independent of hepatic inflammation or mechanical obstruction to the flow of bile. This variety of the disease it is important you should be accurately

acquainted with, as it is not only exceeding common in temperate climates, but because I believe it is a great cause of mortality in warm countries, and that the yellow fever of the tropics is reducible in a great measure to this form of disease. In other words, that the cause of the yellowness and many other of the symptoms is to be referred to an intense irritation or inflammation of the digestive tube, with a predominance of that irritation in its upper portion.

The jaundice which depends upon gastro-duodenal inflammation was first accurately described by Broussais. Dr. Marsh has also made many valuable additions to our knowledge on this subject in his paper on jaundice, published in the fifth volume of the Dublin Hospital Reports. You will find too that in a case of jaundice described by John Hunter, he suggests the possibility of its being preceded by inflammation of the duodenum. But I believe we are chiefly indebted to Broussais for our first correct notions of the pathology of this disease, and for its scientific and successful treatment.

The disease may occur in the acute form, or it may come on in a slow insidious manner; but in either case, as far as my experience goes, it is always accompanied by symptoms referable to a morbid state of the mucous membrane of the intestines. Dyspeptics and individuals subject to diarrhœa are liable to it, but it may also attack strong and healthy persons from the two following causes. A man is exposed to considerable heat, his body is bathed in perspiration, he experiences some degree of lassitude, and is very thirsty; in this state he takes a large draught of cold water. In a few hours afterwards he begins to feel uneasy and complains of being unwell; he gets shivering, nausea, thirst, and fever, and this fever and thirst with bilious symptoms (as they are called) continues for two or three days, when some morning on awaking the patient is surprised to find himself jaundiced. The same thing may happen as a consequence of error in diet. A person eats at supper a quantity of indigestible food, next day he has vomiting and thirst, and in a day or two more jaundice appears. I may remark here that this indisposition of two or three days' standing is a very curious and interesting feature in the disease, and would seem to be connected with the progress of disease in the mucous surface of the stomach and duodenum. Jaundice from gastro-duodenitis generally occurs in this country under two varieties. The first is an extremely mild disease; it comes on with very slight and transient symptoms of constitutional or local derangement, it seldom prevents the patient from pursuing his ordinary avocations, and generally disappears without any trouble. The second variety is an extremely severe and frequently a fatal disease; between this and the former there are numberless shades and gradations.

Let us take a case of the more severe form of jaundice. The cause of this, as I have already mentioned, is often the taking a copious draught of cold water, while the body is heated by exercise, or eating a quantity of indigestible food. The patient is indisposed for two or three days before the jaundice appears; he has nausea, vomiting, great thirst, loss of appetite, he complains of burning heat in the epigastrium, and there is some tenderness on pressure over the region of the stomach and duodenum. His tongue is foul, his bowels costive, his urine loaded, he has considerable prostration of strength, complains of vertigo and lowness of spirits, and is constantly sighing. There is always more or less febrile disturbance: in some cases the fever is ephemeral, and goes off in a day or two, in others it continues for a much longer period. When this fever continues beyond the second or third day, it is to be looked upon as an unfavourable sign, and you may expect that the case will be unmanageable and dangerous. There is another remarkable symptom on which I have had reason generally to found an unfavourable prognosis, *and this is a variation in the intensity of the yellowness.* In some cases you will find that to-day the countenance and skin are much less yellow, and this is always noticed by the patient, whose spirits are generally raised by the decline of the jaundiced tint, but in a day or two it becomes as deep as ever, and it may go on in this way, alternating from a faint to a deep tinge, and vice versâ. This is an unfavourable symptom: it appears to indicate the repetition of inflammatory action in the intestinal tube, because each increase in the depth of the yellow tinge is accompanied by an increase of the epigastric symptoms. In such cases as this, the patient does not, as under other circumstances, shake off the disease and return to his usual habits; he lies in bed, and though he complains of no pain except when you make firm pressure on the epigastrium, still he is not at all improving; he tells you he is better, but he is still languid, and his appetite does not return. The stools are generally clay-coloured, but this is not a necessary consequence of jaundice, they are sometimes yellow, and I have seen them of a perfectly healthy appearance. The pulse, in most cases where the fever is ephemeral, returns in a few days to its natural standard; in some instances it is remarkably slow, and this state of pulse is to be regarded as an unfavourable symptom. Sometimes there is a slight degree of subsultus tendinum and delirium, and I must observe that you are never to forget that the early supervention of nervous symptoms in any form of this disease is always to be looked upon with suspicion. One of the most alarming complications, however, of this gastro-duodenal jaundice is the occurrence of coma during its progress, a symptom to which the attention of the profession was first strongly directed by Dr. Marsh. He has given several cases of jaundice characterised by this symptom, the ma-

jority of which resisted all the ordinary resources of medicine, and terminated fatally. I must confess, too, that I have never seen a case in which the coma was distinctly established terminate favourably. You should, therefore, when called to treat a case of jaundice, be always on the alert, and never allow any bad symptom like this to steal upon you, and it is gratifying to think that if you take this symptom in time you will, in all probability, be able to overcome it.

An extremely interesting paper on this coma occurring in jaundice will appear in the forthcoming number of the Dublin Medical and Chemical Journal, from the pen of Dr. Griffin of Limerick. He gives the details of some extraordinary cases, which you will find well worthy of an attentive perusal. Out of four cases *in one family*, which he attended, two died, who had become comatose at an early period; in the other two the affection of the brain was relieved by bleeding and other active measures. From this it would appear, that the mere supervention of coma is not necessarily followed by death, but that it is an exceedingly dangerous symptom when it comes on at an early period of the disease. It is very difficult to give a satisfactory explanation of this. Some persons think that it is attributable to the action of the bile on the blood which is circulating in the brain. This explanation would answer very well if coma was a symptom of constant occurrence; this, however, is not the case, and we must seek for some better reason. It is stated by some, that coma may be one of the consequences of the close sympathy which exists between the brain and liver. Dr. Griffin draws an analogy between the effects of suppression of bile in jaundice and suppression of urine in diseases of the kidneys, and thinks that the affection of the brain is of common occurrence in one as well as in the other. This analogy, however, is incomplete, for we have no case of complete suppression of urine without fever and other violent symptoms, but we have many cases of complete suppression of bile with very slight and almost inappreciable disturbance of the economy. It is very difficult, in the present state of medical science, to explain the coma of jaundice; all we know is, that it sometimes occurs, that it is a bad symptom, and must be met with great activity. I may mention one fact which seems to be strongly opposed to the analogy of Dr. Griffin. It will be proper to observe here, that Dr. Griffin does not advance this as an opinion, or advocate it as a theory; he merely offers it as a hint or suggestion, leaving it to others to decide the question. We are not, therefore, in examining this analogy, reasoning against any opinion of his. But with respect to this matter, the fact to which I allude is this—one of the worst cases of coma I ever witnessed occurred in a patient who had no suppression or retention of bile: the bile flowed freely into the intestines, the dejections were distinctly tinged with it, and yet this man had deep jaundice and intense coma. We are still in want of a number of facts on this point; it is a subject which affords a large field for interesting enquiry, and Dr. Griffin deserves great credit for the philosophical and impartial manner in which he has brought his cases before the medical public.

When a patient dies of jaundice accompanied by this comatose affection, you are naturally anxious to ascertain the cause of death. Now what you will generally find is this: on opening the head you examine the brain accurately, but cannot detect any lesion of its substance or membranes; you then go to the stomach and discover there marks of vascularity; you open the duodenum and find it in a state of intense inflammation. I have seen many cases of this disease, in which the mucous membrane of the duodenum was highly engorged and almost black. It is said that this inflammation extends from the duodenum along the common biliary duct to the liver. I am not possessed of facts to confirm this assertion, but I have little doubt that, in the majority of cases, the jaundice is more the result of a mere lesion of innervation of the liver, than proceeding from any spread of inflammation along the ducts into its substance. Unless we can demonstrate this inflammation, it is idle to assume its occurrence. When you examine the liver, gall-bladder, and biliary ducts, you generally find them in the normal state. In a few cases the ducts have been found impervious from adhesive mucus: you will see in John Hunter's works a case of this kind, which occurred in a consumptive patient. You will find a great number of important facts, relating to the pathology of jaundice, in the commentaries upon his own pathological propositions by M. Broussais. I would also advise you to peruse Dr. Marsh's excellent paper in the Dublin Hospital Reports.

We come now to the diagnosis of jaundice depending upon gastro-duodenal inflammation. In the first place, we learn from the history of the case that the exciting cause has been some excitant of inflammation in the mucous surface, the injestion of indigestible aliment, or taking cold water into the stomach while the body has been overheated. The next thing is the supervention of fever with gastric symptoms, and these being followed in two or three days by an attack of jaundice, *without any of the ordinary signs of hepatitis*. Here we have a disease excited by taking cold water while the body is heated, or by indigestible food, preceded by febrile disturbance with gastric symptoms, and unaccompanied by the symptoms or signs of hepatitis. When this combination of circumstances occurs, you make your diagnosis with great certainty, and set it down as jaundice depending on inflammation of the stomach and duodenum, and treat it accordingly. There are but two forms of jaundice accompanied by symptomatic fever,

the one under consideration, and that which is the consequence of hepatic inflammation, or other disease. It might be supposed that the tenderness of the epigastrium was caused by an affection of the liver, but by making an accurate examination you will be generally able to discriminate with certainty. You will find that the pain is less than that of acute hepatitis, that strong pressure gives pain, not in the region of the liver, but in that of the duodenum; you can ascertain by a manual examination and by the pleximeter, that there is no enlargement of the liver, that there is no remarkable dulness on percussion at the lower part of the chest on the right side, and when the fever is ephemeral, this will furnish you with much valuable assistance towards forming a correct diagnosis.

With respect to the treatment of this form of jaundice, in mild cases, where there is little or no fever (for fever is to be taken as a test of the severity of the disease), the patient very often gets well without any treatment, and the jaundice, after lasting a few days or weeks, goes off spontaneously. In all such cases a regulation of diet, keeping the bowels open by mild laxatives, and prohibiting wine, spirits, and other stimulants, will be found in general sufficient to remove all the symptoms. I wish, however, to impress upon you that it is of *the utmost importance to cut short this disease as soon as possible.* There is no use in letting it get ahead of you; and in every case where the symptoms are in any degree acute, and there is a degree of fulness and tenderness over the epigastrium, you will be culpable if you omit to apply leeches over the stomach and duodenum, and prescribe iced water, and every other means calculated to remove inflammation. If you allow it to go on to a certain length, if you allow fever to progress and coma to supervene, you will not be able to manage the case so easily. Never then omit the application of leeches the moment you have ascertained the existence of decided inflammation. Keep your patient's bowels open by enemata or by mild saline laxatives, regulate his diet carefully, prohibit all stimulants, and he will generally do well.

Many persons are in the habit of prescribing mercury in this disease. From my own experience I cannot say whether this is right or wrong; but I can state that I have seen a great many cases get well without it. But in cases where the symptoms are obstinate, and the stools continue white, I think you would be justified in giving mercury, even as far as to produce salivation. I must remark to you, however, that I have seen two cases in which it was found impossible to produce the free action of mercury in patients labouring under this disease. The exhibition of small doses of cream of tartar two or three times a day made into an electuary with some mild confection, I have found to be an excellent remedy in the treatment of this affection. In my lecture on dysentery, I mentioned some facts which go to prove that this remedy seems to have great power in bringing down bilious discharges. In this form of jaundice I found cream of tartar extremely useful, and its exhibition is unattended with danger.

Now suppose you should meet with a case in which coma appears as an early symptom, what should your line of treatment be? Here you have to deal with a very threatening symptom, which, if neglected for any time, will, in all probability, bring on a fatal termination. You should therefore, on its first appearance, meet it with a corresponding activity; you should immediately have the head shaved, apply leeches behind the ears, blister the nape of the neck, and act smartly on the bowels by laxatives. It was by such treatment as this that Dr. Griffin saved his patients.

I wish here to make some observations on a very remarkable form of gastro-duodenitis, which was almost epidemic in this country some years ago, at least it occurred during the existence of an epidemic fever, and we had at that time a great many cases of it in hospital. It is a curious fact that the majority of these seemed to bear a distinct resemblance to the yellow fever of warm climates. This will appear somewhat extraordinary; but, when you have heard a statement of the facts, you will be inclined to think that these cases were nothing more or less than so many instances of the malignant yellow fever of the tropics. I shall read for you an account of the symptoms, as they were observed in numerous cases under the care of my colleague, Dr. Graves, and myself, in the Meath Hospital.

In the great majority of cases this disease was preceded by fever, in fact all the patients who exhibited this form of jaundice had been admitted as fever patients. After a longer or shorter period, without any premonitory indications, symptoms of intense irritation of the digestive tube set in, and advanced with a fatal rapidity. Most of the patients vomited frequently; there was great tenderness of the epigastrium and over the region of the small intestine; the tongue became black and parched; there was a violent pain in the belly, and a spasmodic affection of the abdominal muscles, which felt hard and knotted, and to which the nurses gave the name of *twisting of the guts*, a name which singularly agreed with the numerous intussusceptions found along the course of the small intestine after death. This state of suffering continued from one to four hours, and then the body became all over suddenly jaundiced. Then came another train of symptoms. With intense and universal jaundice the patients exhibited also extreme restlessness, tossing their arms about, and regarding their attendants with a look at once expressive of nervous suffering and despair. Some raved, had trembling and convulsive fits, and were totally unconscious of every thing passing around them; others preserved their intellect to the

last, but they had depicted in their countenances an agony and a despair which I shall never forget. General spasms were frequently observed; and many, on attempting to swallow, had spasms like those of hydrophobia. There was great irritability of the stomach; many vomited frequently, and in some cases the matter ejected bore an exact resemblance to coffee grounds. The pulse became low and fluttering, the extremities cold, the face pale and shrunken, and in some the nose assumed a purple colour, giving to the patient a truly horrible appearance. This change in the colour of the nose was preceded by extreme paleness; the part, at first, appeared as if it had been frost-bitten. Broad patches of a wax-like whiteness, elevated a little above the level of the skin, and somewhat resembling urticaria, having the same temperature as the rest of the body, were found on the following day to assume a reddish colour; and on the third day the redness was converted into dark purple. The toes were affected in a similar way; and in some of these cases the parts so affected sloughed and were thrown off. There is at present in this city a woman who lost the ala of the nose and one of the toes in this manner.

The phenomena observed on dissection were equally remarkable. Though the tenderness of the epigastrium was very great there was no trace of peritoneal inflammation; *neither was there in any case inflammation of the liver, and the gall ducts were found to be pervious in every instance.* The mucous surface of the stomach and duodenum and ileum were found in every case to present intense marks of inflammation, there were numerous intussusceptions along the course of the ileum, and the spleen was found to be large, soft, and pultaceous. There was no evidence of inflammation of the brain, but in the ventricles and at the base of the brain there was in some cases an effusion of yellowish fluid, and the membranes had a faint tinge of yellowness. In one case I found a remarkably dry state of the arachnoid. In one severe case there was a good deal of a substance resembling coffee grounds in the stomach, and the mucous membrane was soft and disorganised.

All the phenomena of this disease, the gastro-intestinal inflammation, the yellowness of skin, the enlargement and softening of the spleen, the rapid fatality and excessive prostration, seem to point out a strong analogy between it and the yellow fever of warm climates. In the writings of Rush and Lawrence you will find, that their description of the phenomena observed on dissection, would in a great degree answer for those of the cases which I have detailed. I may mention here, too, that in our cases the mortality was severe. We lost the first sixteen cases; and it was not until we fully ascertained the nature of the disease by dissection, that we began to save these patients. Then by free depletions, copious applications of leeches to the abdomen, and the bold use of calomel and opium, we succeeded in a great number of cases. In some cases death took place in four, in others in six hours, in a few it was more prolonged. There is no epidemic on record in this city in which the same symptoms and the same rapid fatality were observed.

With respect to the analogy between this disease and yellow fever, it appears that in the latter affection the yellow colour depends upon the presence of bile in the blood. This is one point. Again, from the most accurate descriptions which have been given of the morbid appearances of yellow fever, it appears that in the majority of cases the liver has been found healthy; here is another point. In yellow fever also, inflammation of the stomach, duodenum, and intestines, is a matter of almost universal occurrence, as you will find by examining the works on yellow fever. In our cases we had all these circumstances; we had extreme tenderness of the epigastrium, and inflammation of the stomach, duodenum, and intestines; and in one severe case we had black vomit. All these circumstances, combined with the fatality, seem to prove that the cases which were under treatment in the Meath Hospital during the epidemic of 1826-27, bore a very striking resemblance to that species of fever which is supposed to exist only in warm climates. It is probable that if yellow fever should appear in temperate countries it would exhibit itself in the form of gastric fever, with some cases only of yellowness. Indeed it seems to be now very generally admitted that yellow fever has nothing peculiar in it, that it is the maximum of bilious or gastric fevers. We find that in proportion as we approach the warm latitudes, the digestive mucous membrane appears to take on a greater susceptibility of disease. Between the tropics it would seem as if morbid actions were chiefly thrown upon the viscera of the abdomen. Europeans who have resided there for any length of time acquire a yellow tinge, and many of them suffer from intestinal and hepatic inflammations. If we go northward we find the case to be the reverse; as we approach the colder latitudes we find the mucous membrane of the digestive tube acquires a greater degree of tone and vigour, that it is less susceptible of disease, and can bear much greater stimulation. The inhabitants of warm climates use a large proportion of vegetable food, they seldom indulge in the use of animal food or spirits. The Hindoo lives on rice, the Arab on dates and milk. But if we go northerly, we find the natives habitually using stimulating food and drink with impunity; indeed, it is wonderful to think what vast quantities of flesh, animal oil, and other stimulants the stomach of an Esquimaux or a Kamskatkan will bear without injury. There is no doubt that warm climates predispose to inflammatory affections of the digestive apparatus, and this seems to connect yellow fever with the ordinary form of gastro-

duodenitis accompanied with jaundice, or, in other words, a little more extent, a greater degree of intensity, and we may have the jaundice of this country converted into yellow fever. And it is fair to conclude that the *typhus icterodes* of temperate countries owes its danger not to the mere circumstance of jaundice existing, but to the greater degree of secondary gastro-enteritis which has produced that jaundice.

I shall now draw your attention to some other forms of jaundice. One of the most important of these is that which arises from the obstruction of the biliary ducts by calculi. It would be foreign to my purpose to enter into any discussion with respect to the formation of gall stones in a course of lectures like this; I shall therefore refer you for information as to their history and composition to the various treatises on animal chemistry. What we have to consider at present are the symptoms of the disease, the habit of body in which it is found to occur, and its mode of treatment. You see on the table numerous preparations of the various forms of this disease.

Gall stones are more commonly observed after the age of forty or fifty than before these periods; they are very frequently met with in persons of sedentary habits, and hence women are more subject to them than men. They are also liable to occur in persons who eat highly-seasoned indigestible meats, and take little or no exercise. It is stated that in England five sixths of the cases of gall stones occur in females. I do not know whether this proportion be exact, but the fact is established that they are more common in females than men. Biliary calculi may be found in three different situations, either in the substance of the liver, or plugging up the biliary ducts, or filling the gall-bladder. Here is a preparation, exhibiting the gall-bladder almost obliterated by the pressure of a number of those calculi within its cavity. Here is another specimen. You see the gall-bladder is contracted, and nearly filled up with biliary calculi; it also appears to be atrophied and reduced in size. Here is a remarkable specimen: you observe the gall-bladder, which is rather large, is completely filled with a vast calculus; its coats are also thickened, probably the result of inflammation. Here is another preparation of the gall-bladder, containing two moderately sized calculi.

Gall stones when lodged in the substance of the liver, or in the gall-bladder, may remain for a long time and accumulate prodigiously without producing jaundice. This has been frequently proved by the fact, that on opening the bodies of persons who have not had during life the slightest symptom of jaundice, the gall-bladder has been found completely filled up with these productions. But when any cause determines the passage of one of these bodies into the ducts, and that it is too large to pass freely, then the symptoms of icterus begin to make their appearance. We do not know what it is that produces the attempt to discharge small biliary calculi through the ducts, but it is during this process that the dreadful symptoms of what has been by some called *hepatic colic*, are observed, and, supervening on these, the rapid occurrence of jaundice. Under such circumstances a train of phenomena presents itself, very different from that which characterises the jaundice depending on inflammation of the stomach and duodenum. The patient is suddenly attacked with violent pain in the epigastrium and right hypochondrium. The stomach sympathises, and we have nausea, cardialgia, and vomiting; the patient's sufferings are dreadful, and he refers his pain to the region of the gall-bladder. The abdominal muscles are thrown into spasmodic contractions, there are often convulsions and fainting fits, the extremities are cold, the body is bathed in perspiration, and the pulse is often hard and contracted, but seldom accelerated. This is a very remarkable symptom. Heberden says, that the pulse not being in quickness above the standard of health, with a sudden attack of pain in the region of the epigastrium, are diagnostics of this affection. "I have seen," says he, "a patient in this disease rolling on the floor in a state of violent agony, which I could not allay with nine grains of opium, and yet the pulse was as tranquil as if he was in a calm sleep." I can confirm the truth of this observation from my own experience. Here are the diagnostics: the pain is more intense than that which attends any form of inflammation, and yet the pulse is perfectly quiet; it occurs in persons not generally subject to spasmodic attacks; it is not preceded by constitutional symptoms; and is rapidly followed by jaundice, and absence of bile in the stools. Under these circumstances you may make a certain diagnosis.

Sometimes a tumour is formed in the right hypochondrium, which rises above the edge of the liver and gives a feeling of distinct fluctuation, marking the situation of the distended gall-bladder. In such cases as these the calculus is in the common duct, and the bile descends into the gall-bladder, from which it cannot escape, thus causing distention of that organ. This may go on until the distention becomes so great as to increase the size of the gall-bladder to such a degree, that, in some cases, it has been known to contain a pint of fluid; and cases have occurred in which it has burst and effused its contents into the peritoneum, causing violent peritonitis and death. This termination, however, is fortunately of very rare occurrence. I believe that some of the cases in which rupture occurred were those in which an emetic was given; and hence it is that many practitioners are afraid to give an emetic where this state of the gall-bladder has been ascertained or is strongly suspected.

Gentlemen, I shall continue this subject at our next meeting.

PLAN OF A UNIVERSAL ASSOCIATION OF APOTHECARIES IN THE UNITED KINGDOM OF GREAT BRITAIN.

BY ALEX. THOMSON, M.B. OF ST. JOHN'S, CAMB.

"Eheu! Inter dicendum fugerit Invida ætus!"

Objects proposed to be accomplished by the adoption of the following Plan :—

To melt all those, having chemists' shops, without being members of an Apothecaries' Company, and all those members of the Apothecaries' Companies of the United Kingdom, either not practising medicine, or willing to abandon that practice for becoming members of the Society, into an harmonious whole, distinct from medical men and from druggists.

To reserve to the members of this Association the name of Apothecaries, and to the Company in general that of Apothecaries' Company of Great Britain.

To do away with the system of centralising chemical and pharmaceutical knowledge.

To furnish a stimulus to the members of this Association to keep up their knowledge, if not for their own mental satisfaction for sustaining contact with their fellows in examining.

To put an end to the public lies introduced into the various systems of government, and regulations, and practice of the apothecaries.

To deprive apothecaries of the power of prescribing medicines directly or indirectly.

To elevate practical chemistry and pharmacy to an independent profession, equal to, and on a level with, medicine.

To increase the dignity of the apothecaries by confiding to them half the responsibility of the National Pharmacopœia, and by preventing them from selling drugs, perfumery, tea, sugar, or chandlery; and, in fact, to confine their privileges to making up prescriptions, preparing the materials necessary for so doing, and analysing all suspicious substances for legal medicine.

To place the compounding of medicines, one of the most important parts of the healing art, under the direction of responsible and properly educated persons, and thus secure the public against the numerous errors committed by the carelessness of masters and the ignorance and indifference of apprentices.

To get rid of the unprofitable institution of apprentices, by which the public is ill served, life often endangered, the time of youth wasted, and the expectations of parents for the progress of their children perpetually blasted.

To replace apprentices by a properly licensed body of paid assistants.

To put an end to the sale of patent medicines and nostrums.

To prevent the sale of any medicine whatever without the regularly signed order of a medical man, and thus preclude the possibility of the serious consequences so constantly arising to the public health, from the pernicious habit of self-quacking.

To secure, by severe laws for the neglect of it, the prosecution of all irregularities in this important part of the healing art, and of every species of pharmaceutical quackery.

To oblige the members, by properly directed visits to their shops, laboratories, and premises, to have in them all the preparations of the National Pharmacopœia and its Supplements, and those of a good quality.

To guard as much as possible against accidents from poisoning, by strict laws regarding their sale, and severe punishments for the infringement of those laws.

To procure, for legal purposes, accurate analyses of every substance suspected to contain poisonous matter, and thus to prevent the public health being undermined, and, at the same time, defend individuals from false suspicion of poisoning.

To provide for the greatest possible advance in pharmacy, by constituting it the duty of one part of the body to analyse all newly proposed remedies the moment they are made known.

To enhance the esteem of the arts of pharmacy and chemistry, by enforcing not only a good, without vexatious, system of preliminary education, but true and efficacious knowledge of all the collateral sciences, without which chemistry and pharmacy cannot be scientifically followed up.

To assure the country that those passed possess substantially the elements of their profession.

To abolish the false system of certificates.

To destroy the monopoly of lectureships.

To prevent examiners, unfit for the office, being elected or retained.

To protect the pupil from unfair questions, or captious treatment in the examination.

To secure by a fine for rejection, that no man shall present himself without a proper quantity of knowledge.

To stigmatise dishonourable and recreant conduct in the members.

To create a fund for the wants of the Society.

A.—*The Society to consist of*

1. All members of the Worshipful Company of Apothecaries of London, either not practising medicine, or willing to abandon that privilege, in order to remain members of this Society.

2. All members of the Dublin Apothecaries' Company.

3. All doctors of medicine of any of the Universities of Great Britain, and all surgeons willing to abandon their right of practising medicine or surgery, for the purpose of becoming members of this Association.

4. All persons of whatever nation, and however and wherever educated, who may pass successfully through the examinations required.

5. Persons arranged into three classes; assistants, members, and examiners.

6. Persons commencing with the museums,

libraries, property, and buildings of the Worshipful Company of Apothecaries of London, and of the Apothecaries' Company of Dublin, become common property of the Association, as a fund.

I must here remark, that, in my first series of propositions regarding medical men, in the 83rd No., vol. iv., of the London Medical and Surgical Journal, the property of the Apothecaries' Company of London is proposed to be allotted to the medical men, or doctors, and hence the article 6 of section A of those propositions must now be read:

6. The museums, libraries, property, and buildings of the medical part of all these bodies, save of the Worshipful Company of Apothecaries of London, to become common property.

7. Forty-one examiners, under 60 years of age, to be elected by a simple majority of all the members in each of the three countries,—England, Ireland, and Scotland, in order to commence the operations of the Society.

8. Eleven examiners to be chosen by simple majority of the examiners in the metropolis of each of the three countries, as the first annual councils.

The council to choose such known professors, or lecturers, as they may deem necessary to aid the examiners, until the Society have members sufficiently capable of examining in all the subjects, and to pay them for their labours out of the funds of the Society.

9. A president to be chosen by simple majority of each council for each of the countries for the first year.

B.—*Assistants,*

1. Chosen by the majority out of five examiners.
2. Equal in all their rights and privileges.
3. Cease to be so, even when chosen, on the examination being found to be unfair.
4. Eligible two years after they have served as assistants during two years, though they have not yet passed their twentieth year, to the rank of members.
5. Yield in all questions of conduct to a simple majority of the council of the country.
6. Must be paid for their services.
7. Pay to the general fund an annual subscription of five shillings.
8. Expelled *ipso facto*, upon conviction before any public tribunal of perjury, or of any other crime, or of selling any medicines without the order of a medical man, regularly signed and dated.
9. Alone permitted, in the absence of the principal, to make up the prescriptions and take care of his business.
10. Prevented making any preparations formed from poisonous substances, or themselves poisonous, without the superintendence of the principal, under pain of expulsion from the Society.
11. Required to observe the same regulations as the masters, with regard to the making up, sending out, copying, and preserving of prescriptions, under pain, for the first fault, of losing their title of assistant for the space of six months, for the second fault for the space of one year, for the third of being expelled from the Society.
12. Prevented, under pain of expulsion, quitting the premises of their employer during his absence.

C.—*Assistantship, Candidates for,*

1. Upwards of sixteen years of age.
2. Furnish no testimonials of study or acquirement.
3. Give notice to some one examiner, whether of their own country or not, of their intention to submit themselves for examination one month previously to the day on which they wish to be examined.
4. Deposit in the hands of the examiner, to whom they apply, previously to drawing out from the urn the names of the other four examiners, the sum of ten pounds.
5. Receive from the examiner a receipt for the money deposited.
6. Draw from an urn, into which the examiner has placed the names of all the examiners in the county in which he, the examiner, resides, the names of four examiners to complete the examining committee.
7. Retouch one-half of the sum deposited, in the event only of their successfully passing their examination.
8. Forfeit the sum deposited if they do not present themselves on the appointed day for examination.
9. Obliged to answer no questions except on the established points of those parts of the sciences and arts required in the next regulation.
10. Examined in—

Latin—Celsus, two first books.
Greek—Herodotus, two first books.
English—Grammar.
Logic—Whateley's.
Geometry—First four books of Euclid.
Algebra—First part of, with arithmetic.
Philosophy—Locke on the Human Understanding.
Botany—Elements of physiological and descriptive.
Mineralogy—Elements of.
Crystallography—First elements of.
Chemistry—Elements of.
Zoology—Elements of.
Pharmacy—Elements of.
Pharmacopœia—A perfect knowledge of the National Pharmacopœia and its Supplements.

Some one system of the elements of these sciences selected by the London Council.

11. Prohibited from occupying any situation as apothecary to public institutions, as dispensaries, hospitals, workhouses, and other public charities.

D.—*Members,*

1. Chosen by the majority out of five examiners.
2. Equal in all their rights and privileges.
3. Decide all questions of government by secret ballot.
4. Yield to the decisions in all cases of a simple majority.
5. Cease to be members, even when chosen, on the examination being found to be unfair.
6. Eligible to the office of examiners after twenty-five years of age.
7. Expelled, *ipso facto*, upon conviction before any public tribunal of perjury, or of any other crime.
8. Pay to the general fund an annual subscription of ten shillings.
9. Prohibited practising medicine directly or indirectly.
10. Make no agreements with medical men for the interchange of patients and customers, under pain of expulsion.
11. Confine themselves to preparing the preparations necessary for the study of chemistry, and for the prescriptions of medical men, to making up these prescriptions, and to the sale of the articles mentioned in No. 12.
12. Permitted to have in their shops, and to sell, all substances and apparatus necessary for the study of mineralogy, geology, natural history, crystallography, and pharmacy, to any one who may produce an order from a medical man, or a ticket bearing his own name, and showing that he has entered to some known lecturer, save in the cases of poisonous substances, which must be subject to the general law upon these substances.
13. Required, under a five pound penalty for each omission, to have in their shops all the substances, simple and compound, of which an indication or description is to be found in the National Pharmacopœia and its Supplements.
14. Have but one shop and set of attached premises for their art, so that, under pain of forfeiture of the contents of any others, their warehouse, and shop, and laboratories must all be on the same premises.
15. Permitted, besides keeping an open shop, exclusively to fill the places of apothecary to all public institutions, as dispensaries, hospitals, poor-houses, and other charitable institutions.
16. Employ as assistants none but persons received under the conditions specified in the law, and paid for their services.
17. Take no apprentices, under pain of expulsion.
18. Inform the council, under a fine of fifty pounds for neglect, of all infringements of the laws made by their assistants.
19. Absent themselves on no occasion, under a fine of ten pounds, from their premises, without leaving them in charge of a member of the society, or of a licensed assistant.
20. Entrust the functions of their business to no one but a member of the society or a licensed assistant, under pain of expulsion.
21. Open their door at all hours, and under all circumstances, under a fine of five pounds for each refusal, for the making up of prescriptions.
22. Have in their possession, and produce, whenever called upon by a medical man to do so, under a penalty of ten pounds for each refusal, a copy of the last edition of the National Pharmacopœia, and all its Supplements.
23. Submit, under pain of expulsion, to their shops, prescription books, or files, laboratories, and warehouses being examined, as often and whenever, and at whatever hour, by a committee of any five examiners appointed by the council, and bearing with it a written order to that effect, signed by the president.
24. Make use of the weights and measures alone chosen by the council, and indicated in the pharmacopœias, under pain of expulsion.
25. Retain and file, or paste into a book kept for that purpose, all prescriptions they shall have made up, and display them whenever called upon by the coroner, by the medical man signing them, or by the visiting committee of examiners, furnished with a written order from the council, and signed by the president, under pain of expulsion.
26. Return, under a fine of five pounds for every omission, an exact copy of every prescription sent to them for preparation.
27. Make up no prescription whatever which is not signed by the name and christian name of a medical man, and dated; and in which the names of the articles are, not with the directions, written in full, in Latin or in English, and the weights or quantities indicated by the symbols prescribed in the National Pharmacopœia or its Supplements.
28. Sell no poisonous substance, whatever may be the excuse of the demander, without an order, written, signed, and dated in full, by a medical man, under pain of expulsion.
29. Accompany, under pain of expulsion, with a clearly written indication of the necessity of caution, in following strictly the directions prescribed by the medical man, for fear of the consequences, every composition containing a poisonous substance.
30. Put up all articles having different directions, when more than one is sent for the same patient, in papers, boxes, or bottles of a different colour for each of the articles.
31. Write the labels invariably on paper of the same colour, or of a shade of the same colour as that of the paper, box, or bottle containing the articles, and have every label furnished with the written or printed name of the proprietor of the shop from which it is sent.

E.—*Candidates for Membership.*

1. Aged upwards of twenty years.
2. Furnish no testimonials of study or acquirements.
3. Give notice to some one examiner, whether of their own county or not, of their intention to submit themselves to examination one month previously to the day on which they wish to be examined.
4. Deposit in the hands of the examiner, to whom they apply previously to drawing out from the urn the names of the other four examiners, the sum of forty pounds if they have not been received assistants, and in that case of thirty pounds.
5. Receive from the examiner a receipt for the same.
6. Draw from an urn, into which the examiner applied to has placed the names of all the examiners in the county in which he, the examiner, resides, the names of four examiners to complete the examining committee.
7. Retouch one-half of the sum deposited in the event only of their successfully passing their examination.
8. Forfeit the sum deposited if they do not present themselves on the appointed day for examination.
9. Obliged to answer no questions except upon the established points of the sciences and arts, indicated in the next regulation.
10. Examined in—

Latin—Cicero de Oratore et Celsus.
Greek—Herodotus and Dioscorides.
French—Elements of.
English Composition—On a chemical or pharmaceutical subject, drawn from an urn, into which each of the five examiners has deposited one in a sealed envelope, by the candidate himself.
Logic—Whateley's.
Philosophy—Locke on the Human Understanding.
Natural Philosophy—Elements of.
Geometry—First six books of Euclid.
Algebra—First parts of.
Arithmetic—Generally.
Trigonometry—Plain.
Chrystallography—Elements of, as Brooke's
Mineralogy—Elements of, and those substances employed in chemistry.
Botany—Elements of physiological, descriptive, and medical.
Chemistry—Analytical and synthetical generally.
Pharmacy—In its most extended sense.
Pharmacopœia—The National, and its Supplements. Knowledge of all the substances, simple and compound, with their natural history and properties, simple and relative.
Legal Medicine, with Toxicology—Those parts which refer to the composition and sale of medicines, and the tests and analysis of matters suspected to contain poisonous substances.

F.—*Examiners.*

1. Unlimited in number.
2. Chosen from members by the majority out of five examiners.
3. Have no privilege over the members, save that of being eligible for the council, that of being employed in the analysis of matters suspected to be poisonous, and that of belonging to the visiting committee.
4. Cease their functions after 60 years of age.
5. Degraded to members upon being convicted by any one of the councils of refusing, except in case of illness, to examine, or to analyse for legal purposes, or to visit, and of partial or unfair conduct in the examinations.
6. Paid for their journeys, analysis for legal purposes, visits, and loss of time, by the body in general.
7. Meet for examination in an apartment open to all the members of the profession.
8. Assemble for examination in the chief town of the county to which they belong.
9. Are special or general; special for one or more sciences, general for the whole of them.
10. Examine whenever called upon, three weeks' previous notice having been given them.
11. Five in number for each examination.
12. Three of the five for the examining committee always general examiners.
13. Place the names, whenever applied to individually, for examination, of all the examiners in the county in which they reside, each in a sealed packet, into an urn, and allow the candidate to draw out four to complete the examining committee.
14. Susceptible of being refused, to the number of three, after the first drawing by the candidate.
15. When refused by the candidate, replaced by a second drawing by himself from the same urn, the names of the refused examiners having been replaced in the urn.
16. Advertise the four examiners so chosen of the time, place, and object of their re-union.
17. Refuse examination in the county, if there be not a sufficient number of examiners to constitute a committee.
18. Choose in the committee for examination, one of their number for a presiding examiner to direct the examinations, and defend the person examined from vexatious and unfair treatment.
19. Observe the same rules, except with regard to the amount of the deposits, and the subjects of the examinations with the candidates for the assistantship, the membership, and the examinership.
20. Demand from all candidates, previously to their drawing, the complements of the examining committee from the urn, a deposit of 10*l.* for the assistantship, of 40*l.* for the membership, and of 20*l.* pounds for the examiner-

ship, and in the event of their success, return to them immediately one half of the amount.

21. Put questions to the candidates for the assistantship, only on the facts of the elementary parts of the sciences and arts indicated; for the membership, only on the facts of the elementary branches when indicated, and on those of the sciences or arts generally, when required in the regulation; for the examinership, on every department of the various sciences and arts required from the member, or on any other subjects connected with the profession for a general examinership; and the same on the special science, or sciences, for a special examinership.

22. Conduct the examinations on Latin, Greek, French, English composition, both *viva voce*, and by a series of written questions, to be answered in writing; the examinations in logic, philosophy, natural philosophy, geometry, algebra, arithmetic, and trigonometry, by written questions, to be answered in writing only; and all the remainder of the examinations *viva voce*.

23. Conduct the examinations on crystallography and mineralogy by questions on parts of the subjects required for each examination, and upon specimens submitted to the observation of those examined.

24. Conduct the examinations on botany by questions on the elements of physiological, descriptive, and medical botany, and by causing the candidate to recognise at sight, or by examination with the aid of a general system, the plants of the National Pharmacopœia and its Supplements.

25. Conduct the examinations on chemistry, pharmacy, and the pharmacopœia by questions on the principles and practice of these subjects, and by requiring such compositions or decompositions of substances, chiefly connected with the pharmacopœia, and such manipulations, chemical and pharmaceutical, as may be judged necessary by the examiners, within the limits of the extent of knowledge required for each class of persons examined, the materials and instruments being furnished to those persons.

26. Conduct the examinations in legal medicine with the greatest care, requiring such analysis of artificial compositions containing poisons, as may be deemed necessary by them, and written details of these experiments, such as are requisite for the coroner, or a court of justice, and verbal answers to such questions and doubts as might arise from these descriptions.

27. Decide, by a simple majority, the acceptation or rejection of the candidate.

28. Return to the successful candidate half of the money deposited by him previously to his examination, immediately after its conclusion.

29. Transmit the funds received, with a written account of the result of the examination, to the metropolitan council of the country in which the examination takes place.

Examiners employed in the Visiting Committee.

30. Five in number for each visiting committee.

31. Selected for the visiting committee from the examiners of the county in which they are to visit, and in the event of there not being enough in the county, from those of the largest adjacent county.

32. Remain visitors during one year.

33. Elected as visitors on the 1st of January of each year by the president for the year in council, immediately after his election, drawing out from an urn, into which the names of the examiners in each county have been placed in sealed packets, the names of five.

34. Meet for visiting at the places and times appointed by the metropolitan councils, under pain of forfeiture of their titles of examiners.

35. Give no notice of the time or hour of their visits.

36. Visit at no fixed hours.

37. Choose previously to each visit, by simple majority, one of themselves to preside, direct the order of the proceedings, and draw up and transmit the report.

38. In visiting, present an order of the metropolitan council, signed by the president thereof, as the evidence of their authority.

39. Decide, when visiting, all questions of doubt by a simple majority.

40. Take reports of their visits, and transmit them forthwith to the metropolitan council.

41. Sign individually the report of each visit before its being sent to the metropolitan council.

42. Examine at the visit the shop, warehouse, laboratory, and premises, connected with the business of the person visited, so as to ascertain the existence therein of all the simple and compound substances contained in the National Pharmacopœia and its Supplements, of the National Pharmacopœia itself, with its Supplements, and of the weights and measures required; the accuracy of the arrangement of the prescription book or file, and the purity and goodness of the preparations, and the fulfilment of all the regulations relating to the premises of an apothecary.

Examiners employed in the Chemico-Legal Committees.

43. Five in number for each chemico-legal committee.

44. Elected upon the chemico-legal committee by the coroner's placing in the presence of the jury into an urn all the names of the examiners in the county in which the accident happens, in sealed packets, and drawing out five to form the committee.

45. Wait upon the coroner, whenever furnished with a summons signed by himself and a jury, under a penalty of 50*l.* for the first, and expulsion from the society for the second refusal.

46. Receive from the hands of the coroner

alone all matters to be analysed for judicial purposes.

47. Proceed, upon having received a substance or substances from the coroner for analysis, forthwith, and with the shortest possible delay, to the analysis, in presence of any one or more of the members or assistants who may desire to be present.

48. Choose, when called upon a chemico-legal committee, from among themselves, by simple majority, a president to detail and draw up three similar written reports, to be signed by the whole of them, of the experiments and results of the analysis, one for the coroner, one for their own president, and one for the metropolitan council.

49. Present the report of the experiments and results of their analysis to the coroner, through the president.

50. Deposit the results or material proofs of their analysis, as far as possible, in the hands of their president, to be laid by him before the coroner, and subsequently, if required, before the necessary tribunal; and lastly, to be transmitted by him to the president of the metropolitan council, with a view to their being preserved in the museum of the Association.

51. Forfeit for ever the title and rank of examiners, upon a breach of any one of the laws for which the punishment is not already indicated.

G.—*Examinership, Candidates for,*

1. Have at least twenty-five years of age.

2. Give notice to some one examiner of their intention to submit themselves for examination, one month previously to the day on which they wish to be examined.

3. Produce to the examiner to whom the notification is made, their certificate of age and of membership.

4. Deposit in the hands of the examiner to whom they apply, the sum of 20*l.*, previously to drawing out from the urn the names of the four examiners, to form the complement of the examining committee.

5. Receive from the examiner the receipt for the money deposited.

6. Draw, after having made the deposit, from an urn, into which the examiner has placed the names of all the examiners in the county in which he, the examiner, resides, the names of four examiners, to complete the examining committee.

7. Retouch the half of the sum deposited in the event of their successfully passing their examinations.

8. Forfeit the sum deposited if they do not present themselves on the day appointed for examination.

9. Answer any questions, theoretical, practical, or positive, that may be put to them for the sciences in which they demand examination, if for specific examiners; in all the sciences and arts required from the candidates for the membership, if for general examiners.

H.—*Councillors.*

1. Eleven in number for the metropolitan towns of each of the three kingdoms.

2. Chosen by a simple majority of the examiners resident in the metropolis of each kingdom.

3. Elected by ballot and simple majority on the 1st of January for each year.

4. Announce the day of election of the new council, one month previously, in the public journals.

5. Choose, on the day of, and immediately after, their election, by simple majority, one of their own body as president for the year.

6. Present to the president, immediately after his election, an urn containing successively the names of the examiners of each county, in sealed packets, in order that the names of five may be drawn by him to constitute the visiting committee for the year for each county, and, in the event of there not being sufficient examiners in any county, an urn containing the names of the examiners of the largest adjacent county for the same purpose.

7. Appoint the time of meeting and of visiting of the visiting committees.

8. Forward to the examiners an announcement of their election to the visiting committees, signed, and orders signed by the whole of them, and countersigned by the president as the authority for the visits.

9. Are honorary officers, and consequently unpaid for their services.

10. Degraded, *ipso facto*, by a refusal or neglect to perform any of their functions to the rank of member.

11. Vote on all questions laid before them in council.

12. Meet once a month for the despatch of regular business.

13. Meet also for the purpose of deliberation whenever there is any difference of opinion on points of government.

14. Assemble in an apartment open to all the members of the profession.

15. Confer, in re-union of the three kingdoms, and by simple majority, with the government, on all subjects connected with the profession.

16. Change none of the principles of the Association without consulting and receiving the assent in writing of a simple majority of the members.

17. Of Dublin and Edinburgh subservient on all other matters, but those mentioned in No. 15, to those of London.

18. Annul the election of a member, or of an examiner, or of an assistant, or other officer, on proof being laid before them of the elections having been unfairly neglected.

19. Take cognisance of the conduct of the assistants and members, and inquire into all accusations against them connected with the laws of the society.

20. Analyse all new substances proposed as

remedies, when chosen by lot on an analysing committee.

21. Five in number for each analysing committee.

Councillors on the Analysing Committees

22. Chosen by the president drawing from an urn, into which the names of the eleven councillors of the country in which the discovery is first made known, placed in sealed envelopes, the names of five to constitute the committee.

23. Elect one of their number by simple majority as president of the committee, to take down notes of the experiments, and draw up a report on their results.

24. Present the reports of their labours to president of the council, through their president.

25. Preserve specimens of the substances analysed, and of the products of the analysis, in the museum of the body.

26. When chosen, proceed forthwith to the analysis with the least possible delay.

Councillors

27. Conduct, and are responsible for, the affairs of the society.

28. Determine the amount of fees to be paid to the examiners for the examinations, and to the visiters for the visits.

29. Frame and sustain to a level of the science, with the councillors of the medical body, a National Pharmacopœia for the United Kingdoms, in which their duty shall be the chemical and pharmaceutical parts of the subject, with a history of the combinations and decompositions.

30. Publish, in concert with the councils of the medical body, at the close of each year, such additions and corrections of the National Pharmacopœia, under the form of supplements, as shall be deemed necessary by the councillors of the two bodies, until a general vote of the members of both bodies shall call for a new Pharmacopœia.

31. Select the books, systems, and elements of languages, sciences, and arts, in each of the branches of study required, in which the examinations are to take place.

32. Take care of the museums and libraries, seeing that they are properly lighted, cleaned, and supplied.

33. Remove all obstacles to the studies of the members, and of young men studying the profession.

I.—*President of the Association*

1. An honorary officer.

2. Elected on the 1st of January every year.

3. Chosen from the council by a simple majority of its new members for each of the three kingdoms.

4. During the last year presides at the election of the new council and president, without voting on the last, and then vacates office.

5. Of London is the depositary of the funds finally, of each county temporarily.

6. Of each country disburses the funds under the approval of the council.

7. Of each country signs all obligations of the society.

8. Calls all meetings of the council.

9. Prosecutes, in the name of the society, all persons exercising the arts of chemistry and pharmacy without the license of the society, and all persons vending nostrums and patent medicines.

10. Decides all questions of order in the meetings of the council.

11. Is judged in all cases of accusation of want of fulfilment of his duties by the remainder of the council, aided by the oldest on the list of examiners.

12. Is degraded to the rank of member whenever pronounced guilty by a majority of his judges of any breach of duty.

TRANSLATION OF M. ALIBERT ON THE DISEASES OF THE SKIN.

BY SAMUEL PLUMBE, M.R.C.S.

Late Senior Surgeon to the Royal Infirmary for Children, &c.

Dermatoses Eczemateuses.—SPECIES IV.

Zoster.—English, Shingles.—Zoster manifests itself by an eruption of vesicles clustered together, and surrounded by a red inflamed areola, taking the figure and course of a belt suspended on the body, and extending from the linea alba towards the spine or across the shoulders, and sometimes surrounding the neck like a collar. It is preceded and accompanied by sensations of burning, itching, &c. After a time the vesicles disappear, dry up, and leave the skin, where they have formed, of a red colour, which gradually disappears. It is supposed by many to be analogous to pemphix, but without sufficient ground.

For the convenience of description, we divide them into the acute and chronic forms.

The acute is most commonly seen. It attacks young persons and those adults who enjoy robust health. It appears most frequently on the right side of the body, though the left is occasionally attacked by it.

The chronic form has been pronounced never to have existence by persons unqualified to pronounce an opinion. There certainly have been cases where it has existed months and even years.

Authors are not agreed as to the place which zoster should occupy in nosological arrange-

ment. Some have classed it with erysipelas, others as a form of herpes; but it is evident that no great likeness exists on either side. It is a distinct disease, but most resembles pemphix; and so far as regards the contents of the vesicles, there is almost an absolute identity. This disease is seated in the papillæ of the cutaneous surface, which explains the frightful torments the patients are condemned to *.

The active form of zoster is not uncommon; it is often seen in the hospitals of Paris, and has received a multitude of names. It occupies generally only one side of the body, most frequently the right, from which it extends towards the navel and spine. I believe it never entirely surrounds the body; but I have seen it wearing the form of two horse shoes, one before, the other behind, the extremities of which did not very closely approach. Some have described it in the form of a ribbon, extending down the fore-arm and arm, and now and then it surrounds the neck. The duration of the active form is from two to three weeks. The size of the vesicles, which, as has been observed, are always surrounded by a red areola at the commencement, are not larger than lentil seeds, and begin to increase in size. At this period the patients experience severe pains in different parts of the body of a lancinating and pricking nature, which are intolerably severe, and which increase as long as the eruption continues to spread, and as the vesicles become united to each other, and form a large erythematous band.

We cannot describe this disease without noticing the suffering accompanying its development; this consists of sharp and burning and itching pains, sometimes constant, sometimes only of several hours' continuation. The patient feels as if he were surrounded by a belt of fire, or expresses himself as if seized by the claws of a burning instrument. It is like the vulture consuming the entrails of Prometheus, said Darwin; and Tulpius, evidently aware of the precordial pains, called it herpes precordia exedens. No relief is felt, except by the use of cold applications.

Chronic Zoster.

The form above-mentioned goes through the course described, and terminates; but the chronic evinces successive crops of eruptions of vesicular formation, accompanied by the same pains as belong to the acute. Patients often leave St. Louis apparently cured, but speedily return with the disease again upon them. In some cases fissures containing bloody matter are seen. What is most discouraging in this form is, that the internal pains remain, and are severe, though the external disease has disappeared. I have seen cases where great itching of the skin, or deep-seated pains, remained a long time after the eruption had disappeared; and, in one instance, it seemed likely to continue for life, having set in at the termination of menstruation.

There is no reason to repeat that the phlyctenæ of zoster are always of small dimensions, when compared to the bulla of common pemphix; they may be said to be no larger than a common pearl. They contain a small drop of limpid fluid, either transparent, or of a yellow colour. The pellicle containing it withers, becomes wrinkled, and separating, leaves the cutis denuded. When several vesicles join together and become broken, the edges of the spot, after a certain time, are of a deep red or scarlet colour, the middle being of a faded grey colour. The sero-purulent discharge which flows from all parts of the abraded surface accumulates in some parts, and resembles gum-drops. Febrile symptoms do not belong to this form, and occur in conjunction with it only now and then accidentally.

Etiology.

Bilious disorders, a scorbutic diathesis, depraved humours, have been placed among the assigned causes of different authors. I have myself observed it consequent on hysteria, and in patients suffering from suppressed hemorrhoidal or menstrual discharge; anything impeding perspiration may also produce it. Violent affections of the mind, followed by severe pains in certain parts of the body, lead to the eruption in some cases.

* Rayer flatly denies the existence of much pain or suffering. "Jamais elles ne produisent les doleurs atroces dont unpathologiste moderne a parlé."—page 204. A moment's consideration of the structure of the cutis will disclose the truth.

Treatment.

The treatment of zoster requires much care and methodical attention. Those who consider it of little importance, have not carefully attended to it. In infancy and youth it is sufficiently mild, but sometimes when attacking old people it is of murderous fatality. We noticed the case of a man in the Hospital of Incurables, who expired under the most frightful sufferings. It is unsafe to attempt the cure of these affections, if any suspicion be entertained of the existence of organic disease. Periodical headach has been cured by its appearance, even where epilepsy was feared from the violence of the former.

Abstraction of blood from the arm, or from the neighbourhood of the part by leeches, are of common use. Oleaginous and milky fluids for bathing the parts, as also decoctions of mallow or linseed, are advantageous, and particularly necessary when a tendency to ulceration or irritation manifests itself, and there is a black or sanious discharge. Pommades of henbane and belladonna and of opium are employed with benefit, and if the skin becomes gangrenous, local antiseptics should not be neglected.

The allaying of pain is the grand difficulty which we meet with in this disease, as usually seen. The external employment of nitrate of silver, "la méthode ectrotique" of M. Lenes, as published by him, I have entertained a high opinion of for some time, and M. Lisfranc has shown to his pupils several cases of individuals who rejoiced at having submitted to it. The suffering is, of course, acute at the moment of its application, but it soon ceases, and the morbid irritation is singularly reduced. Other authors have sought to bring about the same results by blisters. Cold applications and bathing in the current of rivers gives relief. A mild regimen is also necessary, and anything likely to produce gastric irritation is carefully to be avoided. Ordinarily advise a solution of the neutral salts in butter-milk, chicken or frog broth; mild narcotic medicines may be used to procure rest.

It is a curious fact that the disease occurring on the right side disappears far more speedily than when it appears on the left. I am quite unable to explain this. Is it because of the neighbourhood of the liver, and the proneness of this organ to disorder, and the consequent disturbance of *all* the digestive organs? Future observers may be able to solve this question.

Foreign Medicine.

Maladie de Bright.

Under the influence of the humid state of the weather which was predominant during the last three months of 1833, M. Baudelocque, of the Hôpital des Enfans Malades, noticed a great number of cases of anasarca, of which some were idiopathic, others symptomatic; sometimes they were primitive, sometimes consecutive to the febrile exanthemata, and to scarlatina in particular. The pathological phenomena observed in these patients have been somewhat similar to those which occur in cattle feeding in damp pasturages. In no case has the general or partial œdema appeared to depend on lesion of the liver, or central organ of circulation. These alterations of structure have been equally rare in infants and adults. In three subjects, attacked with general dropsy, the presence of albumen in the urine was observed; two of these patients died, and, on examining the bodies, the alteration in the kidneys, mentioned by Bright, and which has recently been the subject of the researches of Drs. Christison and Gregory, of Edinburgh, was found. This disease has been exclusively observed in adults and old men, and it was supposed that infancy was exempt from its attacks; but the recent investigations of Wels, Blackall, and Hamilton have dispersed all doubts, and proved that this form of complaint may occur at almost any period of life. The cases which have fallen under the notice of M. Baudelocque also have confirmed these latter opinions. Amongst the foreign reports will be found one extracted from the Gazette Médicale, and illustrative of this point.—*Gazette Médicale.*

Extracts from the Life of Cuvier.

BY M. PARISET.

It was in the year 1788 that Cuvier went to reside at Fiquainville, in Normandy, where, although only 18 years of age, he had been appointed tutor to the son of a gentleman there living. His active mind immediately directed

itself to the investigation of the objects which the nature and situation of the place afforded, and which, from its propinquity to the sea, were not few. His attention was principally directed to the study of insects, fishes, and the moluscæ, of which last Aristotle has so happily sketched the history and anatomy, and of which class some enjoy nearly all the functions of fishes, without however having with them the least analogy; closely approximating and yet being widely separated from the class of vertebrated animals, both in their nature, the number of their organs, and the peculiar resemblances to each other, from which it happens that the pulp is constructed on a plan which we do not recognise in any other class of beings, and from which Cuvier already concluded against certain speculative ideas, that here, at least, nature had left a gap, a manifest void, which overthrew all the vain systems of the chain of beings. One particularity of these animals, and of Cuvier himself, was that they furnished him with the ink with which he wrote their history. This ink, comparable if not identical with Indian ink, is a black liquid, concrescible, soluble, and indelible, and served to transmit to paper the preparations of the animals themselves, made by his delicate scalpel. These designs, made by Cuvier with this ink, are now considered his masterpieces, and dispute the palm of boldness and neatness with the works of even the most celebrated artists. His studies on the insect tribe apprised him that these animals, deprived of circulation, respired in a similar manner to plants, and were nourished by imbibition, as the zoophytes. In the neighbourhood of Caen there lived a citizen, a great amateur in natural history, who possessed a magnificent collection of fishes, principally from the Mediterranean. Cuvier became acquainted with this gentleman, flew to his treasure, and after some few journeys, by dint of his crayon, that precious instrument of observation and of memory, became in his turn their possessor, for, in natural history, the faithful representation of an object is the object itself.

(*To be continued.*)

Researches upon Croup.

Authors, who have written upon the affections of the larynx, have noticed the signal influence of a humid temperature upon the development of diseases of this nature. This observation, of which the truth cannot be doubted, has been confirmed by the cases which have occurred in Paris in the last months. During December and January the temperature never ceased to be warm and moist, the thermometer being often 10 or 12 degrees above Zero; at these periods affections of the larynx and pharynx were very predominant; there were also a great number of catarrhal affections, and cases of angina, in which false membranes were found; and, in addition to these, there were observed several cases of true croup. This disease, become very rare during the last few years, has lately proved fatal to several patients at the Hôpital des Enfans: there have been three cases, all of which terminated in death shortly after their admission, and in all of which false membranes were found in the larynx, trachea, and bronchial passages. Tracheotomy was performed on one sufferer by M. Sanson, but we do not know the result. The disease has been equally prevalent with adults; M. Broussais, in one of his lectures on pathology, exhibited the larynx, the trachea, and the bronchi of a young soldier, who died at Val-de-Grâce with all the symptoms of croup, and in whose body the characteristic alterations of disease were observed.

Local treatment is alone efficacious in this complaint. Thus, when the false membranes have approached near to the arch of the palate, the amygdalæ, or the pharynx, which alone are accessible to these therapeutical plans of treatment, caustics, more or less irritating, applied to the false membranes, have destroyed their organisation, and effected a cure in them: when, however, these membranes are developed in the larynx, trachea, and particularly in the bronchi, the disease has proved beyond the resources of art, and all the patients who have been so attacked have perished. Professor Broussais has stated, in his lectures, that this affection is nothing more or less than an intense degree of laryngitis, and might be overcome by energetic antiphlogistic treatment. In the different autopsies, at which we have assisted, the mucous membranes of the air-tubes were pale, colourless beneath the false membranes, and in no cases, which have fallen under our notice, have we observed any sign of intense phlegmasia. Thus, a slight cough and hoarseness, without any appearance of ge-

neral re-action, marks the commencement of the affection in the larynx, which, all at once, and without any appreciable cause, becomes the seat of the membranous exudation. When the disease is declared, the antiphlogistic treatment has always appeared to us powerless. Every circumstance, indeed, causes us to doubt the inflammatory nature of this affection. If, therefore, it is to be called a phlegmasia, we must admit that its characteristics are peculiar, and differ from those of inflammations in general.—*Gazette Médicale.*

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, March 15th, 1834.

Dr. Copland in the Chair.

Claims of Dr. Jones and Dr. Veitch to the Invention of the small Silk Ligature.—Metastasis of Gonorrhœal Discharge.—Sympathy between Disease of the Cardiac Orifice of the Stomach and the Heart.

The draught of a petition to the House of Commons having been read and unanimously adopted by the Society,

Mr. Costello read some extracts from a letter sent to him from Dr. Veitch of Chelsea, claiming the priority of invention of the small silk ligature, an invention of which the merit has generally been ceded to Dr. Jones. Mr. Costello said, that what he had, at a former meeting, stated upon the subject, was merely historical, for he had not inquired particularly into the merits of the claimants of this important discovery. From what he had since heard, he should be inclined to consider as correct what Dr. Veitch had stated, and he was the more inclined to admit this, as he considered that such ready and willing conviction might act as an incentive to other and more worthy discoveries. Since the evening on which the subject of torsion of the arteries had been brought forward, he had received a communication from M. Amussat confirming the value of torsion, and alluding in particular to the case of Lord Nelson, in which the ligature did not come away for many weeks after its application, thus verifying the expression, that "the glories of Trafalgar hung upon a single thread."

Mr. Greenwood thought the very able manner in which Mr. Costello had brought forward the subject was in the highest degree praiseworthy; but still he could not agree with him as to the value of torsion, several cases being on record of secondary hæmorrhage occurring after such operation. With regard to Lord Nelson's case, he did not consider that it went far to support the argument for torsion. It was notorious that cases of amputation sometimes failed, but it would be absurd therefore to consider the operation as useless. After some further remarks on the subject, he concluded by remarking, that he felt certain the more the subject was inquired into, the more would the value of the ligature be estimated.

Mr. Costello explained the failure of an operation for torsion at the Hôpital Antoine by the want of tact which was displayed by the surgeon. In another instance of failure, only one side of the vessel was twisted; and again in a third unsuccessful case the forceps were not of the proper construction. Mr. Greenwood, in the course of his objections, had stated that Jones insists upon the complete division of the inner coat of arteries; now, if such was the fact, Jones argued in the most complete manner possible for torsion, since, in this operation, the inner coat was most perfectly divided. The immediate effect upon the inner tunic was one of the greatest advantage, for within an hour or two the plug is formed, whilst, in the operation by ligature, much longer time is necessary for the formation of an obstacle to the flow of blood.

Dr. Johnson remarked upon the merit which was undoubtedly due to Dr. Veitch for the invention of the silk ligature. The French had always been in the practice of applying some of lint or other foreign substance between the ligature and the coats of the arteries, fearing the division of the latter; and, until the time of Dr. Veitch, no person had applied the single ligature to the human subject, for the experiments of Jones were not performed on man, and were, on that account, not conclusive, as it is well known the effects of operations upon animals do not always resemble those upon human beings.

Dr. Ryan was gratified to hear Dr. Johnson coincide in the merits of Dr. Veitch's invention. That gentleman had applied the small ligature in the presence of Dr. Johnson and Dr. Ham-

mick, so far back as 1805, on the human subject, and mentioned his success to the surgeons of the Royal Infirmary, Edinburgh, soon afterwards, and long before Dr. Jones had performed the operation on animals, or his work had appeared.

Mr. Greenwood, in referring to the remark of Mr. Costello, that although Velpeau had displayed a want of tact in twisting the artery, still he had admitted the value of this mode of operating, said that it was a curious fact, that Dupuytren, who witnessed Amussat operate, and who lauded the operation, had never resorted to its use in the Hôtel Dieu, even during the stirring times of the Revolution in 1830.

Mr. Costello replied, that torsion was not known in 1830.

Some difference of opinion having arisen between Mr. Hunt and Mr. Greenwood as to the explanation of a passage in Jones, touching upon the division of the inner and middle coat, by applying the ligature in a perfectly circular manner,

Dr. Johnson rose and explained the discrepancy, by stating that a fine round ligature applied equally would perfectly divide the coats, whilst a larger one, by causing an inequality on one side, would not act in this way.

Dr. Copland referred to the rapidity and manner in which the exudation of lymph took place, and by means of which hæmorrhage was restrained.

Mr. Costello said, all those surgeons who had employed torsion had concurred in praising it, whilst the objections raised against it were made by gentlemen who had not tested its merits by experiments. He thought that if those persons who did object to it would turn their eyes to what was going forward on the Continent, and more particularly at Hamburg, they must feel convinced that great success had attended its introduction into practice.

Mr. Peregrine wished for the opinion of the Society on a case of acute gonorrhœa, in which the discharge was suddenly suppressed on the supervention of a catarrh, and an inflammatory and swollen state of the tonsils. By resorting to emetics, blisters, &c., this condition of the amygdalæ subsided, and was immediately followed by the renewal of the gonorrhœal discharge. He would not offer any opinion on this case, but was desirous of knowing whether it might not with propriety be termed a case of metastasis.

Dr. Copland observed, that several cases similar to the preceding were on record.

Dr. Johnson had met with discharges, in children of very tender years, which could not by any possibility be considered as gonorrhœal in their nature, and which would entirely cease upon the use of remedies, and again make their appearance. He admitted, however, that it was not so common for specific diseases to stop in this sudden manner.

After some further observations on this subject by Mr. Hunt and Mr. Peregrine,

Dr. Johnson brought before the notice of the Society an instance of the sympathy between disease of the cardiac orifice of the stomach and affection of the heart. A gentleman had been ill for some years, with difficulty of deglutition, palpitation of the heart, emaciation, &c.; these symptoms were aggravated at intervals, and were considered by an eminent surgeon, who had failed in attempting to pass a bougie, to be caused by strictures in the œsophagus. The case terminated fatally last week, and proved, on examination, to be one of carcinomatous disease, situated at and extending round the termination of the œsophagus in the stomach. The heart and liver were perfectly healthy.

In answer to a question, Dr. Johnson said it was impossible, by means of the stethoscope, to discover, during such violent action of the heart, whether that organ was enlarged or not; it was only by attentively inquiring into the history of the case that it could be discovered.

Dr. Copland said he had observed that disease of the cardiac portion of the stomach was not unfrequently attended by this distressing palpitation of the heart.

Adjourned.

MEDICAL SOCIETY OF LONDON.

Monday, March 17th, 1834.

W. KINGDON, Esq., President, in the Chair.

Diseases of Children—Ptyalism—Sympathy between Affections of the Thorax and Brain—Effects of Mercury on the System—Symptoms and Treatment of Water Canker.

MR. ROBARTS entered into an explanation of

a case of salivation, occasioned by the use of mercury, to which he had alluded at the last meeting. At that time Dr. Whiting had stated that it was not of the nature which he (Mr. R.) had considered, but was an instance of the disease called gangrena oris. The symptoms, both local and general, were totally different from those of gangrena oris, as mentioned by Dr. Hamilton. In alluding to this distressing consequence of the use of mercury, he had not meant to detract from the value of that medicine, but merely to instance effects which sometimes followed its use.

Dr. Whiting said if the case had been mentioned on a former evening, as now, he certainly should not have considered it as one of gangrena oris; this latter disease, mentioned by Dr. Hamilton, was not so unfrequent as generally supposed. Many practitioners in London were in the custom of attributing it to the effects of mercury; it, however, frequently existed when no mercury had been given.

Mr. Headland stated, that in speaking of the use of calomel in thoracic disease, he had not for one moment considered it as alone sufficient for their cure, but in that peculiar form which he was disposed to consider as not of an inflammatory character, but depending upon irritability and sympathy with the brain, its value was undeniable. Notwithstanding what Dr. Whiting had said respecting the stethoscope, he still could not coincide with him as to its great value; for in such instances as those which he had mentioned, its application was unnecessary, and frequently fallacious.

Mr. Bryant perfectly agreed with Dr. Whiting in his opinion of the great utility of auscultation: frequently when the symptoms were obscure, the application of this instrument to the heart at once discovered the nature of the disease.

Mr. Dendy did not think that the diagnosis in the cases mentioned by Mr. Headland was so very difficult; one great point of discrimination was in the remission of the symptoms. The state of the pupil also threw much light upon the seat of the complaint; if contracted, it was reasonable to suppose that the head was most affected; in such cases much benefit was derived from the application of leeches behind the ears. In estimating the value of calomel, it was necessary to bear in mind that it was not supposed to supersede the necessity for bleeding, which latter remedy seemed to possess the power of predisposing the body to a state favourable to the administration of other remedies.

Mr. Stevens had met with a form of disease not generally noticed by medical practitioners. It consisted of ulceration in the cheek, following the administration of calomel, and commencing in a small black spot, it rapidly increased in size, and was accompanied by a most intolerable fœtid odour, which at once discovered the nature of the complaint. A case of this nature had been admitted at Guy's Hospital, and had been attributed to mercury, the parents of the child having said that it came on after the use of some white powders.

Dr. Whiting said the case mentioned by Mr. Stevens had been under his care previous to its admission into the hospital; therefore it was not caused by mercury, for only two grains of calomel had been given, joined with other purgatives, but was a true instance of water canker.

Mr. Hooper had met with two cases precisely resembling that seen by Mr. Stevens, and had he not seen the whole progress of the treatment, should certainly have attributed their origin to mercury. They were generally found to occur in some debilitated state of the constitution consequent upon scarlatina, measles, or some other complaint.

Mr. Bryant thought it possible that even two grains of calomel might be sufficient to produce all the symptoms related by Mr. Stevens in some subjects. In treating the diseases of children, it was necessary to bear in mind the tender state of the system and peculiarity of constitution; he thought the observations of Dr. Uwins, at the last meeting, with reference to the state of the nervous system in bronchitis, were particularly valuable and important.

Mr. Kingdon had seen the bad effects which sometimes resulted from the free use of mercury; these were, however, only exceptions to the general rule, and were to be attributed to some peculiarity of constitution.

Mr. Proctor noticed the absence of any affection of the tongue in these cases, as clearly marking the distinction between this disease and ptyalism; he could not concur in th-

great dread which some surgeons had of blood-letting, for he had frequently applied leeches largely, and had seen much benefit result from their use.

Dr. Waller observed that in those children who died of thoracic disease, there was generally found effusion on the brain, attention therefore ought to be directed to both these organs; he trusted that what had been said respecting mercury, would not prejudice any gentlemen against the use of this remedy, for he considered it one of our most valuable medicines. In connexion with bleeding he was in the practice of using mustard poultices instead of blisters, which he had frequently found injurious.

Mr. Kingdon had found that the majority of these cases of ulceration of the face, if treated early, might be cured. He had found a medicine composed of Peruvian bark, rhubarb, ginger, and subcarbonate of soda, given in milk every three or four hours, particularly efficacious.

Mr. Dendy had seen the local application of balsam of Peru, and the use of muriatic acid and tartrite of iron of great value.

Dr. Whiting said that stimulants were recommended by Dr. Hamilton; when granulations could be produced, the probability of the patient's recovery was great. The application of the compound tincture of myrrh with equal parts of the diluted sulphuric acid of the Pharmacopœia, applied at intervals of ten minutes, until smarting was occasioned, proved of the greatest service; one case which had not been seen until the disease had made some progress, terminated in permanent lock-jaw: this complaint appeared to be of a specific nature, and was very different from other kinds of sloughing; it corresponded in some of its characters with that form of disease caused by ergot of rye.

Mr. Dendy stated that Mr. Wood of Oldham had related some cases of a similar nature, in one of the earlier volumes of the Medico-Chirurgical Transactions.

Several other gentlemen took part in the discussion, and mentioned several interesting cases.

Adjourned.

THE
London Medical & Surgical Journal
Saturday, March 22, 1834.

PARLIAMENTARY COMMITTEE—UNIVERSITIES—APOTHECARIES.

THE Parliamentary Committee commenced the operation of examining witnesses, rather unexpectedly, on Thursday the 13th instant, after our last number had gone to press. It was supposed that the examination would not have been entered upon for a few days later.

Of course we are not at liberty to reveal the tenor of the examination: but a fair opinion of its nature may be formed from the quality of the witnesses. The first person called was Dr. F. Hawkins, the Registrar of the College of Physicians; his official duties explain how it was that, on this occasion, he took precedence of the learned President. Were it not for some necessary explanation, touching documents in his custody, the Registrar would not, assuredly, have had the lead of the learned President upon such a momentous crisis, when the admirable tact and judgment almost intuitive, of the generalissimo,—all courtesy to the head of corporation delinquents apart,—might display themselves in governing the fortunes of the day.

Sir Henry Halford has, however, since appeared. Up to a very late moment, even after the appointment of a Parliamentary Committee, the learned President had not given up all hopes of conducting the investigation, which he foresaw was inevitable, in his own way; at least he expected to have an inquiry of his own, in the shape of a Royal Commission. Whether this *ultimum moriens* is now at length defunct in the learned President's breast,—whether he still fosters this

"Hope against hope,"

is a problem upon the powers of illusion beyond our skill.

There will be found in another part of this number a copy of a paper sent by the Committee to the medical officers of Dispensaries, which will give the profession a foretaste of the inquiries into which the Committee is resolved to enter. Independently of the importance of the information which will be thus elicited in respect to Medical Reform, it will afford details of a very interesting nature for *the Statistical Society,* which has been just established.

We have had, upon various occasions lately, to animadvert upon the conduct of the Universities. The modifications in the course of medical study, requisite for a degree in medicine at Oxford, have been already commented on. We understand that, even now, changes of a like character are contemplated at Cambridge, of which the main principle is to shorten the period for obtaining a degree by one year, and to require two years' hospital attendance. It is surprising, indeed, that fool-hardiness can go so far as to intermeddle, *past* the eleventh hour, in such a matter. The only result that can be reckoned on, from such a proceeding, is probably the amendment of the returns already made to the Committee by the University. This new attempt, if our authority be correct, as well as the already celebrated innovation at Oxford, is doubtless the fruit of Sir Henry Halford's visit to Alma Mater last year.

The same generous and distinguished men, whose useless efforts upon two late occasions to admit Dissenters to graduate at Cambridge, or at least to permit them to take medical degrees, we have had to notice, have again come forward with an appeal to Parliament for its interference. The notice of their petition, which is to be presented to the House of Lords by Earl Grey, astonished the Duke of Cumberland and that great Cambridge authority, Mr. Goulburn. Lord Althorp, in noticing this petition, took occasion to observe, that he saw no objection to throwing the Universities open to Dissenters.

These matters plainly indicate the feelings of the government, and leave no doubt that it is prepared to go along with the profession in despising the complaints of corporate prejudice and bigotry, which would, for selfish purposes, sacrifice the public interest. On a late occasion, too, the liberality of the government was manifested in a matter immediately concerning professional interests:—Upon the presentation, by Lord Durham, of the petition of the physicians against the college at Pall Mall East, Lord Lansdowne expressed his readiness to assist the petitioners; and there was some intimation of the appointment of a Committee of the Upper House, to investigate the whole subject; but we believe the inquiry is likely to be left altogether in the hands of the Committee of the House of Commons.

Such is the history of the movement towards medical reform up to the present date. It were, however, unjust not to notice the active co-operation the friends of reform have latterly received from *The Times:* the three most able articles it has published on this subject have done much to enlighten the public, and to assure it how deeply it is interested in the proper organisation of medical practitioners. We are happy to find the opinions advocated in this journal so much in accordance with those adopted in that influential quarter.

We have often deprecated the untoward influence which "the Hall, Bridge Street, Blackfriars," to use the expression of *The Times,* has by accident—rather let us say by culpable neglect—acquired o-

the whole class of medical practitioners in this country. The history of that body, from its establishment as a city corporation by James I. to the climax of its splendour in 1815, affords a singular instance of the fluctuations to which corporations calculated for other times are liable, when they have survived their original purpose, without the mending hand of the reformer*. The earliest event of importance occurred about the close of the seventeenth century, when the College of Physicians endeavoured to punish an apothecary for prescribing medicine gratis behind his counter, and then selling the medicine. This contest, in its day much celebrated in prose and verse, was carried to the House of Lords, where it was at length decided, that it was not unlawful for a vender of medicines to give gratuitous advice to those who came to buy from him. The true ground of that decision, so important in its consequences, is to be found in the narrow monopoly which the College of Physicians of that day had taken care to establish.

In the greater part of its subsequent history we find it for some time laudably engaged in pursuit of the profits of trade; in which, however, its eagerness to secure the supply of medicine to the army and navy, and several foreign companies, led it into various acts of a very dubious character.

About the year 1748, the Apothecaries' Company acquired a control over the venders of medicine in the neighbourhood of London; but, beyond the range of seven miles from the city, it was open to every man that pleased to practise and dispense medicine.

Then came the celebrated act of 1815, by which the corporation was invested with a sovereign power over all the general practitioners of England. That act, it is well known, originated in a private meeting of some gentlemen who were interested in the duty on glass bottles. For some time, even the corporation itself took little interest in a measure which was to bestow upon it such unheard-of privileges; and at length, when it did exert itself, the Colleges of Physicians and of Surgeons refused to concur in an application to Parliament, to sanction a scheme for the education of general practitioners. It was the intention of the original projectors to crush altogether the dispensing trade of the druggist. The Bill expressly protected the rights of the druggists, as they then existed, from its operation. This plain departure from the original principle was, however, far outbalanced by the lucrative consequences of the remaining parts of this celebrated enactment; for it is expressly declared in the act, that the Society may appropriate the monies which it should receive by licences in any way they might deem expedient; in consequence whereof, the members of the Court of Examiners have pocketed, in the course of eight years before 1833, the net amount of 10,218*l.* 12*s.*! Soon after the passing of the Act, the Company turned all its attention towards enforcing its newly acquired legal rights, carefully abstaining, meantime, from interfering with such as wrote druggist over their door; and, we believe, a very large sum was spent amongst the lawyers of Westminster Hall, in punishing unfortunate delinquents. Within the last three years, finding it has secured by its term of apprenticeship a complete monopoly in general practice, it has cer-

* A tolerably correct history of the Apothecaries' Company may be extracted from the Introduction to Gray's Supplement to the Pharmacopœia, and the article Apothecaries in the Penny Magazine. We mention these books because they are in the reach of every reader.

tainly made some efforts to improve the *professional* education of the apprentice. How far short that education is of the qualification a practitioner ought to have, it is superfluous to say.

We apprehend it will be found impracticable, however desirable it may be, to separate completely the duties of the physician and the apothecary. We may for the present dispense with any discussion upon the bad effects of the union, as concerns the character and practice of the physician and the health of the patient. Still, with all the dangers of what our neighbours in France call *polypharmacie* staring us in the face, we suspect the *pure* apothecary could find bread no where except in large cities. We think, however, a partial remedy for the abuses arising from the union might be found by providing a proper tribunal for taxing an apothecary's bill for medicines. A power of this nature is possessed, or assumed, by the Apothecaries' Hall in Dublin. In conjunction with a measure of this kind, we would have it declared by act of parliament, if there is any doubt on the subject, that every medical practitioner, whether physician or surgeon, was by law entitled to a fair remuneration for his advice.

Every man, permitted to practise medicine, should be qualified to dispense it: whether he would provide his own drugs must be left to the discretion of each practitioner; but if he does furnish them, he should derive no profit from so doing, beyond the reasonable profit of a mere apothecary.

DASHING AUDACITY.

It is well known the President of the College of Physicians claims the right of introducing one Licentiate every year to the honour of the Fellowship. For the last two years this privilege has not been exercised; and it is said, Sir Henry Halford, M.D., &c., &c., &c., openly professes, as his reason for being so chary of his honours, that *there is not a Licentiate in London of sufficient talent and education to entitle him to the rank of a Fellow!* We wonder will the *learned* President venture to assign such a pretext before the Committee. Perhaps he has,—time will tell. There is nothing we are not prepared to expect from his "dashing audacity."

Reviews.

Rules for the Restoration and Preservation of Health, and the Best Means for Invigorating and Prolonging Life. By George Cheyne, M.D. 12mo. pp. 224. London: 1834. H. Renshaw.

Rules for Preserving the Health of the Aged, by means of Air, Clothing, Diet, Exercise, &c. By J. A. Salgues, M.D. 12mo. pp. 307. London: 1834. H. Renshaw.

Both these works have been long patronised by the non-professional public. They contain a vast deal of good advice on the preservation of health, and the prevention of diseases. Those who follow the advice offered in them, will escape many diseases; and it is only to be regretted that the public are so little informed as to the means of preventing diseases. In both works there are prescriptions for treating diseases, but here we must observe, that the person who undertakes the cure of himself without a knowledge of medicine, has a fool for his patient.

The Monthly Archives of the Medical Sciences. Feb. 1834. Edited by Dr. Hunter Lane.

This journal consists of original communications, reviews, and notices of books, abstracts from foreign and domestic medical literature, medical politics, and intelligence. The independent spirit of the editor entitles him to our respect, and his arrangement and selection of materials, display taste and judgment. We wish him ccess.

The Medical Quarterly Review. No. II. Jan. 1834.

This new aspirant to favour consists of reviews, notices of books, original communications, collectanea, medical politics, and intelligence. The work is conducted with much spirit; the editor is a sharp critic, finding unpardonable faults with every author, great and small, and much fonder of strictures on the theory than on the practice of medicine. We offer this comment with good feeling, and if it be unkindly taken, we cannot help it. Time will prove whether the profession will think differently from ourselves.

On Dentition and some of the Incidental Disorders. By JOHN ASHBURNER, M.D., Lecturer on Midwifery, &c. Small 12mo. pp. 234. London: 1834. Longman and Co.

This little volume contains a great deal of valuable information on a subject too much neglected by medical practitioners in general. The author adduces a host of evidence in proof of a position which no one experienced in the practice of medicine can doubt,—that the irritation of the nerves of the jaws may derange the whole functions of the body, and excite a crowd of functional disorders, which are generally ascribed to other causes. This unassuming production deserves the perusal and study of every one engaged in the practice of the healing art.

QUESTIONS

Which the Governors of Dispensaries are required to answer for the Information of the Committee appointed by the House of Commons to inquire into the State of Medical Practice and Education; and which the said Governors, having answered, are required to return, directed "To the Chairman of the Committee on Medical Education, House of Commons, London."

1. When was your dispensary first established?

2. How is it supported?

3. Are there in-patients as well as out-patients?

4. If so, what was the number of each in 1833? and what is the number of beds for in-patients?

5. State the number of medical, surgical, and midwifery cases in 1833.

6. What is the number of physicians, surgeons, apothecaries, nurses, and other officers attached to your dispensary?

7. What are the names of the physicians? Where did they graduate? When did they graduate? Of what medical or surgical colleges are they fellows, members, or licentiates? When were they elected officers of the dispensary?

8. What are the names of the surgeons? When did they graduate or obtain their diplomas? Of what medical or surgical colleges are they members, fellows, or licentiates? Are they members of any and of what company of apothecaries? Do they belong to the council or board of examiners, of any and of what college of surgeons? When were they elected officers of the dispensary?

9. Is the choice of your medical officers restricted to the graduates, fellows, members, or licentiates of any particular universities, colleges, companies, or corporations?

10. Would the holding of any particular religious belief operate to exclude a person from being one of your medical officers?

11. In whom rests the election of your medical and surgical officers? and what are the by-laws for regulating such elections?

12. What are the names of the house surgeons or apothecaries?

13. Do they actually reside at the dispensary?

14. How many times a week, and at what hours, are the other medical officers required to visit the dispensary?

15. In what manner and by whom are the medicines for the use of the dispensary supplied?

16. Is the person supplying the medicines a medical officer or governor of the dispensary?

17. What was the salary, and what were the emoluments, of each medical officer of the dispensary in 1833? and whence are the emoluments derived?

18. What was the rate of fees for a student's attendance on the medical and on the surgical practice of the dispensary in 1833? What was the amount of such fees, and the share paid to each medical officer in 1833?

19. Are any and what lectures given at the dispensary, and by whom? What is the

tate of fees for attendance on those lectures? By whom are the lecturers appointed?

20. Are any of the lecturers also medical officers to the dispensary? and if so, what emoluments do they derive from those lectures?

21. By whom is the rate of fees for attending the medical practice of the dispensary, and for attending the lectures, regulated?

22. What was the number of pupils attending, 1st, the medical, 2nd, the surgical practice of the dispensary, in each of the years 1831, 1832, and 1833?

23. What was the number of pupils attending the lectures in the same years?

24. State, in detail, the income, the sources of income, and the charges upon income, the actual receipts and payments, and the balance in hand at the beginning and end of the year, for each of the years 1831, 1832, and 1833.

QUESTIONS

Which the Governors of Infirmaries are required to answer.*

1. When was your infirmary first established?

2. Does your infirmary depend for its support on endowment, on rates made for its maintenance, or on voluntary contribution?

3. How many beds are there at your infirmary for in-patients?

4. How many in-patients were admited into your infirmary in each of the years 1831, 1832, and 1833?

5. How many in-patients were there at your infirmary on the 1st of January of each of the years 1832, 1833, and 1834?

6. How many in-patients, admitted into your infirmary in 1833, were, 1. medical cases, (*a*) acute; (*b*) chronic; and 2. surgical cases, (*a*) wounds and accidents; (*b*) chronic?

7. How many of the in-patients in your infirmary on the 1st of January, 1834, were, 1. medical cases, (*a*) acute; (*b*) chronic; and 2. surgical cases, (*a*) wounds and accidents; (*b*) chronic?

8. What number of capital operations was performed at your infirmary during each of the four last years?

9. Class the number of capital operations performed at your infirmary during the four last years, according to their nature, and state the number belonging to each class.

10. What was the number of cases of fractured bone for which in-patients were admitted during each of the four last years, and what was the number of severe accidents?

11. Does your infirmary admit of out-patients? How many out-patients were visited in 1833; and how many were under visitation on the 1st of January, 1834?

12. How many of the out-patients visited in 1833 were medical, and how many were surgical cases?

13. How many of the out-patients under visitation on the 1st of January, 1834, were medical, and how many were surgical cases?

14. Are the out-patients visited at their own homes?

15. Are the out-patients visited by the medical officers of your infirmary, or by the pupils of the medical officers, or by whom?

16. What is the number of the physicians, surgeons, apothecaries, nurses, and other officers, attached to your infirmary?

17. How many of these are required to be resident, and how many are visiting medical or surgical officers?

18. What are the duties belonging to each of the aforesaid offices?

19. Do the resident or house physicians, surgeons, or apothecaries, of your infirmary actually reside, or do they live in the neighbouring town or city?

20. What are the names of the physicians? Where did each graduate? What are the dates of their degrees? Of what medical or surgical colleges are they fellows, members, or licentiates? When were they elected to the infirmary? In what capacity were they immediately before their election?

21. What are the names of the surgeons? Where did they graduate or obtain their diplomas? Of what medical or surgical colleges are they members, fellows, or licentiates? Are they members or licentiates of any and of what company of apothecaries? Do they belong to the council or board of examiners of any, and of what college of surgeons? When were they elected to the infirmary? In what

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* This circular has also been addressed to the Governors of HOSPITALS, with the substitution of the word "Hospital" throughout for "Infirmary."

capacity were they immediately before their election?

22. Is the choice of physician, surgeon, or apothecary to your infirmary restricted to the graduates, members, fellows, or licentiates of any particular universities, colleges, companies, or corporations?

23. Is the physician, surgeon, or apothecary of your infirmary required to be of any particular religious persuasion, or would the holding of any particular religious belief be a ground for exclusion?

24. In whom rests the election of the medical and surgical officers of your infirmary; and what are the by-laws for regulating such elections?

25. State the name of the house-physician, house-surgeon, and house-apothecary, and the ordinary place of residence of each.

26. How many visits a week are required of the visiting physicians and visiting surgeons respectively; and what and how many hours are given to such visits?

27. In what manner and by whom are medicines supplied for the use of the hospital? What was the cost of medicines supplied to your infirmary in each of the years 1831, 1832, and 1833?

28. Is the person supplying medicines a medical officer or a governor of your infirmary?

29. What is the salary, and what are the emoluments of each officer of the infirmary, and whence are the emoluments derived?

30. What are the rates of fees paid by students for attendance on the medical or surgical practice of your infirmary?

31. To whom are those fees paid in the first instance?

32. Between whom are those fees divided, and in what proportions?

33. What was the amount of fees taken for attendance on the medical and surgical practice of the infirmary in each of the years 1831, 1832, and 1833?

34. What amount, derived from such fees, was paid to each officer in the infirmary, entitled to share the same, in each of the said years?

35. By whom is the rate of such fees regulated?

36. What was the number of pupils attending, first the medical, second the surgical, practice of the infirmary, in each of the years 1831, 1832, and 1833?

37. What was the number of apprentices articled to each medical officer of the infirmary in each of the said years?

38. Are apprentices to the medical officers of the infirmary required to pay the same fees for attendance on the medical practice of the infirmary that other students are required to pay?

39. Are members of the profession required to pay the same fees as students for attending the medical and surgical practice of the infirmary?

40. What are the regulations for admitting students or members of the profession to the medical and surgical practice of the infirmary?

41. By whom are such regulations made and approved?

42. By what universities, colleges, or companies, empowered to grant degrees, diplomas, or licenses to practise, is attendance on the practice of your infirmary recognised, as a qualification to be examined for such a degree, diploma, or license?

43. When was your infirmary first so recognised?

44. What length of attendance on the practice of your infirmary is required by such universities, colleges, or companies, as qualifying a student to be examined for a degree, diploma, or license to practise?

45. Have the fees for attendance on the practice of your infirmary undergone any variation, since such recognition of your infirmary, by any university, college, or company? If there has been any variation, state it.

46. What lectures are given at your infirmary?

47. What are the names of the lecturers?

48. By whom are they appointed?

49. What is the rate of fees for admission to every such course of lectures?

50. What is the time that each course lasts?

51. What is the number of pupils that attended every such course during 1831, 1832, and 1833?

52. State the emoluments that each lecturer derived from such lectures in 1833?

53. State the regulations of the hospital for admission to such lectures?

54. By what universities, colleges, or companies, empowered to grant degrees, diplomas,

or licenses to practise, are these lectures recognised as a qualification to be examined for such degree, diploma, or license?

55. When did that recognition first take place?

56. Were the fees of admission to such lectures varied in consequence of such recognition?

57. Are the medical officers of the infirmary permitted to be governors thereof? Are any of them governors?

58. What was the mortality among the in-patients of the infirmary during each of the years 1831, 1832, and 1833? State the same for the out-patients.

59. Is anatomical examination of those who die at the infirmary allowed by the governors to be made?

60. State, in detail, the income, the sources of income, and the charges upon income, the actual receipts and payments, and the balance in hand at the beginning and end of the year, for each of the years 1831, 1832, and 1833.

61. By whom and in what manner are the governors, managers, or committee of your infirmary elected? are they elected for life, or for a limited period?

62. Is there any established dietary for in-patients?

British Hospital Reports.

WESTMINSTER HOSPITAL.

Cataract—Couching.

John Simon, a young man ætat 30, of scrofulous habit, was admitted under Mr. Guthrie. About seven years ago he received a slight blow on the right eye from a soft substance, which at the time gave him no uneasiness, but was soon followed by a trifling diminution of vision. This gradually increased, and eventually he completely lost the sight of that eye. Having remained in this state many years, he at length applied at the hospital for relief. The cataract was of a whitish colour, and seemed to occupy the entire of the crystalline lens.

After due preparation Mr. Guthrie performed the operation of couching or depression. The patient being placed sitting on the ground and the operator on a chair, and having a firm hold of the patient's head, introduced the needle through the sclerotic coat, and passing it transversely towards the upper part of the lens, he broke up the opaque crystalline lens, gently disturbing it. A bandage was then bound over the eye, and the patient recovered. He did not suffer the least pain from the operation, but felt some uneasiness in the eye for a day or two after. He complained of pain in his head, and was ordered to be cupped on the back of his neck. A few days after he was bled in the arm, and was attacked with symptoms of erysipelas in the arm and fore-arm. Leeches were applied and the erysipelas speedily disappeared. It afterwards appeared in his leg, but there also it easily yielded to simple treatment. His health is completely re-established, but vision has not yet returned in the eye; he however can discern light from darkness much better than previous to the operation.

Stricture of the Urethra—Cauterisation.

There is a case of exceedingly obstinate stricture at present in the hospital, which has resisted all efforts at dilatation. For this case Mr. White ordered that a bougie armed with the lapis infernalis should be introduced and speedily withdrawn. Mr. White has known this plan of treatment to have been successful in very obstinate strictures.

Ulceration from Leech-bites.

Mr. White, in calling the attention of the pupils to a case of diseased knee-joint to which leeches were applied, remarked that the bites of leeches frequently, in bad constitutions, turn into formidable ulcers. He has seen a case of a gentleman who met with a severe compound fracture of the leg, to which a great number of leeches were applied. The bites of the leeches became deep ulcers, and the patient died of the excessive discharge, his medical attendants not being able to rally him sufficiently to undergo an operation.

Fracture of the Ilium.

A robust man, æt. 33, was admitted with the above injury, having fallen from a height of ten feet on the pelvis. The treatment consisted merely in keeping the patient lying in a quiet position on his back without any mechanical apparatus. In six weeks he was able to walk about the wards.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON.

Westminster Medical Society	March	22,	8 P.M.
Medical Society of London	—	24,	8 P.M.
Royal Geographical Society	—	24,	9 P.M.
Medico-Chirurgical Society	—	25,	8½ P.M.
Medico-Botanical Society	—	25,	8 P.M.
Zoological Society	—	25,	8 P.M.
Institution of Civil Engineers	—	25,	8 P.M.
Geological Society	—	26,	8½ P.M.
Society of Arts	—	26,	7½ P.M.
Royal Society	—	27,	8½ P.M.
Society of Antiquaries	—	27,	8 P.M

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, March 13th.

Thomas Ash Burrows	Kegworth.
Isaac Harrinson	Near Leeds.
John Nichols Hudleston	Pucklechurch.
Frederick Lewis	London.
Granville Smith	Castle Donnington.
Thomas Scatchard	East Keswick.
George Ferris Whidborne	London.
Alexander Edward Webber	Runnington.
Wm. Barry Wade Webber	Somerset.

LITERARY INTELLIGENCE.

PREPARING for publication, in one volume 12mo, a Dissecting Manual, containing a Description of the Bones, Muscles, Vessels, Nerves, Absorbents, and Viscera of the Body, together with their Relative Anatomy, more particularly as relates to the Arteries. By RICHARD PARTRIDGE, Esq., Junior Professor of Anatomy at King's College, London.

BOOKS.

LECTURES on the Morbid Anatomy, Nature, and Treatment of Acute and Chronic Diseases, delivered in the Theatre of Anatomy, Webb-street, by the late JOHN ARMSTRONG, M.D., &c., &c.; edited by JOSEPH RIX, M.R.C.S., London. 8vo. pp. 851. Lond. 1834. Baldwin and Cradock.

This is an admirable summary of the principles and practice of medicine, and very far superior to most of the rival works on the subject. The excellence of the work and its cheapness will command a large circulation, which it eminently deserves.

A Series of Anatomical Plates, in Lithography, with References and Physiological Comments, illustrating the Structure of the different parts of the Human Body. Edited by JONES QUAIN, M.D., Professor of Anatomy and Physiology in the University of London. Fasciculus X. Folio. John Taylor.

The Animal Kingdom, arranged according to its Organisation, &c. By BARON CUVIER. No. 16. March. Henderson.

A Letter addressed to Henry Warburton, Esq., M.P., &c. &c., on the Grievances affecting the Medical Profession. By a JUNIOR PRACTITIONER. March. John Churchill.

CORRESPONDENTS.

Chirurgus—The list would not make a moderate 8vo.

Medicus—We do not know when the prizes proposed by the Medical Reform Association will be awarded. Our correspondent should apply to Dr. Epps, 89, Great Russell-street, Bloomsbury-square.

Juvenis—We shall attend to it.

A Dublin Reformer—An effectual reform will be made in all the medical incorporations of the United Kingdom.

M. N. B.—We are aware of the intended changes of the medical education for the degree in Cambridge, but they have not been as yet published by the University.

An Inquirer—It would be a breach of privilege to publish any of the proceedings before the Committee of the House of Commons.

METEOROLOGICAL JOURNAL.

MONTH. March, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
13		45	48	37	30·18	30·15	77	75	S.E.	S.E.	Rain	Fine	Fine
14		44	51	41	30·13	30·18	75	73	S.E.	N.E.	Fine	—	—
15		46	50	43	30·27	30·27	71	69	E.	E.S.E.	—	—	—
16		47	51	37	30·27	30·25	69	71	N.	N.W.	—	—	—
17		44	47	38	30·24	30·27	73	72	E.	E.N.E.	Foggy	—	—
18	☽	41	45	32	30·31	30·29	70	69	E.S.E.	E.S.E.	Fine	—	—
19		42	45	37	30·30	30·30	65	69	S.E.	E.S.E.	—	—	—

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LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXXII., DELIVERED APRIL 4, 1833.

Gentlemen,—I believe there is great practical utility in dividing *concussion of the brain* into the three stages, which I described in my last lecture, because the treatment should be regulated accordingly. In the *first stage*, the taking away of blood must be improper and dangerous, the powers of life being already reduced to the lowest ebb; and, consequently, an attempt to reduce them further would be contrary to the dictates both of reason and experience. The patient, in fact, is already in danger of dying, without any reaction taking place in the system; and nothing would be more likely than bleeding to render the risk of this termination still greater. On the contrary, the indication is to endeavour to rally the depressed powers of the system, for which purpose warmth should be applied to the surface of the body, and especially to the epigastrium and extremities, and stimulants to the nostrils. These I consider safer means than the internal administration of cordials and spirituous medicines, which, after the revival of the patient, always begin to have the most pernicious effects. However, some practitioners venture to give ammonia or ardent spirits by the mouth, or even to throw up turpentine clysters. From these plans I should always abstain myself, and be content with external stimulants, which can be discontinued directly they are no longer needed, without any hurtful prolongation of their action.

In the *second stage*, in which the freedom of the circulation has been restored, and a disposition to inflammation of the brain commences, all sources of excitement should be removed. The patient should be kept perfectly quiet in a darkish room, the head should be shaved and covered with cold applications, blood be taken away, the bowels should be freely opened with calomel and antimonial powder, and the functions of the bowels and skin promoted with saline aperient draughts. When the circulation rises a little more, the pulse quickens, and the fever and cerebral excitement have taken place, the lancet, assisted with leeches, small repeated doses of tartarised antimony, and cold washes to the head, may be said to be the sheet anchor.

Gentlemen, here you should bleed fearlessly, as often as the pulse rises above a certain point; for if you do not check the disturbance of the circulation, the inflammation in the head will certainly increase, and the patient die. It is in cases of this description that arteriotomy is sometimes proper.

The *third stage* is that of complete phrenitis, requiring quietude, bleeding, purgatives, calomel, tartarised antimony, and blisters on the scalp, or the application of the antimonial ointment to it. Afterwards, when bleeding can no longer be continued, and there is risk of effusion upon the brain, you may give calomel freely, or employ mercurial frictions with advantage.

When all risk of arterial excitement is over, and certain imperfections and infirmities of the intellectual and muscular systems remain, seemingly as consequences of effusion, or some other permanent changes in the brain, you may rub the scalp with iodine ointment.

Gentlemen, as a subject intimately connected with the consideration of injuries of the skull, I will now make a few observations on *hernia cerebri*, or *encephalocele*, as it is sometimes called, which signifies a gradual protrusion of a portion of the brain through a preternatural opening formed in the skull, either by the trephine, or by the exfoliation of a portion of bone in the state of necrosis. In children, indeed, the protrusion has been known to happen through an opening in the skull, left by its incomplete ossification. When hernia cerebri follows the application of the trephine, or the loss or removal of bone from other causes, some days generally elapse before the brain begins to protrude through the aperture.

and this occurrence is preceded by ulceration, or sloughing, of the dura mater, without which circumstance probably there would be no protrusion at all in ordinary cases; I mean such as follow the removal of bone by the trephine. The tumour soon attains the size of a pigeon's egg, and its circumference is pressed upon by the edges of the opening. There is great tendency to hæmorrhage from the surface of the protruded mass, and consequently the tumour is usually covered with layers of coagulated blood. In some few cases, it is curious to remark that the patient does not lose his senses; though in by far the greater number of examples, he lies in a comatose state; and if coma does not exhibit itself at first, it always comes on in the advanced stage of the disease. The immediate cause of hernia cerebri is obscure and unsettled, no completely satisfactory explanation of it having yet been given by any pathologist. It is said to arise in consequence of the removal of bone; but this is not the only cause, for if it were so, the protrusion would always follow the loss of bone, which is contradicted by experience. The ulceration of the dura mater, and other changes, appear to be concerned. The cortical and medullary portions are often distinctly visible in the protruded mass, and the pia mater is seen dipping down into the sulci, and enveloping the convolutions. Occasionally the tumour ceases to enlarge, acquires a brownish colour, pours out a fœtid matter, and breaks into several pieces, which afterwards separate, and are thrown off; then granulations will sometimes arise, and the patient recover. This favourable termination, however, is rare; and I have seen so few patients get well, who had hernia cerebri, that the prognosis seems to me very unfavourable, more especially when our ignorance of its proximate cause is taken into the account. In France, it used to be the practice to dress the swelling with a pledget dipped in wine. Such an application, one would suppose, could not promise to be very serviceable; yet Larrey and others prefer it. In this country, pressure in moderation has sometimes been tried, and even the bolder method of slicing off the protruded part of the cerebral mass. As a linen compress cannot be so exactly applied as a plate of metal, I should conceive that when the surgeon means to resist the return of the protrusion, the latter should be preferred. In removing a hernia cerebri with the knife, you will frequently have profuse hæmorrhage; but though copious at first, certain cases on record show, that it stops after a short time, and is not itself productive of danger. The liberties taken with the protruded portion of brain, without any apparent ill consequences, are truly surprising: the facts show, at all events, that the superficial parts of the hemispheres will bear a great deal of injury and mutilation, without life being destroyed or recovery prevented. You will not wonder that this disease should be so often fatal, when I tell you, that in most cases it is complicated with extensive and deep-seated injury of the brain. Dissection shows, that there is generally blackness and sloughing of the dura mater for some extent around the tumour; and that in many cases the substance of the brain has a softened and broken down appearance. A fœtid dark coloured fluid is also found between the dura mater and arachnoid membrane, which latter part is often thickened and opaque.

Gentlemen, my next duty is to explain to you the *Principal Diseases of the Eye and its Appendages*, a part of surgery which is now cultivated with the most minute care, and which no surgeon who values his own reputation will neglect the study of. Were it not a subject disfigured by too many harsh and barbarous terms, I should say that it is one of the prettiest departments of surgical pathology and practice—one in which you may often actually see the changes of disease exactly as they occur, and estimate their nature and character with wonderful precision.

For the sake of method I will divide it into three parts, the first comprising *diseases of the lachrymal organs*, the second *those of the eyelids*, and the third *the diseases of the eye itself*.

With respect to *diseases of the lachrymal organs*, I may at once inform you that the lachrymal gland itself is not very liable to disease. In scrofulous children it is alleged to be occasionally the seat of inflammation and suppuration. At all events, such cases are remarkably uncommon; and many of the most experienced practitioners in this branch of surgery have never met with an instance. The inflammation of the gland, if met with, would require leeches, purgative medicines, a cold evaporating lotion, and other antiphlogistic remedies. If suppuration could not be prevented, the cold lotion should be exchanged for poultices and fomentations; and, as soon as matter is formed, a puncture ought to be made, if possible, through the conjunctiva under the outer portion of the upper eyelid; or, if this were impracticable, a puncture should be made through the skin.

Another rare disease is an *indolent scrofulous enlargement of the lachrymal gland*. When, gentlemen, I speak of any disease of the lachrymal gland, the case, whatever it may be, must be an uncommon one; and this you will be convinced of when I tell you, that at the London Eye Infirmary the reports for twelve successive years contain no example of any disease of the lachrymal gland. If you were to meet with an indolent enlargement of this organ, you would treat it with the general remedies which I have recommended for other scrofulous diseases, especially the repeated use of leeches, the compound calomel pill at night, and aperient medicine in the morning; or, what might be still more advisable, you would have recourse to friction with iodine ointment, prepared according to Lugol's formula, the

patient taking at the same time the iodine solution, made according to the directions which I specified in a former lecture. If iodine disagreed, when thus administered, which is not often the case, you might prescribe small doses of rhubarb and subcarbonate of soda, with or without the hydr. c. cretâ; or the infusion of calumba with the tartrate of iron, as alterative and tonic medicines.

Scirrhus of the lachrymal gland is mentioned by most surgical writers; but doubts are sometimes entertained, whether a certain chronic induration of the lachrymal gland, generally described as scirrhous, be truly of this nature; for the disease is remarked not to affect the lymphatic system; never to undergo malignant or cancerous ulceration, independently of that of the eyelids or conjunctiva; not to be followed by relapse after extirpation; and that the lachrymal gland is not very prone to assume any malignant change, may be inferred from the fact, that when the globe of the eye and the other contents of the orbit are extensively diseased, the lachrymal gland usually remains unaffected. The same fact is commonly noticed in cases of medullary sarcoma of the retina, even when it is advanced to that degree which makes the removal of the eye necessary. The gland may be rendered as large as, or even larger than a walnut; but when removed, its texture, though hardened, is sometimes alleged not to exhibit the peculiarities of the scirrhous structure. However, the best authorities differ on this subject; for some of them contend that the lachrymal gland, conjunctiva, and eyelids, are the parts about the eye peculiarly liable to cancer; and there is no doubt that the lachrymal gland is sometimes involved when these other parts are attacked. A truly scirrhous affection of the lachrymal gland alone is undoubtedly a very rare disease. In the examples recorded by Mr. Todd and Dr. O'Beirne, the structure of the diseased gland seems to have corresponded to that ordinarily described as characteristic of scirrhus.

What is reputed to be *scirrhus* of the lachrymal gland, is not attended with that preternatural dryness of the eye, which has frequently been supposed to be an unavoidable consequence of such a disease; for in the cases of it, recorded by Mr. Todd and Dr. O'Beirne, in the 3rd vol. of the Dublin Hospital Reports, there was actually an increased secretion of tears; an *epiphora*, as it is technically called. The symptoms characterising it, are lancinating pain in the external and upper part of the orbit, enlargement of the gland, till it forms a prominent, hard, lobulated, tumour, quite perceptible under the tense skin of the upper eyelid, and displacing the eye-ball in a greater or less degree, downwards, inwards, and forwards; dulness of the cornea, dimness of sight, double vision, dilatation of pupil, and at length complete blindness. In the worst stages, the temporal side of the orbit is dilated, or the eye so pressed upon, as to be destroyed by ulceration and the evacuation of its humours.

As for the treatment, with the view of reducing and dispersing what is termed the scirrhus of the lachrymal gland, the means proposed are leeches, followed by a succession of blisters, alternately to the neighbouring part of the forehead and temple, or friction with Lugol's iodine ointment, assisted by the internal exhibition of the iodine solution.

Were these plans to prove ineffectual, and the tumour to become a source of considerable annoyance to the patient, or of mischief to the eye, it would be necessary to remove the diseased gland. The operation cannot be easily done from beneath the upper eyelid, as is sometimes recommended, unless an incision be made through the outer commissure, so as to let that eyelid be turned completely up, and the conjunctiva be sufficiently exposed. Hence surgeons, who have occasion to remove the lachrymal gland, have generally preferred cutting directly down to the tumour, making a crucial incision over it, raising the angles of the wound, and then taking hold of it with a tenaculum, and dissecting it out. You may conclude, gentlemen, that when the swelling is above a certain size, a crucial division of the integuments will be necessary, because a single incision would not answer the purpose of giving convenient room for its dissection and extraction.

The return of vision, and of the eye into its place again, does not always take place immediately; and the sight may, indeed, never be recovered. In one case, reported by Dr. O'Beirne, the eye resumed its proper position, and vision was restored. In another instance, the particulars of which are given by Mr. Todd, though the protrusion of the eye was gradually rectified after the operation, the blindness continued. In one or two examples, which were under Mr. Lawrence, the operation was followed by very considerable improvement of the sight.

Diseases of the Caruncula Lachrymalis.—The caruncula lachrymalis and semilunar fold of the conjunctiva are liable to inflammation; and sometimes matter forms in the substance of the former part. The treatment consists in the removal of the cause, which may be the pressure and irritation of the eyelashes, or the presence of some other extraneous substance; but, the most common cause is exposure to cold. The caruncula is to be frequently bathed with tepid water, and opening medicines administered. In the early stage of a severe case, a leech might be put on the caruncula; and, in the event of suppuration, a bread and water poultice, included in a little muslin bag. The abscess should be opened early, and, if fungous granulations arise, they are to be repressed with the nitrate of silver.

Gentlemen, I request your attention in the next place, to what is termed *Encanthis*, which signifies a chronic enlargement of the

caruncula lachrymalis. Two forms of it are usually described; one, a *simple* indolent swelling of the part, the other, a *scirrhous* affection of it, disposed to degenerate into cancerous ulceration, but, fortunately, so rare, that some surgeons who have had the greatest opportunities of seeing this department of surgery, have not met with a single example of it. The inconveniences, necessarily resulting from an encanthis, are considerable, as chronic ophthalmy, an impediment to the complete closure of the eye, and an interruption of the passage of the tears into the nose, by the compression and displacement of the puncta lachrymalia. Hence the tears are continually dropping over the cheek, so as to produce the complaint technically named *stillicidium lachrymarum*, which is not to be confounded with *epiphora*; for while this last consists in so profuse a secretion from the lachrymal gland, that the tears cannot wholly pass down into the nose, the *stillicidium* is a dropping of the tears over the cheek, in consequence of an impediment to their passage from the eye into the lachrymal sac. From the various causes which I have explained as accompanying encanthis, the eyesight itself must be considerably weakened and disturbed.

When an encanthis cannot be reduced by applying to it the vinous tincture of opium, or a solution of the nitrate of silver, and, especially when, from its great pain and disposition to bleed, it evinces a cancerous tendency, or, at all events, a propensity to become a malignant disease, it should be removed without further delay. Some operators pass a ligature through it, by means of which they draw it out, while they perform the requisite incisions with a small scalpel; but taking hold of it with a tenaculum will be quite sufficient to enable you to cut it away.

In the encanthis of the large inveterate kind, you may notice an elongation of it upon the inside of each eyelid, requiring to be separated with the knife in the commencement of the operation, before the main part of the tumour is separated. The surgeon should be careful not to encroach upon the conjunctiva, and, if possible, he should save a small portion of the caruncula, sufficient to prevent a perpetual dribbling of the tears over the cheek, after the cure of the disease. The eye is to be bathed with tepid anodyne decoctions, and then mild ointments, and astringent collyria, &c., are to be employed. If the granulations rise too much, apply the nitrate ofsilver. Although encanthis is a rare disease, its occasional formation is attested by so many good authorities, that, as far as I can judge, it deserves notice in the class of diseases we are now considering.

Of various Diseases of the Lachrymal Organs, formerly confounded together under the name of Fistula Lachrymalis.—It is only within the last few years, that any discrimination has been introduced into the views taken by surgeons of the diseases of the lachrymal organs. Nearly all these complaints were supposed to be essentially connected with obstruction of the nasal duct; and hence its removal was generally the principal thing contemplated in the treatment. It was too much looked upon as a cause, and not as an accidental accompaniment or consequence of certain affections of the lachrymal parts of the eye. The truth is, obstruction of the nasal duct is sometimes merely the temporary effect of inflammation; and, I might say, that in the greater number of diseases affecting these parts, such obstruction either does not really exist, or, at all events, has no share in the original production of the inconveniences which the patient is experiencing.

Were you always to act in this part of surgery on the principle that an obstruction of the nasal duct is the great cause of inconvenience, you would not be showing much more judgment, than if you were to treat all the affections of the bladder and urethra by dilating the latter canal. In short, nothing can be more incorrect than the supposition, that every disorder of the organs, serving for the conveyance of the tears from the eye into the nose, must depend upon obstruction of the nasal duct, and must require modes of treatment founded upon this assumed principle.

Thus, if the disease be simply a morbid change in the secretion of the mucous lining of the lachrymal sac, the *blennorrhœa sacculi lachrymalis*, as it is termed,—or if the case be merely an extreme relaxation of the part, the *hernia* of it, as it is sometimes called, the absurdity of opening the sac with a knife, and thrusting a probe, bougie, or style down into the nose, must be too obvious to need any further comment. Good representations of the appearances of both these forms of disease are given in the plates which I now pass round for your examination.

Gentlemen, you will sometimes meet with cases of *inflammation of the lachrymal sac*, an affection which may extend, more or less, down into the nasal duct. The affection may be *acute* or *chronic*. I believe that chronic cases are far more common than acute ones. In the latter, a swelling, shaped like a horse-bean, very painful when touched, and attended with a degree of redness, presents itself just below the tendon of the orbicularis palpebrarum muscle. The swelling of the skin is at first confined to the part over the lachrymal sac, but afterwards spreads to the eyelids, which present an œdematous appearance. Now, in consequence of the lining of the sac and nasal duct becoming thickened, the passage for the tears into the nose is obstructed; so that, partly from this cause, and partly from the shrunk contracted state of the puncta lachrymalia, usually noticed at the same time, the tears do not descend into the nose, but fall over the cheek; consequently, there exists what is termed a *stillicidium lachrymarum*. However inflamed the skin may be, you can

always distinctly feel the swelling of the lachrymal sac beneath it. In healthy individuals, this kind of inflammation of the lachrymal sac rarely leads to the permanent obliteration of the nasal duct by the effusion of lymph, though, in scrofulous subjects, such a result is possible.

The pain, attending acute inflammation of the lachrymal sac and lining of the nasal duct, is exceedingly severe, indeed more violent than might be expected from the small extent of the part affected. The headach is excruciating and the fever considerable. Frequently the case advances to suppuration. The sac and the parts by which it is covered, being incapable of any further distention, sometimes slough; but, more commonly, in the middle of the swelling a yellowish soft point is observed, which soon gives way. Excellent representations of these states are contained in the plates which I now show you. Then, the collection of pus and mucus within the sac makes its way through the orbicularis palpebrarum and the integuments; but, by this opening, merely the thinner parts of the matter are discharged, and the tumour is for some time but inconsiderably lessened. Soon afterwards you will observe, that when you press upon the superior part of the sac, that not only pus and mucus are discharged from the opening, but occasionally a quantity of pure tears; a proof that the conveyance of the tears into the sac is re-established; in other words, that the action of the lachrymal puncta and canals has again commenced. This is always a favourable circumstance, as it denotes that now the only question relates to the state of the nasal duct. For some time after the discontinuance of suppuration, a morbid secretion, somewhat like pus, is kept up from the mucous membrane of the sac; but this also ceases in its turn, and healthy mucus is again formed in the natural quantity. Sometimes the opening in the sac now heals up either spontaneously or by the aid of common surgical treatment. Most frequently it contracts at first to a very minute size, through which, if the nasal duct should not have become duly pervious again, the tears and mucus will occasionally be discharged. Should this minute opening close, and the nasal duct still remain impervious, the patient is obliged several times in the day to press upon the sac, in order that the mucus and tears collected in it may be discharged through the lachrymal puncta and canals. In other instances, the swelling of the lining of the sac and duct lessens with the inflammation; the passage for the tears is restored, and a complete cure is the result.

Gentlemen, from what has been stated you will readily comprehend, that it is not every inflammation of the lachrymal sac that terminates in the production of an external opening indisposed to heal, or a *fistula lachrymalis*, as it is termed. Whether such an opening form or not, and whether, when formed, it will become fistulous or not, will depend very materially upon the mode of treatment adopted.

If, when the lachrymal sac is violently inflamed, the case be neglected or wrongly managed, a complete or partial closure of the nasal duct by the adhesive inflammation is very likely to be the consequence. And the same effect may be produced in the lachrymal canals, in which event, the absorption of the tears, and their conveyance from the eye into the sac, may be for ever impeded, and the patient remain during the rest of his life afflicted with a *stillicidium lachrymarum*.

Gentlemen, I will next speak of the *treatment*.

In the *first stage*, the manifest indication is to endeavour to subdue the inflammation; and it is by combating this affection, and not by attacking one, or even several of the symptoms, that you will have the greatest success in curing the complaints now engaging our attention. For instance, what would here be more absurd, than the scheme of dilatation, by the introduction of probes through the lachrymal canals into the sac, or even through the nasal duct into the nose? This would only be subjecting the inflamed parts to a new cause of irritation, and increasing the risk of greater mischief than is actually impending. Hence, instead of trying to insinuate instruments from one of the puncta lachrymalia down into the nasal duct,—a method, as I think, never advisable as a common practice, on account of its injurious effect upon the delicate organisation of the lachrymal puncta and canals,—you should have immediate recourse to antiphlogistic treatment; applying leeches freely and repeatedly to the inflamed part and its vicinity, covering it either with a cold evaporating lotion, or applying poultices and fomentations, and prescribing saline aperient medicines, followed up by calomel and antimonial powder. A very low diet will always be requisite; and, when the pain is severe, venesection should not be omitted.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XIV.

Diagnosis of Jaundice from Biliary Calculi—Proof of the Passage of the Calculus—Indications of Treatment—Rupture of Gall Bladder after the use of Emetics—Spasmodic Jaundice—Discharges of Fatty Matter—Researches of Drs. Bright and Elliotson—Connexion with Malignant Disease examined—Source of the Fatty Matter.

Gentlemen,—We were occupied at our last meeting, in considering the symptoms of that disease in which there is a formation of what

are termed biliary calculi; the passage of these into the common biliary duct; the possible strangulation of the duct for some time, and the consequent production of jaundice. I described the symptoms of this disease as consisting in a sudden and violent attack of pain in the region of the gall-bladder, succeeded sooner or later by the phenomena of jaundice, and in the generality of cases *occurring without fever*. Between these violent attacks the patient sometimes has intervals of complete ease; at other times a gnawing sensation continues in the original situation of the pain. It is remarkable, however, that a patient may have an interval of perfect ease between the fits, somewhat similar to the calm which occurs during the pains of labour. The occurrence of this cessation of intense suffering has been attributed to the passing of the stone into the duodenum; this, however, is by no means certain. The idea generally entertained upon this matter is that each attack of pain corresponds with the passage of a stone. How far this notion may be true I cannot decide; but this I shall impress upon your attention, that the mere subsidence of pain is no proof of the removal of the disease, *unless bile is discharged by stool or by vomiting*; but when such a discharge coincides with the cessation of pain, you may be sure that the obstruction has been overcome for the time. I need not remark to you that the smaller the calculus is, the greater the facility with which it will be discharged. You will find in some cases, that the efforts which nature makes to remove one of these concretions are quite unavailing; it lies in the gall-bladder or duct, and there remains impacted. Here its presence sometimes excites inflammation, lymph is thrown out, and the duct becomes permanently closed; in other cases it has been found to make its way into the duodenum by ulcerative absorption, and is thus discharged.

The size of biliary calculi is various. Generally speaking, their dimensions are similar to those which you see before you; but there are many cases on record of very large ones having been discharged. In the 12th number of the Medico-Chirurgical Transactions, Dr. Brayne gives an instance of one passed, which was three inches long and three and a quarter in circumference. I may, however, mention, that there is a source of doubt connected with this case. It is possible that the calculus in this instance was nothing more than one of those fatty covered concretions which are found in the intestinal tube, and which have nothing to do with the gall-bladder or its ducts. As it is my intention to return to this subject, I shall here only observe, that fatty matter has been frequently discharged in hard as well as soft masses, that it sometimes cuts like a biliary calculus, and that it may be difficult for a mere physiologist to distinguish concrete masses of this kind from gall-stones.

The passage of a biliary calculus does not of itself necessarily imply the occurrence of jaundice: if it passes without difficulty there is none; if it happens to become impacted, then jaundice is sure to follow. It is a curious fact, that of this form of jaundices cases have occurred in which the flow of bile into the digestive tube has been obstructed for more than a year, and yet a recovery took place.

Permit me now to rehearse the diagnosis of jaundice from biliary calculi. Sudden and violent pain in the region of the gall ducts, increased by pressure, but generally unaccompanied by acceleration of pulse or fever, coming on in a person not subject to spasmodic attacks and speedily followed by jaundice. This is the diagnosis. In most of the cases described in books, and, I believe, in the majority of instances, you will find the disease to exist without febrile symptoms; but it is also true that it may be complicated with febrile disturbance, and under such circumstances you should be apprehensive of inflammation in the biliary ducts or duodenum. The importance of this will appear when you come to consider the treatment.

Now, suppose you are called to attend a case of this kind. A person of sedentary habit, who indulges in highly seasoned food and takes no exercise, gets a sudden attack; he lies, perhaps on the floor, writhing with agony; he is beginning to exhibit the yellow tinge of jaundice; he refers his pain to the region of the gall-bladder; his pulse, however, is quiet, and he has no evident symptoms of fever. Here the nature of the disease is manifest, and the first thing you have to consider is what are the indications of treatment. These are obviously threefold. The first is to guard against inflammation; for you are aware that inflammation may take place, and besides, the higher the irritation and (if I may so term it) the spasm of the gall ducts are, the greater will be the difficulty in passing the stone. The next thing is to allay spasmodic pain. We know that this pain is principally spasmodic, or nervous, because it is always more sudden and violent than that which attends common inflammatory action, and, moreover, it is commonly uncomplicated with symptoms of inflammation. The third indication is to adopt measures to favour the passage of the stone. Now these three indications, but more particularly the second and third, are, as you may perceive, reducible to one form of treatment. Whatever will relieve pain and spasm will assist in favouring the passage of the stone. If then, you happen to meet with a case of this affection in a strong robust constitution, where the pain is violent and is aggravated by pressure, and particularly where there is any sign of febrile disturbance in the system, I would advise you to bleed such a person immediately. Not that you have to combat actual inflammation, but because you have to prevent the liability to it, and because in using the lancet, you are employing a most powerful antispasmodic. The

next thing of importance, in severe cases, is the application of leeches over the region of the gall-bladder, and the same remarks apply to leeching as to venesection. You are not to suppose that the application of leeches will cure the disease; but you may be sure that it will assist materially in allaying spasm, and favouring the passage of the calculus. The bowels should be freely acted on by purgatives and enemata; you may give a brisk purgative by the mouth, and at the same time a purgative enema. After the bowels have been opened, the only thing which you can rely upon for giving relief is opium, and that in full doses. I have seen several patients labouring under this disease who appeared to me to be maltreated. The different measures for procuring relief were certainly put into practice, but not in a regular or proper manner. They first got a dose of opium, then a purgative, and lastly were blooded. If you have a case of this kind to treat, bleed first, then leech, next employ purgatives, and when you have emptied the bowels, have recourse to opium. I have never employed the anodyne injection in this disease, but reasoning from analogy, I am inclined to think that it would prove serviceable, and I am aware that it has been employed with effect in that form of jaundice which depends upon hysteria. The tobacco injection also seems to have strong claims to our notice, and in this disease must prove extremely useful, from its powerful effect in reducing spasm.

There is a difference of opinion with respect to the employment of emetics. The object of their exhibition is to force the calculus through the ducts, by the shock given by the sudden and violent contraction of the abdominal muscles, and also to relieve spasm, by their subsequent relaxing effect. Some practitioners of high authority, however, state that this practice is not unattended with danger, and give cases of rupture of the gall-bladder after the exhibition of an emetic. Such an accident as this would be very likely to injure for ever the character of a professional man. I am sure the practice in some cases at least is dangerous. A distinguished medical friend of mine has related to me the particulars of a case of this kind in which the exhibition of an emetic was followed by rupture of the gall-bladder and fatal peritonitis. In this instance the case was not so deplorable, so far as the patient was concerned; he was labouring under extensive disease of the liver, and only exchanged a lingering for a sudden death; but this furnishes no excuse for a medical practitioner. If I were to hazard a conjecture, I would say *that emetics can be employed with safety only in the early stage of the disease, when there is no obstruction from organic disease;* for the longer the jaundice has lasted, the greater is the chance of obstruction from organic disease. Again, you should never use them *where there is evidence of a distended gall-bladder.* If you can feel the tumour formed by the distended gall-bladder in the right hypochondrium, you may be sure something has been going on for a long time, and you should be cautious in giving an emetic. Never use it then where you can feel a tumour in the region of the gall-bladder. If you give it at all, give it in the early stage, and after premising venesection, leeching, and the use of the tobacco injection. I had almost forgot to mention that very signal advantages accrue from the use of the warm hip bath in this disease. I have seen cases in which the most extraordinary relief was obtained by applying twelve leeches over the region of the gall-bladder, and then placing the patient in a hip bath.

Sometimes it happens that the symptoms return again and again. Here you cannot repeat the venesection; you must employ leeches, the hip bath, warm fomentations, opium, and everything calculated to relieve pain and spasm. Watch your patient carefully, guard against inflammation, and if any inflammatory symptoms of the duodenum arise (but this is rare) take proper measures to obviate them.

A few words now with respect to what has been termed spasmodic jaundice. This form of the disease occurs independent of inflammation of the stomach or duodenum, and independent of disease of the ileum, brain, or liver. It appears to be an essentially spasmodic disease, but the situation of the spasm has not as yet been accurately determined. It is supposed to exist either in the gall-bladder, or in the biliary ducts, or in the duodenum. If the biliary ducts and gall-bladder do not possess muscular fibres, we must place it in the duodenum; but whatever may be its seat, it presents the characters of a spasmodic disease. It seems to be excited by the same cause, and yields to the same treatment as other spasmodic affections. It generally occurs in hysterical females, and in hypochondriac and nervous persons, and disappears under treatment calculated to allay nervous excitement. Its exciting causes seem to be chiefly sudden and violent mental emotions, or the taking of a quantity of indigestible food; and it frequently terminates by the discharge of flatus upwards and downwards. It resembles in a certain extent the last-mentioned form of jaundice, but differs in two particulars; first, the pain is relieved by pressure, which generally increases it in the former species. Dr. Pemberton, in his Treatise on the Diseases of the Abdominal Viscera, dwells strongly on this point. The second peculiarity is, that in this disease the attack is more sudden. In the case of jaundice from gall-stones, the patient has some degree of pain and uneasiness before the violent symptoms appear; but in this form they exhibit themselves in a sudden and unexpected manner. The disease too is accompanied with hysterical or convulsive symptoms, and there is sometimes a copious flow of limpid urine. All these circum-

stances are important in forming a correct diagnosis.

The best treatment for this spasmodic jaundice is, after acting on the bowels by warm purgatives, to use fetid enemata, and prescribe a mixture composed of ether, castor, and ammoniated tincture of valerian and opium, which are of the greatest use when the bowels have been opened. In this form, as well as that which we have been lately considering, the fact is, that if you expect any good from opium, you must not give it until the bowels have been opened. Opium and antispasmodics have, I am convinced, often lost their character for utility, from being given at a time when the exciting causes of disease are still present in full energy; and the failure of these powerful auxiliaries is to be attributed to the neglect of proper measures for reducing intense irritation. In the spasmodic jaundice, tobacco injections would be likely to produce beneficial effects. Generally speaking, however, you will not find it necessary to have recourse to such a vigorous remedy, as the disease is most commonly observed in delicate females, and yields readily to milder treatment. Indeed, it will often disappear spontaneously, and without any apparent cause.

The last form of this disease which we have to consider, is jaundice connected with an affection of the brain; and this is a very interesting and curious subject. I shall not, however, enter upon it at present, as I intend to reserve my observations on this point until we come to treat of diseases of the nervous system. I have alluded to this variety on a former occasion, and referred you to Dr. Marsh's paper on jaundice in the Dublin Hospital Reports, in which you will find several cases of it which came on as the result of disease in the head. Broussais admits that it is dependent on, and secondary to cerebral disease; but he thinks there is another link in the chain of connexion, and that this is duodenitis. He believes that we have irritation, first in the brain, next in the duodenum, and then jaundice. Several practitioners of great authority, on the other hand, assert that the cerebral affection produces jaundice at once, without the intervention of duodenal inflammation. In the present state of medical science we cannot determine this point.

A few observations now with respect to the discharge of fatty matter from the bowels. The reason why I introduce the subject here is, because it has been frequently observed in connexion with jaundice and disease of the upper portion of the digestive tube. In the last number of the Medico-Chirurgical Transactions, a great mass of interesting matter has been published on this subject by Dr. Bright, Dr. Elliotson, and Mr. Lloyd. I shall give you a short analysis of these papers; and I wish to impress this upon your recollection, that when you go into practice, the study of this affection would form a subject worthy of your investigations; and that any attempts on your part to clear up the difficulties which complicate this singular form of disease will be advantageous to the cause of science.

Dr. Bright gives three interesting cases of this disease. In these the discharge was in the form of oil or semi-concrete matter,—it floated on the top of the fæces, and had a fetid odour. There was also in these three cases a remarkable similarity in the pathological phenomena. The first case exhibited symptoms of jaundice, diabetes, enlarged liver, and discharge of fatty matter: on dissection the liver, pancreas, and duodenum were found diseased. The second presented symptoms of jaundice and disease of the liver, in addition to the fatty discharge: on dissection the liver was found healthy, but there was a similarly diseased condition of the duodenum and pancreas; there was malignant disease in both. Nearly the same symptoms were observed in the third case, and after death disease was found in the pancreas, small intestine, and the pylorus was in a state of extensive ulceration. In all there was chronic disease of the pancreas and duodenum terminating in jaundice, from obstruction of the gall duct, and accompanied by discharges of fatty matter from the bowels. Here are three cases, in which there is an extraordinary similarity in the symptoms and pathological appearances. Dr. Bright is inclined to think that these discharges may be connected with disease of the pylorus and duodenum, but particularly with malignant affections of the pancreas, and gives the particulars of some cases in which disease of the pancreas was suspected, and in which, from the absence of this symptom, he was induced to give a contrary opinion, which, on dissection, turned out to be correct.

Mr. Lloyd's case resembles those detailed by Dr. Bright, inasmuch as it presented the phenomena of jaundice with obstruction of the gall ducts, disease of the head of the pancreas, and contraction of the duodenum. So that you see we have here four cases in which there was disease of the duodenum and disease of the pancreas, together with the occurrence of jaundice. I may, however, mention one fact, which you should be acquainted with; in Mr. Lloyd's case the pancreatic duct was found to be obstructed by calculi.

Dr. Elliotson commences his paper by alluding to that peculiar substance called ambergris, which is frequently washed ashore by the tide in several countries, and which is supposed to be a morbid production from the intestinal canal of the Physeter Macrocephalus, or spermaceti whale. The quantity found in the intestinal canal of this animal is said to be enormous, and instances are mentioned, in which this substance was found to amount to 182 lbs. in the body of one of these animals. Dr. Elliotson proceeds to give cases from the records of medicine and from his own experience, in which a fatty discharge took place in the human subject. Of this he quotes cases from Mællen-

brochus and Mæbius in the Ephemerides, but one in particular from the works of Fabricius Hildanus, which I shall briefly recount. "A pious matron of Hilden had been for a long time subject to severe pain in the stomach, which became at length much worse, when one day the pain extended all over the abdomen, and after very severe pain and suffering, she discharged about three pounds of fat, which was of a pure quality, had no smell, and was preserved by her for many years." This woman recovered perfectly. Dr. Scott, of Howick, mentions the case of a servant girl, who had been treated with purgatives and injections, under the supposition that her disease was colic, and who, after two or three days' suffering, discharged a quantity of fatty substances, about the size of nuts, beans, and peas, which burned like fat when thrown into the fire; this patient also recovered. Dr. Babington gives another case, which had been mentioned to him by Sir E. Home, in which we find that a lady, who had been suffering, as it was supposed, from gall stones, happening to take castor-oil draughts to open her bowels, passed a quantity of fatty matter. Another case is detailed by Mr. Howship, where a lady who had been attacked with pain, jaundice, and fever, passed a quantity of this substance with the subsidence of those symptoms. The fatty matter in this case was discharged after the lady had taken a pint of olive oil upon the recommendation of Dr. Simpson, of New Malton. Dr. Turner, of St. Thomas's Hospital, mentions the case of a female who laboured under an hysterical distention of the belly, and who passed quantities of this substance, specimens of which are preserved in the Hunterian Museum.

Sometimes these fatty discharges are found in the concrete, sometimes in the semi-fluid form. Dr. Elliotson mentions the case of a patient who had phthisis, diabetes, and discharge of fatty matter; thus he was at the same time passing fatty substance, large quantities of saccharine urine, and spitting up pus and softened tubercular matter. Between all these and the agonising pain which he suffered, he became in a short time completely exhausted and sank rapidly. The fatty matter discharged in this case was shown to Dr. Prout and Mr. Faraday, and Dr. Prout stated he could not distinguish it from human fat when heated. Tulpius is quoted by Dr. Elliotson as relating a case where *fat was discharged from the bowels and bladder*. Here is the quotation:—"But what do we say of Margaret Appelmania, an innkeeper, who, in her 70th year, passed precisely the same fat, both from the intestines and the bladder, and likewise without fever, emaciation, or colliquative excretion. Towards the close of the disease, however, she did become feverish, and in consequence, so emaciated, that death found her little else than a juiceless dried up corpse." A case similar to this was communicated by Mr. Pearson to Dr. Elliotson. The symptoms were suppression of the biliary secretion and a copious discharge of *oil from the bowels and bladder*, which, it is stated, formed good soap when mixed with alkali. Dr. Prout has observed fatty matter passed with the urine, and considers this symptom as an indication of the probable supervention of malignant disease of the kidneys and bladder. The last case is from the *Annali Universali*, which is quoted by Dr. Johnson in the Medico-Chirurgical Review for July. In this case the patient, after fasting for a considerable time, took a quantity of indigestible food. On the evening of the same day he had an attack of vomiting: at first blood was thrown up, and then he ejected this fatty substance to the enormous amount of thirty pounds. There was, in this instance, a sudden and extraordinary emaciation, the patient was so reduced in the space of a few hours, that the skin hung in loose folds about him. He recovered in twenty days, but with great loss of bulk.

Let us inquire now what is the nature of this symptom. Is this fatty matter a morbid secretion from the liver, from the pancreas, from the mucous membrane of the stomach, or from the intestines? There are facts to show, that in certain cases this disease cannot be explained by a reference to any of these circumstances. It seems plain, too, that Dr. Bright's suggestion of referring it to malignant disease of the duodenum and pancreas, and the diagnosis which he would seem to found upon it, cannot stand here; for the symptom upon which he attempts to establish a diagnosis—a discharge of fatty matter—occurs in persons who have recovered from the disease. We cannot suppose that they have been labouring under malignant disease of the duodenum and pancreas when they have recovered; and that a recovery may take place is proved by Dr. Elliotson's cases. It is quite probable, however, that if the irritation, or whatever it be that produces this discharge, should continue, it may bring on fungoid and malignant disease; but that the discharge of fatty matter is significant of the actual existence of such a condition is not borne out by these facts. Well, are we to look upon this discharge as a secretion from the liver? I think we cannot, because we have seen that in Dr. Bright's three cases the biliary duct was obstructed by disease of the duodenum and pancreas. I may mention, too, that in some cases, where a dissection was made, the liver was found perfectly healthy, and the gall-bladder in its normal condition, full of pure bile. Taking this and the foregoing fact into consideration, we have proofs that this fatty substance, in some cases at least, cannot come from the liver. Does it proceed from the pancreas? It would more naturally come from the liver than the pancreas, for the liver does actually secrete a certain quantity of fatty matter; but there is no substance of this kind found in the secretion of the pancreas, which is considered to bear a strong analogy to that

of the salivary glands. Besides, in the case mentioned by Mr. Lloyd, where the duct of the pancreas was obstructed by calculous secretions, this fatty matter has been discharged; and hence we cannot, I think, refer it to the pancreas. Whence, then, does it come? Is it a secretion from the surface of the intestines? This is a question which it is hard to determine. We do not yet know, nor have we ever met with, that state in which lesion of structure in the mucous membrane of the intestinal canal has been followed by a discharge of fatty matter. We have discharges of serum, lymph, blood, and pus, from the surface of the intestines, according to the nature of the disease; but we know of no pathological condition as the result of which fatty matter may be produced. Again; cases of every known form of disease in the liver, pancreas, and intestinal canals, occur without this discharge at all. In the present state of medicine, the probability is that this discharge is the result of a sort of metastasis of the secretion of fat from the other parts of the body, in which it is usually deposited, to the surface of the digestive tube, where it is poured out somewhat in the same way as in cholera; the fluids of the body are rapidly absorbed and eliminated by the intestinal canal. This supposition, without attempting to bring it forward as the true solution, furnishes us with the best explanation of the case. In the case of the patient who discharged this substance by stool and with the urine, the emaciation came on rapidly, as if all the fat of the body had been absorbed and carried out of the system; here, too, the fat was discharged from another mucous surface. In the other remarkable case, where a vast quantity of this substance was thrown up by vomiting, the emaciation was so great, that the patient's skin hung in loose folds about him. When we reflect, too, that there is no recognised disease of the intestines, liver, or pancreas, to which this discharge can be referred, we cannot help believing that it is the result of a metastasis in the secretion of fat.

The next point in this matter which we have to consider is, what is the best mode of treatment. This question, I believe, cannot be answered at present; nor can our practice be anything but empirical until we have more light thrown upon the subject. With a view to increasing our knowledge, I beg of you to make this disease the subject of your practical investigations, and to have a look out for this discharge, because I believe it often occurs unnoticed, from our neglecting to inspect the evacuations.

CLINICAL LECTURES

DELIVERED BY

G. J. GUTHRIE, ESQ., F.R.S.

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At the Westminster Hospital.

LECTURE XII.

Diseases of the Bladder and Urethra.

GENTLEMEN,—The first case of leucorrhage from the urethra occurred in a gentleman living in Cockspur-street, who had had a catheter passed by a surgeon of great reputation and ability in the morning, without either pain or inconvenience. On his return home he found there was a considerable oozing of blood, which continued during the day, and induced him to send in the evening for his surgeon, who was unluckily out of town; the bleeding increased in the night, and in the morning early I saw him. There were several tubs of ice and water in the room, all apparently containing a considerable quantity of blood; his face was deadly pale, the pulse scarcely perceptible; and he said he had bled a pailful, which was of course an exaggeration. The bleeding was arrested in a few minutes by pressure applied in the proper place, (on the perineum,) and did not return.

The second occurred in the case of a tradesman, who had passed a common soft bougie for himself, the point of which had caught on some small opening, and, it is presumed, penetrated into it; he bled for two days and two nights, when I was desired to see him in Paddington-street. I found him kneeling in bed, and straining violently to pass his water and the blood which came with it, but which came with great difficulty, as the bladder contained a good deal of coagulated blood, which had passed backwards into it. He was as white as a sheet, and fell back in his bed, nearly insensible, almost as soon as I entered the room, having, as he said afterwards, passed several quarts of what, as it all coagulated, he considered to be pure blood. As urine and blood coagulated together when out of the body in equal proportions, it is probable that only half of it was blood. This bleeding was also arrested in a few minutes by pressure, and did not return.

For the purpose of knowing where to make the pressure, any light, flat, and narrow, but firm, substance should be prepared, such as a piece of cork, which can always be procured. The patient should then force all the coagulated blood out of the urethra; and, as the bleeding usually takes place in these cases from that part which is anterior to the triangular ligament, pressure can readily be made upon it externally; but as it may be made a little before or behind the exact spot, in either of which cases it would be useless, the selection of that spot

must be well made. This is done by beginning as far back as possible, and gradually bringing forward the finger by which the pressure is made. At a certain point the flow or dripping of blood will be arrested, and the precise spot from which it comes will be in all probability a little behind where the finger rests, a fact which can also be easily ascertained, by carrying the finger a little backwards, when the blood will again flow. The bit of cork or pad can now be duly placed, and the patient should be desired to make pressure on it himself, and which he can often more readily do than an assistant.

When the hæmorrhage comes from the prostatic part of the urethra, cold water, rest, and an opiate will suffice to stop it, provided it has been caused by some accidental circumstance, and does not arise from disease of a fungous or malignant nature, in which cases nothing can prevent its return, or even its continuance.

A gentleman sent for me, having passed a bougie for himself, which he was sensible was not only a little larger than his usual size, but that it had also caught on some fold at the entrance of the bladder, and had passed it with a jerk; a continued bleeding was the consequence, accompanied by an urgent desire to make water, but which appeared to be blood, or nearly so. The desire soon became more urgent, and the difficulty of passing any thing greater, until at last complete retention ensued. There appeared to me to be two evils;—one, retention of urine from having passed too large a bougie; the other, hæmorrhage and irritation of the neck of the bladder from having abraded a spot on its surface, and which was augmented by the sympathy which always exists between it and any very irritable part of the urethra. In order to relieve the retention, I passed a small gum elastic catheter, which drew off a quantity of bloody urine, and relieved the irritation and desire existing at the neck of the bladder, and which soon afterwards subsided. I then directed an opiate to be given, and that he should go to bed, which he did; and although some blood oozed from the urethra, and he passed dark coloured bloody urine for twenty-four hours afterwards, indicating that some blood had found its way into the bladder, the bleeding did not return, and I attribute the subsidence of it very much to the quietude of the bladder after the distress had been removed by the passing of the catheter, and the obstruction to the passage of the blood and urine through the urethra had been removed. It is not long since you had in the hospital a case showing the nature of a hæmorrhage of this kind into the bladder, from an injury to the urethra, and filling it up so as to create great distress. The proper practice to be pursued in such cases is to inject the bladder with warm water through a catheter with a single large eye on the side and a hole at the end, or by a double catheter, by the motions of which, in the first instance, the large coagulum may be in some degree broken up, when it is more readily dissolved by the water, which it ultimately is, so as to leave the urine quite clear in a few days, provided no more blood is poured into it.

When the hæmorrhage does not come on from any distinct accidental cause, it may be somewhat difficult to ascertain from whence it comes. An old medical friend of mine passes occasionally dark bloody coloured urine, which gave him much alarm, and on account of which he has also consulted some gentlemen, eminent from their knowledge of these diseases. The blood was supposed to come from the kidney, and that it was really blood was readily shown by coagulating a small quantity in the urine by the application of heat, and he took many different kinds of medicines in consequence without effect. As some little difficulty seemed to exist on the first attempt to evacuate the bladder, and as the bleeding might arise from the irritation caused by a small stone, it became necessary to examine the urethra and bladder. Nothing could be made out, save a slight difficulty on entering the neck of the bladder with the sound No. 12, and which part offered a positive obstruction to No. 14, surmountable only by a little management of the point of the instrument. He has, in fact, the bar, or dam, I have pointed out as occasionally forming at this part, independently of any disease of the prostate; and as he now finds that his urine is clear for many days together, and that he can always cause it to be a little bloody, either by passing a large bougie or by a little more than his ordinary exercise, he has acceded to my original opinion, that the blood comes from some enlarged veins at the neck of the bladder. He can now pass No. 14 through it with ease, and is much more free from the passage of blood than formerly. He therefore uses the solid silver sound once a-week, and has abandoned that of internal medicine, satisfied of its inutility. I was led to believe that the veins of the neck of the bladder were enlarged, first, from there being obviously some derangement of structure as well as of function at the part, and from perceiving that the veins of the nose, as well as those of the glans and prepuce, were very blue and tumid, appearing as if they did not duly transmit their blood through them, and it struck me that those of the neck of the bladder might be in the same state. The sound only did good, or does good, by preventing the increase of the bar, and thereby rendering an undue action of the bladder unnecessary; the part is, in fact, at rest.

Hæmorrhage from the neck or other part of the bladder may depend upon this simple source, or on one that is malignant. In the course of the last summer I saw a gentleman, in consultation with Dr. Prout, Sir Astley Cooper, and Mr. Brodie, who continually passed great quantities of blood, partly mixed

with his urine, and partly coagulated. The clots of blood which came away were not, however, formed of pure coagulated blood, but were mixed with shreds, and apparently a medullary matter, which left little doubt of the hæmorrhage proceeding from a fungous tumour of the bladder. He died soon afterwards quite ex sanguine, having returned home despairing of relief, and an examination after death proved the correctuess of our suspicions. I had at the same time in the hospital a case of apparently equal danger, but which had a happier result. I take the history of it from Mr. Foote's case book, being one of those which obtained for him my prize of five guineas for the best selection and history of surgical cases which occurred in the hospital during the last year.

John Warrener, ætat. 42, a brass-founder, was admitted into Percy Ward, under Mr. Guthrie, June 12th, 1833. Resides in Duck-yard, Duck-lane; is a man of middle size, and rather muscular; skin rather sallow; nervous temperament; has had a gonorrhœa eleven or twelve times; has served as a marine twelve years, four years in the West Indies and four and a half in the East, but was never affected with any of the diseases of the country; he has suffered from bleeding from the bladder at occasional intervals for ten years; when it first came on he had a discharge, which he concealed, and for which he was not taking any medicine; he then came, on account of the loss of blood, under the care of the medical officer of the navy at Chatham, by whom he was attended for three or four weeks, and then discharged as incurable. He was told at the time of his dismissal that he had a diseased bladder and stricture. The hæmaturia after a time left him, and he continued well for six or eight years, when a drinking bout brought it on again. He was admitted into the hospital for retention of urine, which came on also after drinking to excess, to which he is rather partial; this was relieved by passing the catheter. Is not married; has not received any injury to the spine or abdomen; does not suffer from pain in the back or above the pubes; when the bladder is so far distended as to require its evacuation, it causes so much pain that if he is asleep it wakes him; he is immediately relieved by emptying it, and he cannot retain his water long, in consequence of the pain it gives him, which is chiefly felt near the frænum preputii, the evacuation being followed by scalding. The hæmorrhage has returned only within the last few days, and he considers that he loses a pint of blood daily; the fluid, when first evacuated, is of a bright red colour, as if it were all fluid blood, but after standing awhile a separation takes place and the blood coagulates and falls to the bottom of the vessel. The stream of urine has generally been of a good size and never twisted or double. Tongue clean; bowels open; appetite good; pulse regular, but rather jerking, 86; sleep disturbed.

15th. Mr. Guthrie passed a catheter, and said that there was a slight stricture in the urethra. He inquired concerning the shape of the clots of blood, and being told that they were round, he said that the round ones came from the bladder, but that those of a vermiform shape often came from the kidneys, or rather took the form of the ureter in their descent from it. He then ordered an elastic gum catheter, with one eye, to be passed and retained in sight, care being taken that it did not exceed the commencement of the urethra more than one inch, for fear of injuring the coats of the bladder, and that it should be passed full an inch, lest the eye or hole should irritate the neck of the bladder, for which reason he said he had them made with a hole at the end only; a common bladder was to be attached to the end of it to serve as an external reservoir, into which the fluid might continually pass, and without effort, so as to prevent any accumulation and distention of the internal bladder. He was also ordered

℞. Sulph. alum, gr. iijj.
Sulph. magn, ℥iij.
Acide. sulph. dil., gtt. v.
Inf. rosæ. comp. ℥iss.

Fiat. haustus ter die summend. To keep perfectly quiet.

Mr. White, who saw him afterwards, called his pulse the hæmorrhagic one.

19th. Sleeps well, being undisturbed now by the notice to empty the bladder, which he used formerly to receive. The first night after the instrument was passed he could not keep it in, in consequence of the pain it gave him, and he was rather sulky when it was replaced; he did not at first approve of the second, or adventitious bladder, which he thus carried about with him; he is, however, now tolerably reconciled to it, and is convinced that he is improving; he suffers very little pain, and only at the frænum preputii; the stream of water is becoming clearer every day; the presence of the instrument has caused a slight discharge from the urethra. Medicines to be continued.

20th. Mr. Guthrie directed the removal of the external bladder, as it had produced the effect desired; to keep the catheter in and well plugged, its contents to be drawn off every hour; a large catheter is to be passed as the urine dribbles away by the side of the one now in the urethra.

22nd. Continues improving; his water is clear, and he passes it in considerable quantity; No. 10 catheter has been passed into the urethra.

25th. Says he is getting well fast; can retain his urine three or four hours without pain; bowels kept open by medicine. The catheter does not cause any annoyance, it is not yet of the full size of the urethra, but to be gradually increased in size, so as not to induce irritation. Medicine repeated.

29th. The catheter was altogether removed

by order of Mr. Guthrie. He can now retain his water for a long time (comparatively speaking) without pain or inconvenience.

July 9th. Dismissed cured.

I believe that as much good was done, in this case, by keeping the bladder perfectly quiet, and preventing, as far as possible, any action of it, by allowing the urine to flow always through the catheter, as by the medicine. It is a mode of practice I have followed in other cases with success; and if the sulphuric acid and alumen had not proved beneficial, I should have substituted for them the powder of galls and opium, in imitation of Ruspini's styptic, which is supposed to be made of these articles, and which I have known to be advantageously used in these as well as in other internal hæmorrhages, and particularly from the kidney, and in those which occur in females.

Dissatisfied with the application of caustic to the surface of a thick and narrow stricture, I was, fifteen years ago, induced to try the effect of its application to the internal surface, by introducing it into the stricture. My attempts did not succeed in so satisfactory a manner as I could wish, the caustic rarely doing enough to be effective. The method I adopted was, to introduce a hollow silver tube into the stricture, the single eye of which was placed in a narrowed part of the instrument, half an inch from its extremity, so that the sort of bulb thus formed, on being passed through the stricture, might, by catching or drawing it back, bring the hole or slit in the narrowed part or neck of it, just opposite the internal surface of the stricture. Into the tube a platina wire, carrying at a proper distance from its extremity a piece of caustic, moulded with a hole in its centre for the wire, and duly secured, was passed, and it looked as if it would act well, but it did not do much; and as I rarely then or do now have recourse to caustic, it has been of late altogether disused. In 1825, M. Ducamp, of Paris, published a method by which the argentum nitratum was to be applied to the inside of a stricture also, and he was led to believe that he could accomplish this object, however small the opening was, provided it was passable. A model of the face of the stricture having been first taken, and the opening being ascertained by a portion of the modeling composition having entered into it, a hollow tube of gum elastic, graduated by inches and lines, was passed down to it, having an opening at the end, and these openings were not all made in the centre, but as far as could be imagined they corresponded with the openings which might take place in the face of a stricture, or one was made for each particular case. Through this opening a small spoon or curette was protruded by a stillet; and as it had been filled with argentum nitratum in powder, which was afterwards melted by the flame of a candle, he hoped it could then be safely applied to the inside of the stricture. It was found, however, to be difficult of application, indeed it frequently could not be applied; the curette, with every care that could be given, would not enter the stricture, and the caustic was wasted on the surrounding parts.

Lallemand, in order to prevent this evil, made an alteration in the instrument, which brings it nearly to one of the ancient English ways of using the argentum nitratum. It is to introduce the caustic on a stillet through a tube or hollow bougie, so that when the armed stillet is duly placed in the tube it looks like a common bougie. This is to be introduced into the stricture according to a measurement previously made, when, by withdrawing the tube, the stillet being held perfectly steady, the end of it, which is defended by a small button, forming the extreme point of the bougie, remains, and the caustic, contained in a similar spoon or curetté to that of Ducamp, is exposed, and ready to be turned to any part of the circle which may require its application. This mode of proceeding is much more simple and easy of execution, as well as more effective than the other. It is liable, however, to this particular objection, that it cannot be used until a bougie of the size of No. 3 or 4 can be passed through the stricture, the effecting of which constitutes the principal difficulty in the cure, whilst all the other objections against the use of caustic, except that of making a false passage, remain in full force.

Lallemand says he has applied caustic in this manner to all parts of the urethra with success, and in one case he particularly specifies as far as the neck of the bladder and the prostatic part, at a distance of nine inches and a half from the orifice of the urethra, which was, however, naturally a long one. The relation of this cure, from page 60 to 91 of his work, is very interesting, and his subsequent remarks on the use of the argentum nitratum in diseases of the prostatic part of the urethra are deserving of attention, although the prejudices existing against that remedy in this country will not admit of their application, which is the less to be regretted, as the object may be attained by other, and apparently milder means.

With reference to the assertion that the use of caustic is followed by a more permanent cure than when any other mode of proceeding is adopted, much reservation is necessary. When the whole of the diseased part is destroyed by it, and it was not originally of much extent, I am inclined to believe that the statement is correct, and that there is less liability for a return of the complaint, than when the cure is accomplished by mere dilatation, although this is by no means certain. When the disease has been of long standing, and of some extent, the superiority claimed for the caustic cannot be admitted. I have three gentlemen now under my care, who had the argentum nitratum applied, one 40, one 35.

the other 30 years ago, by Sir E. Home, and they have had it done since, yet they all have now narrow strictures at the same place where they then existed. The occasional use of the bougie after a cure by caustic, is admitted, however, to be indispensable in most cases, even by Sir Everard Home, its firmest advocate; and the observations which have since been published, and that I have had opportunities of making, confirm, rather than refute, the admission.

ANALYTICAL TRANSLATION OF M. ALIBERT ON THE DISEASES OF THE SKIN.

BY SAMUEL PLUMBE, M.R.C.S.

Late Senior Surgeon to the Royal Infirmary for Children, &c.

Pemphigus.—Species III.

This disease manifests itself on one or more parts of the body, by bullæ or vesicles of different forms and dimensions, which may or may not be surrounded by a light band of inflammation. These bullæ or vesicles, which are formed by the elevation of the cuticle, are filled with a limpid, transparent fluid. In a few days they wither and shrink, or break and leave the cutis denuded; the fragments of the cuticle form on the cutis a sort of eschar, of a blue or blackish appearance. Redness, and a blistering, burning sensation, attend the disease in its progress.

The disease is acute or chronic. The acute form generally announces itself by lassitude, and a general feeling of illness, and by wandering pains in the limbs. It arises most frequently with shiverings, or an appearance of febrile excitement on the countenance. The tongue is covered with white fur, and thirst and restlessness prevail, when a tumefaction and redness of the skin of the part shows itself. The individual attacked experiences severe pains over the whole body, the heat of skin is excessive, and the symptoms, altogether, are those of violent inflammation. Almost immediately there appears on the skin, red and purple discolorations, of a round or oval form, prominent and hard, but yielding to the pressure of the finger. These are disposed in groups, or are sometimes more dispersed, and severe sensations of pricking, itching, &c., are felt in the spots affected, whether occurring on the extremities or trunk. They show themselves on the face, eyelids, cheeks, &c., and simultaneously or successively, the bullæ form, and in the course of a single night may arrive at the size of a small nut or almond. The eruption is so rapid, that often in the course of a single night, the whole body may be covered. They are then perfectly transparent, and sometimes surrounded by an areola of inflammation. The fluid is viscous and albuminous, resembling the white of an egg. When the accompanying fever is adynamic the fluid is of a deep red colour, and putrescent.

On the fifth or sixth day the vesicles break spontaneously and dry up, the cuticle becoming cracked and broken, and peeling off, shows the skin of a bloody red colour; as the disease approaches its termination, the vesicles newly formed have less volume and malignity of character, and go through the same course. The eruption, however, may extend itself so much that the patients are unable to move, and spasms and tremor of the extremities attack them. To their local pains are added severe suffering in the internal organs, and prostration of strength. Nevertheless, towards the third week the eruption dries up, leaving nothing on the skin but the appearance of crusts of a brownish colour, which eventually dropping off, leave no cicatrix, or scar, though the skin continues for some time discoloured.

The active form has many varieties. We noticed a case where the patient was attacked in the night. A female suffered from painful and irregular menstruation, and was attacked with violent pains in the head and epigastric region, constriction of the throat and chest, and other hysterial symptoms. About midnight, there arose, on all parts of the body, an eruption of vesicles, without redness on their borders. Their appearance was preceded by sensations of itching and burning. The patient slept, though agitated by frightful dreams. The pulse was irregular; but what was surprising in this case, the vesicles thus suddenly formed disappeared before morning like soap bubbles!! The fluid was re-absorbed, leaving merely redness of the spots on which the vesicles were situated.

I have attentively watched the course of the chronic form in the hospital of St. Louis, where it often appears, and have seen occasion to withdraw it from its original place among the 'dartres,' to place it here. It is truly a chronic disease, for I have seen it often con-

tinuing for several years. The bullæ appear of a mild character and form, and disappear successively. Trifling attacks only of fever take place in its course, and appear to be consequent on the local irritation.

The character of the vesicles resemble those produced by boiling water; the pain attending them is great; and the patient very often breaks and rubs off the vesicles. It is sometimes, on its first appearance, confined within a limited space on the surface, but occasionally it spreads as rapidly and extensively as herpes.

In the chronic form only it is found exhibiting the character of successive eruptions, the acute appearing and passing off speedily. When the disease is chronic, and the vesicles have arrived at their full development, they break like soap bubbles, and dry up on the skin in a wrinkled form, and sometimes the fluid is re-absorbed before rupture of the vesicle takes place.

The rapidity with which the eruption increases is different in different cases: in some it closes its career very soon; in others the vesicles do not attain their full magnitude for many hours, and some remain extremely small, and retain a globular form, the larger bearing in their external figure the resemblance to the half of an almond nut or egg. In many instances the collapsed cuticle adheres to the surface of the skin. We observe that in the progress of the disease the serous fluid changes its colour, being in the early stage a light yellow, and towards the end a livid red.

Sometimes the whole surface of the body is invaded by this disease, and is threatened with complete and entire suppuration and abrasion. An ichorous humour escapes from the corners of the eyes, which is disposed to dry and form scabs in that situation, enlarging gradually, and spreading towards, and even on, the conjunctiva. The lips swell, crack, and ulcerate to the extent of absolute deformity. The lining membranes of the digestive organs partake of the inflammatory action, and catarrhal symptoms in the same way are originated. The lining membranes of the nose, mouth, throat, &c., participate; the tongue is furred; and, in short, all the mucous membranes, more or less, participate in the disease. Microscopic examinations in two cases have led to the discovery of an analogous affection of the intestinal canal in fatal cases; and the patients had, during the latter period of existence, bloody evacuations.

M. Alibert furnishes us with the results of the post-mortem examination of a female who died of chronic pemphigus. He says the cuticle was separated from the cutis with extreme facility, and that it showed the figure of the ampullæ, blebs, or vesicles very distinctly; that the lining membrane of the mouth was covered with aphthous eruptions, all superficial, a thin blackish pellicle being spread over each speck. The face and tongue were deeply affected by it, and the latter, partially destroyed, exhibited thick scabs, from under which issued a thick and glutinous fluid. The œsophagus, in other parts healthy, presented about its cardiac termination a slight adhesion between the mucous and muscular coats, and a serous fluid was found in the adjacent intervening cellular structure. The intestinal canal had sanious ulcerations scattered over its mucous lining, and two large vesicles were found in the colon *.

The constitutional symptoms may be such as indicate determination to, or inflammatory action of, the vital organs.

[M. Alibert details here the symptoms of such consequences at large, and furnishes us with a train of consecutive symptoms, such as are certainly never seen in this country as connected with pemphigus or pompholyx. The disease, as it is seen here, has never been found in connexion with that of vital organs, although much disorder of a certain part of them may occasionally prove an adequate cause.]

The disease is, according to M. Alibert, seen in France accompanied by the low fever of absolute starvation. His description is that of a man with a feeling heart, but too long for the pages we are able to set apart for his work.

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* It may, perhaps, be unnecessary to remind our readers of our particular office, as regards the work before us, i. e. that of an analytical translator. Many of them will, as we do, entertain great doubts of the possibility of the existence of a *vesicle* on any part of the mucous membrane of the bowels.

Etiology.

A mysterious veil appears to conceal the causes producing this disease. Persons who have had small-pox, or other cutaneous disease, or gout, or those who suffer from suppressed menstruation, that of hæmorrhoids, are the most subject to it. The ancients thought an acrid humour existing in the blood its chief cause.

We are obliged to guess at the causes of pemphigus. Different authors have put forth their theories, and many have done so without being aware that their notions have been entertained and even printed before. A German physician entertains a notion that the fluid of the vesicle is ruinous in its character, as it has appeared where his patients have suffered from retention of urine. Another thinks that changes of the atmosphere are powerful agents; he thinks that the atmospheric air becomes at intervals of a pernicious quality, and that it irritates the vessels of the surface.

Mr. Plumbe tells us that it is occasionally epidemic, and that it appeared in that character on the banks of the Thames on each side at Chelsea, in 1816, and that it extended many miles around. Climate appears to influence very materially this disease. It is more common in England and Germany than in France, Spain, or Italy; but an instance is recorded, where an individual was never free from it from the time he left his native home till he returned.

Bad living and intemperance are always ascertained to have been among the most powerful and operative causes of this disease. The influence of the seasons of the year in producing it are equally remarkable, the disease appearing in many cases on the commencement of spring, and continuing troublesome through the course of summer. In all cases the sense of burning heat precedes the appearance of the vesicle, and there are ample reasons for considering that in many cases the latter tends to avert serious constitutional disease, or inflammation of vital organs.

Persons of sedentary habits, the occupants of prisons, those who are badly fed and hardly worked, and gourmands particularly, are most frequently subject to it. Moral causes, depressing the powers of the constitution, are also frequently traceable in individual cases.

Treatment of Pemphigus.

Our knowledge is, without doubt, not extensive as to the treatment of this disease. A more intimate knowledge of the seat of the mischief, as regards the tissues in which it originates, appears necessary. In ordinary cases, where evidence of malignity does not exist in the constitutional symptoms, it runs its course safely and calls for no material interference. The ordinary drink may chiefly consist of butter-milk and other diluents. Stimulants or sodorifics are not necessary. Cream of tartar drink is useful, and if the patient cannot obtain sleep a draught of musk and camphor has been found to procure it.

But the disease is often symptomatic of other maladies. It is complicated with many such, as synochous, catarrh, and adynamic fevers. In such cases emetics of tartarised antimony and ipecacuanha ought to be employed. If there is much prostration of strength, bad breath, and if the vesicles assume a black appearance, quinine and other tonics must be employed. If the case is that of an aged person, who has not had the advantage of good nourishment, cordials are advantageous, as have been remarked by Willan and Bateman. Mr. Plumbe advises calomel in combination with purgatives, to be afterwards followed by mild tonics. The external phenomena of pemphix approach very nearly to those of the second degree of erythema. The external treatment must not be neglected; the bullæ, or ulcerations, should be dressed with mild cerate. Starch baths and emollient pediluvia are useful. The pain is relieved by the use of decoction of poppy heads, &c., and to arrest the progress of unhealthy suppuration lotions of acetate of lead are necessary, as also the solutions of the chlorurets of sodium and lime of labanaque.

M. Alibert inquires whether this disease is idiopathic, and tending to connect the condition of the blood, or connected with hysteria, amenorrhœa, stone in the kidneys or bladder, suppression of the lochia, low fever, and scurvy? He recommends his readers to consult no less than forty-one other authors, in which list the translator has the honour of finding his own name.

Foreign Medicine.

Employment of Iodine against Mercurial Salivation.

In the Hospital of la Charité at Berlin, Dr. Kluge has confirmed, by numerous experiments, the observations of Dr. Knod, as to the efficacy of iodine in mercurial salivation. He has seen, under the influence of this medicine, the tumefaction of the glands disperse, the salivation arrested, and the mercurial ulcerations cicatrise. All these effects are manifested four or five days after the administration of the iodine, in the dose of two grains a-day, gradually increased to the amount of four grains. The formula of Dr. Kluge is as follows :—

℞. Iodine, very pure, gr. v.,
Rectified alcohol, ℥ij., dissolve and add
Cinnamon water, ℥vss,
Simple syrup, ℥ss.

At first the dose each day is to consist of half a drachm of this solution, then a spoonful morning and evening.—*Algemeine Med. Zeitung.*

Treatment of Blennorrhagia.

To cure gonorrhœa quickly, whatever be the period of the disease, M. G. A. Pitschaaf prescribes turpentine administered in the following manner:—Peppermint water, four ounces, Venice turpentine, half a drachm, solution of gum arabic, sufficient to make an emulsion, to which is to be added a drachm and a half of bitter almond water, and half an ounce of orgeat; the dose is a spoonful every hour.

If the patient is of an irritable temperament, the Dr. prefers the following formula:—infusion of half a drachm of hyoscyamus in six ounces of boiling water, Venice turpentine, half a drachm, sufficient mucilage to make an emulsion, to which should be added ℥ss of syrup of orgeat; the dose the same as in the last prescription.

When the testicles are painful, or if the patient is of a scrofulous constitution, he prescribes this other form:—

A scruple of hemlock leaves infused in four ounces of boiling water, Venice turpentine, half a drachm, sufficient mucilage of gum arabic to make an emulsion, bitter almond water, ℥j., syrup of cinnamon, ℥j.; the dose the same.

In general, whichever form is given, it suffices to use it three or four times for the cure of the gonorrhœa, save in old discharges, where a longer continuance of the remedy is required. It is necessary that the patients should abstain from stimulating and flatulent food; for ordinary drink pure water, eau de sucrée, or Selz water; he should also wear a suspensory bandage, and take some hot baths. Opium may occasionally be required to arrest the diarrhœa.—*Journal der Prackteck Heilkund. Mai.*

Microscopical Experiments on Inflammation.

From the result of the experiments of Dr. C. F. Koch and others upon the swimming-bladder in frogs, it appears, first, that on the application of any irritant, a sensible acceleration in the movement of the blood, which circulates in this membrane and at the same time in the capillaries of the part affected, is perceived. 2nd. The movement subsides more or less promptly, this subsidence being particularly apparent after the action of energetic excitants, at which time the globules of blood are nearly in contact. 3rd. This movement of the globules is uniform in all the capillaries, save in the vicinity of large arteries, where, in consequence of the pulsation, there is an oscillation observable in them. 4th. Some isolated globules at first attach themselves to the walls of the vessels and cease to move; by degrees these globules become more numerous, form an opaque brown agglomeration, in which we can no longer recognise their form; insensibly the capillary vessels dilate in proportion, and sometimes acquire even double their volume. 5th. The number of the globules become opaque, and diminish in quantity, because they are dissolved in the serum, which they render of a red and transparent colour. 6th. In the neighbourhood of these vessels in which the blood has no longer any movement, we observe the different phenomena which are noticed in the three first experiments: at first, in the parts the nearest to these vessels the phenomena seen in the third experiment are observable; then, in the most remote parts, those of the second, and afterwards those of the first, conclusion are seen. 7th. The capillaries in which

the passage of the globules is thus arrested, and in which the calibre is much dilated, return more or less quickly to their normal state. 8th. Incisions and punctures determine the stoppage and the dissolution of these globules in the serum. 9th. When the sanguineous globules are agglomerated and their motion is diminished, quick sharp movements or any other irritant, as that which alcohol, æther, or electricity can produce, applied to the thigh of an animal, will re-establish for an instant the natural motion in the progression of the globules; but if this inflammation be slight, the globules soon return to their previous state. In general, the impression of a new excitant exasperates the inflammatory reaction. 10th. The stoppage of the globules of the blood is the more prompt the more active the stimulus is. Their collection into a mass is thus in proportion to the dilatation of the capillaries. 11th. In severe and prolonged inflammatory affections the small arteries and veins are in the same condition as the capillary vessels.—MECKEL's *Archiv. für Anatomié und Physiologié.*

Upon the property which the Flowers of the Nerium Oleander possess of attracting Insects.

BY M. BRACONNOT.

The property which many plants possess of attracting flies has hitherto been explained by the contraction which results from the irritability of the organs of generation; but M. Braconnot, who has paid attention to the plants of the Oleander tribe, has remarked, that it is in the interstices which the antheræ leave between them, that the flies are suspended by a viscid humour secreted by the stigmas, and destined to agglutinate the pollen. If living flies are placed on this part of the flower they are there retained in spite of their efforts to escape.

M. Braconnot has also remarked upon these flowers, that small spiders, too powerless to make prey even of flies, seek their nourishment in the interior of the Nerium Oleander, and there form their nests, living upon any unfortunate fly which may be so luckless as to approach the flower.—*Journal de Pharmacie.*

Active Principle of Sarsaparilla.

BY M. BALKA.

According to M. Balka, the active principle of sarsaparilla is a particular acid, to which he gives the name of *parillinique acide*, and which enjoys the following properties.

In the state of an hydrate, it resembles shells of fish; when broken down, it has the appearance of resin; on fusion it takes a brown colour; if its degree of temperature be augmented it scatters a peculiar odour, pungent and very disagreeable; when burnt, it does not leave any cinders. This acid reddens turnsole paper; if it be dissolved by alcohol, and then crystallised by evaporation, it is scarcely soluble in cold water, but placed in boiling water it readily dissolves, and causes it easily to froth. Chloride of chalk, the mineral acids, and particularly the hydrochloric acid, precipitate it in white flocculi; it differs from *acide pecticque*, inasmuch as it is dissolved readily in nitric acid, and may again be collected by evaporation of the acid; with alkalies it forms soluble but uncrystallizable combinations.

The mode of obtaining this acid, is to treat extract of sarsaparilla by boiling water, which dissolves the *acide parillinique*, and then to evaporate it to dryness, and to again treat the residue with hydrochloric acid; the *parillinique acide* now becomes separated in white flocculi, which should be washed and dried.

Upon the Vinegars, and the Pyroligne Acid of Commerce.

M. Ledoyer, in a note addressed to the Society of Pharmacy, Paris, announces that having had occasion to make some experiments upon vinegars and pyroligneic acid, he has constantly encountered portions of iron in the first, and in the others sulphate of soda, of iron, and even of copper, either together in the same acid or separately.

Treatment of Hooping Cough.

M. Sandras employs with success in this distressing affection, preparations of belladonna. The formulæ which he uses are as follows:—

Powdered leaves of belladonna, gr. ii.,
Mucilage, q. s., in 8 pills, one every hour.

CASES REFERRED TO BY M. LISFRANC IN HIS LECTURE ON ECTROPIUM AND TRICHIASIS.

CASE I.—P. Dantremont was admitted into the Hôpital de la Pitié, May 21st, 1828, aged twenty-three, of a lymphatic temperament, who had been afflicted many years with double ophthalmia, which had resisted nearly every species of treatment. The conjunctiva was much injected, though in a less degree than that of the palpebra. There existed a speck on the right eye, which was very opaque, and two, of the size of a pin's head, were united on the left. Strong light caused pain, and his vision was confused. The eyelashes were horizontal, and the eyelids did not present any inversion; but on desiring the patient to close his eyes, it was easily perceived that the superior palpebra descended in front of the inferior on either side, overlapping its free border on the right to the extent of a line and a half, and on the left two lines.

Treatment.—Bleeding to two pallets, emollient collyria, half beverage, fourth of diet.

The presence of an erysipelatous epidemic, which raged during some time in the hospital, induced the professor to postpone the operation, which was performed on the 6th of June, on the left eye only, after the method of M. Janson. Simple dressing, low diet.

7th. No fever; neither inflammation or tumefaction of the palpebra; slept well.

11th. The pins have lacerated the tissue; continues as yesterday.

16th. Although the cicatrisation is not yet finished, the free border of the inferior is sufficiently carried outwards to prevent this overlapping from taking place; cauterisation by the nitrate of silver.

23rd. The transverse and the longitudinal cicatrices of the wounds are complete; the disease appears to be eradicated; opthalmia no longer exists on this side, the opacity alone remains.

11th July.—The operation has so well succeeded, that the patient expressed a desire to have a similar one on the right, which was performed in a similar way: no bad symptom supervened; the pins came away on the 17th.

18th. The parts appear to be cicatrising.

26th. All the small wounds have completely cicatrised, the operation succeeding as well in the latter as in the former case; vision, although improved, continues impaired from the presence of the opacities; it, however, appears gradually yielding to the employment of the tincture of opium, administered according to the precepts exposed in one of the numbers of the Gazette Médicale, and translated in this Journal.

The patient was dismissed on the 15th of August, freed of the double trichiasis, of the rebellious ophthalmia, and of the opacities of the cornea.

CASE II.—A. Antoine, who was admitted under the care of M. Lisfranc, July 13th, 1829. He was then labouring under a complete inversion of the inferior palpebra, with trichiasis, and severe ophthalmia. The operation was readily consented to by the patient, and performed on the 26th.

The operator first having traced with ink a line on the level with the spot where the entropium seemed to stop, in order to ascertain its extent, then exercising tractions, previously pointing out to those around him its immense inversion (being inverted nearly half an inch), and its peculiar twisted form, as if folded on itself and drawn forwards. He also remarked that he thought it the severest case on record, and that it was not without hesitation, in dread of failure, that he decided on performing an operation. The method of Kohler appeared to him the best, consequently he excised the whole integuments of the palpebra. Strips of adhesive plaster were afterwards so applied as to draw the eyelids forwards, so as to favour the formation of a narrow cicatrice. No inflammatory symptoms ensued, and in proportion as the cicatrisation advanced the inversion seemed to diminish. Care was taken to repress the luxuriant granulations by the application of the nitrate of silver.

15th August. The two internal thirds of the palpebra are reduced to their normal position, although cicatrisation is not yet completed, and the ophthalmia has nearly disappeared.

21st. Cicatrisation is gradually taking place; the palpebra returned to their natural state.

25th. The cicatrisation is completed, ophthalmia no longer exists, and on the 29th the patient was discharged cured.

Case III.—J. Dangla came into the hospital on the 26th of May. He said that his right eye had been affected for ten years with trichiasis. The disease was produced from the inversion of the two palpebra, and had caused an almost total opacity of the cornea, so that the patient was scarcely able to distinguish day from night. The mucous membrane lining the palpebra did not present either ulceration or cicatrice; the eyelids were not œdematous. A deviation of the tarsal cartilage appeared to be the exciting cause of the affection, which is less apparent in the superior than in the inferior palpebra. The patient was operated on the 1st of June. The method of Janson was employed on the superior eyelid only; the patient was bled to twelve ounces; simple dressing and low diet prescribed.

3rd. No better. The patient experiences severe pain; the eyelid presents considerable tumefaction, which has augmented the inversion to such an extent, that the superior pin was concealed between the two eyelids, and caused much irritation. The Professor now withdrew it, which operation was attended with severe pain, on account of the difficulty which the swollen parts caused to be experienced in its exposure. Thirty leeches were applied behind the mastoid processes, and the other treatment continued.

4th. The three other pins are removed, the wound yields a copious suppuration, the symptoms of less importance are moderated.

7th. The parts have returned to their natural condition, except a slight wound which exists on the anterior surface of the palpebra.

10th. The wound presents a more healthy aspect; strips of adhesive plaster are applied to approximate the edges.

11th. The action of the adhesive plaster proving inefficacious, the strips were removed, and the simple dressing repeated.

14th. Cicatrisation is rapidly taking place from the circumference to the centre.

17th. Cicatrisation still progressive, and in proportion as it advances, the inferior eyelid may be seen to elevate.

25th. Wound completely healed; the free border of the tarsus has re-assumed its normal rectitude; the eye is no longer inflamed; the lachrymation, and the pains caused by the movements of this organ, have entirely disappeared. The patient wishes to be discharged.

Here M. Lisfranc remarked, that he had reproached the method of Dr. Physick and M. Boucher for only furnishing a momentous cure. The following case will prove that what has been advanced on this subject was not without foundation.

Case IV.—P. Guillanne, aged 19, was admitted into La Pitié on the 2nd of Feb. 1832, for a wound on the inferior palpebra, which was caused by his striking himself against the bolt of a door. This contused wound, which penetrated the whole thickness, commenced at the free border of the tarsus, immediately exterior to the inferior punctum lachrymalæ. It is five or six lines in length, and follows a direction so that its external extremity is distant two lines and a half from the same free border. This wound, accompanied with tumefaction of its edges or surrounding ecchymosis, and in every other respect sufficiently clear, was reunited by the first intention in about twelve hours after its production, by means of two needles and the twisted suture.

6th. The needles were carefully withdrawn so as to leave the threads, which adhere to the skin by the desiccation of the different fluids furnished by the wound, and combined with the heat, retain in approximation the parts, and sustain the yet tender cicatrix. But a dresser had the inadvertence to cleanse the wound, which was soon re-opened by the contraction of the palpebra. Inflammation and swelling did not permit the re-approximation of its edges, or to refresh them in order to bring them in contact afterwards; so he was obliged to await the dissipation of these symptoms. Five or six days afterwards, the inflammation having completely subsided, and the parts being considerably lessened in size, M. Lisfranc again attempted the re-union, but happily its extent was greatly diminished, and limited to at most two lines. In the hope that the cicatrice would make further progress, the operation was postponed, and the operator gave it as his opinion that it would be completed; and in a short time the patient experiencing no inconvenience, and finding himself in a comparatively advantageous condition, requested his dismissal, which was granted, but not without much regret, on the 1st March.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, March 22nd, 1834.

Mr. Pettigrew in the Chair.

Gout in the Penis—Preparations of Colchicum—Sudden Death—Delirium Tremens—Habitual Stimulus.

Mr. Smith drew the attention of the Society to rather an uncommon case, which had been related to him in the morning, namely, that of gout occurring in the penis. A gentleman, who had frequently suffered from attacks of gout in the lower extremities, which had produced the usual deposits, was suddenly seized with severe pain in the penis, accompanied by swelling of that organ; no sooner had this train of symptoms appeared than the inflammation in the great toe suddenly subsided. He had had a similar metastasis of this affection about two years previous, which had yielded to the remedies usually had recourse to in this complaint. The treatment adopted in the last attack was the administration of extract aceti colchici, and the local application of lotio saturnini. He considered this species of metastasis so very rare, that he had mentioned the case principally with the view of obtaining the opinion of the members, as to the treatment to be adopted, and particularly as to the merits of the acetum colchici, in which he placed much reliance.

Mr. Hunt thought that there was scarcely any disease the consideration of which admitted so much doubt as gout: respecting the different preparations of colchicum he considered that a great error was committed in making use of wine in their formation. Some years since, a chemist of great experience had informed him, that he had made experiments upon the vinous extracts, and had found them very unsatisfactory and uncertain. The amount of the dose generally given was too large; by combining small doses of the acetic extract and alkalies he had found much benefit ensue, and he thought that those persons, who attacked this medicine, referred rather to the abuse than the use of it.

Mr. Griffith was in the habit of giving the colchicum in much larger doses than appeared to be the practice of Mr. Hunt; and seldom did he prescribe less than 30 minims, with a larger dose at bed time; from the sensible benefit derived from it he was induced to consider it almost as a specific.

Dr. Ryan observed, that Mr. Battley had lately introduced a new preparation of the medicine under consideration, which he denominated liquor colchici. This medicine had been used with great success in St. Bartholomew's Hospital, and he, Dr. R., had tried it with very speedy relief in two cases; but, in a third, without benefit. He deemed it worthy of remark, that Mr. Battley showed him new preparations of most of the tonics, cinchona, gentian, &c., belladonna, conium, &c., which, on being mixed with water, imparted the medicinal properties as well as in decoctions or infusions. Mr. B. also observed, that most of the tinctures in the Pharmacopœia were unchemical, and that he hoped to substitute for them the new preparations, which he had already submitted to the Royal College of Physicians.

Mr. Hunt warmly objected to the employment of secret remedies. It was, he thought, derogatory to a medical man to prescribe a medicine of which he did not know the composition.

Dr. Ryan wished to ask Mr. Hunt if he had ever used the liquor opii sedativus, or the James's powder. For his own part, there were few more strenuously opposed to secret remedies than himself, and so far he agreed with Mr. Hunt; but the state of pharmacy in this country was so neglected by those whose duty it was to advance it, that practitioners were obliged to use many remedies not in the Pharmacopœia.

Mr. Hunt had used this remedy occasionally: in cases of great importance, about which he was particularly anxious, he always resorted to medicines in which, from knowing their composition, he could place reliance. He had not made these remarks from any hostile feeling to Mr. Battley, but merely from the general principle of disliking to make use of any remedy about which secrecy was observed.

Mr. Smith asked what was the best treatment to be observed in gouty deposits, and upon which surface of the membrane such deposits generally took place.

Mr. Pettigrew thought the deposition generally occurred on the outer surface rather

than within; in the case of Lord Holland it was however on the inner surface, and on endeavouring to remove it serious symptoms came on.

Several observations on this subject having fallen from different gentlemen,

Mr. Pettigrew mentioned the case of a man, previously in the enjoyment of good health, having been found dead in his bed: an examination was made eight hours after life had become extinct, but not the slightest trace of disease, save a small spot of ossification in the semilunar valve of the aorta, was found.

Mr. Hunt wished to know if the muscular structure of the heart was perfectly healthy.

Mr. Pettigrew said it was of the usual consistence, and was quite sound.

Mr. Hunt had asked the question from a circumstance, which had occurred some years since in a case of a similar kind to the one mentioned by Mr. Pettigrew. The surgeons who had examined the body did not find any cause for death, but, on again examining the heart, (their attention being directed to it by Mr. Hunt,) they discovered that the muscular fibres, although apparently normal, were so soft that the finger could with the greatest ease be passed through its substance.

A pause having ensued,

Dr. Ryan observed, that as there was no subject now before the meeting he would relate a case of some interest, in a practical point of view. On Monday evening last he was called to a gentleman, aged 23 years, of a very full habit, and extremely intemperate. He had been seized with apoplexy on Sunday morning, for which he was vigorously and judiciously treated. He had drank a vast quantity on the two days preceding the attack. On the evening of Monday he laboured under delirium tremens, and was extremely violent. During the consultation he was seized with a fit of apoplexy, for which he was bled, his head shaved, and mustard cataplasms applied to his feet, and a full dose of calomel exhibited. On Tuesday his delirium was increased, and the two medical gentlemen, who attended with Dr. Ryan, agreed it was nervous: tongue white and tremulous; pulse very rapid, 120; cold perspiration. He was ordered 30 m. of the liq. sed.; a fuller dose was not given on account of the tendency to cerebral congestion. In the evening he was no better, and it was agreed to give him his habitual stimulus. He took three draughts, composed of ℥iss. of brandy each, without much benefit; and then he continued these mixed with warm water and sweetened; 30 m. of T. opii. were added to each draught. He took the first at 10 P.M. and soon after became much more tranquil; he slept about 20 minutes, and dosed until 12, when he had a second draught, half of which he swallowed; at 5 A.M. he was perfectly collected and rational: he slept from that hour until 9 A.M. without interruption, and at 11 he was quite rational, and since then he has continued well. There was some reluctance upon the part of one of the gentlemen who attended, to the administration of opium, or stimuli, on account of the repeated apoplectic attacks, and the extreme fulness of habit of the patient. But as the delirium was much more violent after each bleeding, and as the liq. opii. had no effect, he assented to the opinion of the two other attendants. Dr. Ryan ascribed the successful issue of this case to the habitual stimulus, and not to the 45 minims of tincture of opium, as he had now seen 14 cases in which a cure was effected by the accustomed beverage of the patient. This was better in pure nervous delirium than any medicine; and in cases complicated with congestion or inflammation it should be administered after depletion. He thought that many practitioners would have been disposed to carry depletion much farther than in this case.

Mr. Chinnock considered the case related by Dr. Ryan as one of delirium tremens; he did not coincide in the view taken of this case, nor in the particular treatment adopted, thinking that if the opium had not been prescribed, the habitual stimulus would not have produced the great benefit ascribed to it.

Mr. Hunt considered the point mentioned by Dr. Ryan particularly interesting; but, although he was perfectly aware of the value of stimulants in this complaint, he did not think the particular kind of one of so much importance.

Mr. Chinnock considered the medicine of the most importance in the treatment was opium, in full doses; bleeding appeared to him injurious, and he felt surprised to hear that such practice was pursued, in the present day, by any practitioner.

Dr. Ryan replied, that the gentleman who

called him to the case, and whose name he did not mention for reasons known to every practitioner, had called a physician of considerable eminence to another case, who bled repeatedly, and the patient died. He could mention many such cases, even of recent occurrence. If Mr. Chinnock would refer to the periodicals, during the last few years, for reports of discussions on this treatment of the disorder in question, he would find many advocates for depletion. Dr. Ryan then quoted many writers on the subject, and said that most of them advised opium. For his own part he had not found it to answer; and in one case he administered equal 960 minims in 78 hours without any effect. He then exhibited the habitual stimulus, which induced sleep within an hour, and the patient was rational next day. On two subsequent attacks he used the habitual stimulus alone, without a particle of medicine, and with complete success. It was worthy of notice, that the patient was again attacked, was bled, and died in two hours afterwards.

A gentleman observed, that in some cases the practitioner should have the lancet and brandy bottle in each hand and use them successively.

Mr. Griffith moved that the discussion be resumed on Saturday next.—Adjourned.

MEDICAL SOCIETY OF LONDON.

Monday, March 24th, 1834.

W. Kingdon, Esq., President, in the Chair.

Thoracic Disease depending on Nervous Excitement.—Treatment of English Practitioners different from that of Foreigners in Chest Affections.—Sudden cessation of the use of Calomel followed by great depression.—Administration of Stimuli in such cases requisite.

Mr. Kingdon bore testimony to the great value and importance of the remarks of Dr. Uwins on affections of the nervous system in diseases of children. It had chanced that several of the younger members of his own family had been affected with this state of thoracic disease depending upon nervous excitement, which had caused much anxiety in his mind, and had led his attention more particularly to the subject. From what he had seen in the treatment of these cases in his own house, and from numerous others which had fallen under his observation, he was induced to think that the less done, save with the view of lessening or calming the excited state of the nervous system, the better. Sometimes, however, it became necessary to resort to bleeding, and the method which he preferred was that recommended by Dr. Waller. Although he coincided so entirely with Dr. Uwins in his views of the cause of the disease, he must confess he had felt much surprised to find him speak so lightly of the treatment of the digestive system; for he (Mr. K.) felt convinced that the more the state of the chylopoietic viscera was inquired into, of the more importance would their treatment be found.

Mr. Moore had paid much attention to the discussion, and felt some surprise to hear so great a variety of symptoms and treatment recommended by different gentlemen. A case, illustrating the intimate connexion which nervous excitement had with thoracic and other disease, had happened in his own house. One of his children, without any apparent cause, suddenly became affected with unusual gaiety; his face was flushed, his pulse and breathing accelerated, and he was seized with vomiting and nausea. Nothing, with the exception of low diet and confinement in a dark room, was done, and the next day the child was restored to health.

Dr. Negri observed, that it had struck him, as a foreigner, that the practice of this country in these affections was very different from that pursued in his own land of Italy; there the treatment adopted was much more simple, and certainly, in his opinion, much more successful. Attention to the digestive system had always appeared to him very important, and by attention to it he thought he had seen much good ensue. The administration of calomel was, however, sometimes attended with bad results, and he therefore preferred the hydrarg. c. creta, combined with jalap. There was one medicine which he had not heard recommended, but which he thought frequently did away with the necessity for bleeding, namely, tartar emetic; it produced the necessary depression without its being of so permanent a nature as that caused by bleeding.

Dr. Whiting thought that the members, in discussing the treatment of these thoracic dis-

cases, had classed them too much together. It was not because we had general plans of treatment, but because we had particular symptoms, that particular medicines were to be given; each individual case required a separate investigation, and in no two cases did precisely the same treatment answer. Tartar emetic was doubtless beneficial in many forms of affection of the chest, but in double peripneumony, the disease which had originally formed the subject of discussion, no remedy could with safety be depended on save calomel; it was principally in cases where the disease was not very severe that the bad symptoms were produced, for the medicine might be given to a great extent when the inflammation was acute, without producing the much dreaded symptoms.

Mr. Clifton considered that the cases related by Dr. Negri entirely differed from those referred to by Dr. Whiting; in the latter the only medicine in his opinion to be relied on was calomel; the sudden cessation of the excitement, which ensued upon discontinuing this remedy, was, however, one great objection to its use, and unless great attention was paid to this point, much injury might ensue.

Mr. Proctor had seen bad consequences result from the use of tartar emetic; a state of collapse had come on after vomiting, from which the patient had not recovered. The treatment mentioned by Dr. Negri and Mr. Kingdon might be found serviceable in mild forms of disease, but in severe cases other remedies were necessary. Brisk purgatives were here most essential; and he was inclined to think that this class of medicines had not been sufficiently insisted upon by the members of the Society.

Dr. Whiting perfectly agreed with Mr. Clifton upon the absolute necessity of the gradual withdrawal of the calomel; by not attending to this, symptoms resembling hydrocephalus had come on, and the patients had sunk. It was necessary, in leaving off the mercury, to give some stimulus, and there was none so likely to prove beneficial as ammonia. In giving calomel, he did not look so much to the quantity given as to the effect produced; and indeed it appeared that the medicine, instead of acting in the usual way, acted rather upon the disease under which the body at the time laboured.—Adjourned.

THE

London Medical & Surgical Journal

Saturday, March 29, 1834.

CAMBRIDGE PETITION—LORD BROUGHAM UPON THE UNIVERSITY MEDICAL MONOPOLIES—MANIFESTO OF THE COLLEGE OF PHYSICIANS.

THE influence of the Universities of Oxford and Cambridge upon the medical profession has always appeared to us to form a most important chapter in an inquiry into Medical Reform, and we have accordingly lost no opportunity of exposing their abuses, and of noticing any tendencies we could observe towards amendment. We set a high value upon a liberal education as the basis of professional knowledge,—an education of which the fruits should be seen in something more useful than in the trick of composing an inaugural oration of Latin superlatives, with some happy specimens of which the public has been lately favoured. In proportion, then, to the importance of a knowledge of the elements of the sciences to the medical student, and in proportion to our opinion of the ability with which they are at present taught at the Universities, was our dissatisfaction at seeing a large class of students prohibited, or discouraged, from entering their walls, and no sufficient means taking for their encouragement or instruction elsewhere. The enthusiasm of competition is awake long before the love of knowledge, for its own sake, is developed.

But it was not merely from observing, if we may be allowed the quotation,—

"Wisdom at one entrance quite shut out"

from a large portion of the community, that our indignation at the University system was excited:—the direct effect of that system upon the profession of medicine was equally calculated to awake our hostility. Their antiquated privilege of

conferring medical degrees would, however, have long since become obsolete, when they had ceased, from causes beyond their control, to be efficient schools of medicine, had not the College of Physicians bolstered up the accidents of time by its iniquitous by-law, which gives a monopoly of the Fellowship to English University Doctors.

Our readers are aware, that certain members of the University of Cambridge, comprising many of the most eminent philosophers of the age, having in vain endeavoured to induce a few antiquated men, whose thoughts are half a century old, to erase from their statutes the stain of religious intolerance, imposed by the bigotry of James I., petitioned the legislature to carry the spirit of its constitutional enactments into the public seminaries of education. We are now to record the presentation of that valuable petition to the Peers by Lord Grey. The following extract from it expresses, in forcible language, the principle upon which his Lordship amplified in a long and able speech:—

"The University is a body recognised by the law of England as a lay corporation, invested with important civil privileges, and, on that account, resting on no secure foundation, which is not in harmony with the social system of the state. Your petitioners, therefore, humbly beg leave to suggest, that, as the legislative bodies of the United Kingdom have repealed the Test Act, and admitted Christians of all denominations to seats in Parliament, and to places of dignity and honour, they think it both impolitic and unjust that any religious test should be exacted in the University previously to conferring the civil privileges implied in the degrees above enumerated."

Of course the connexion of the Universities with the medical profession occupied the most prominent place in the discussion; and we are most happy to extract into the pages of this Journal the admirable remarks elicited from the Lord Chancellor, which comprehend the whole subject of Medical Reform. They afford a gratifying specimen of the capaciousness of his Lordship's views, and of his exquisite skill in unfolding them. His Lordship said *,

"If a man wished to follow the medical profession, being desirous to devote his faculties and time to that most useful employment, gainful to many individuals but useful beyond almost all other professions to the community at large, he might, if he belonged to the Established Church, be enabled to pursue the profession by going to the University at Oxford, or Cambridge, by residing within his own country, and by obtaining his education there; not, however, his medical education, be it observed, because, though the two Universities are the only bodies having the power of granting medical degrees; they are, also, the only bodies which at once have the monopoly of the privilege, and of the incapacity to teach. They at once claimed for themselves the exclusive power of making doctors, and, at the same time, loudly admitted, for they proclaimed their incapacity, that they could not teach medicine.—They could only make doctors, they could not qualify them.—They could make a man a Master of Arts, by teaching him mathematics and classics, but he must learn medicine elsewhere; and, after qualifying himself by a seven years' study in another part of the world, return to the bosom of his alma mater for the purpose of being created a doctor.

"But if the same individual happened to be a Dissenter, he could not go to Oxford at all. He would, to be sure, be admitted at Cambridge; but even there he would not be able to procure a mathematical or doctor's degree. For the purpose of obtaining a degree in medicine he must quit his home, his family, and friends, and go to a foreign country. He must repair to Paris, to the Dutch Universities, as formerly used to be the case, or to the Scotch Universities; for in London, it seems, a knowledge of the medical art was not to be acquired! It should be borne in mind, that the law of Scotland was very different from the law of England, and he (the Lord Chancellor) knew

* We extract from *The Times*.

of many parents, who had been deterred by that very circumstance alone from sending their children to that country for the purpose of medical education. Still, however, the Dissenter had no chance; he might go abroad, and remain there for three or four years at great expense, receiving instructions in medical science, and he might return again and find himself just in the same situation, as far as concerned the means of obtaining a degree, as when he first left. Why was he subjected to this hardship? Simply because he conscientiously differed from the religious opinions of the majority of his fellow-subjects in this part of the country. That was the reason and the only reason of the grievance under which the Dissenter now laboured, and under which he justly, and in a note not one iota louder than he ought, now complained."

Since this discussion, we are given to understand by the exclusive organ of the College of Physicians, that the College, seeing war declared upon it, and its outworks carried with such resolution in the House of Lords, as to leave no chance for the citadel at Pall Mall East, has published a manifesto in the shape of a circular to their lordships, in which it calls heaven and earth to attest its public usefulness—its disinterested conduct. It grants, forsooth, its *licence* to the doctors of any University *of the earth*; but, having thus provided for the public safety, it thinks itself justified in reserving its fellowship and government to English University Doctors, for the encouragement of an University education. Now it is possible to understand by what illiberal course of reasoning, the Universities may be conceived by some to be part and parcel of the Church of England: but by what obliquity of intellect can it have entered into the head of the learned President, to imagine the College of Physicians part and parcel of the Church of England? May not a physician possess "*a high moral sense*" and "*a classical education*," although he cannot subscribe to the thirty-nine articles? —And again, if an University education was, under such circumstances of exclusion on religious grounds, to have any advantage, why not confine the privilege to the possession of a degree in arts, and allow the student, who has graduated in arts, to seek his professional degree where his profession is taught, without compelling him to return to his alma mater for his doctorate, after having studied elsewhere? But are not the excuses or pretences notoriously false? It is needless to inquire into the provision the College has made for the public wants—a handful of licentiates amongst a host of general practitioners. We are not now inquiring into the competence of the respective classes for practice; all we mean to show is, that the public is not indebted for its sanctioned medical advisers to the College of Physicians. The other pretence of superior *classical* accomplishments is unjust and false; and in all that relates to medical science, it is notorious that not five of the whole body of fellows would be enumerated among the first fifty medical practitioners of eminence in the metropolis.

GLASGOW AND ST. ANDREW'S.

In a pamphlet lately published *, which contains a useful summary of the different medical corporations in the United Kingdom, there are some excellent remarks upon the pseudo-liberality lately evinced by the above Scotch Universities. Glasgow admits the certificate of private teachers in London or Dublin, but carefully abstains from acknowledging the private teachers of Scotland,—a palpable

* A Letter addressed to Henry Warburton, Esq., M.P., by a Junior Practitioner. Churchill, 1834.

bait to English and Irish students, for the sake of the exchequer. The same pamphlet puts the late St. Andrew's affair in a very striking light. It states, that an association of private teachers in Edinburgh, a class not recognised in the University of that city, succeeded in persuading the professors of St. Andrew's to appoint five of the Edinburgh private teachers to form a board to examine candidates for the St. Andrew's degree. The whole affair emanated from the private teachers of Edinburgh and St. Andrew's, —was merely their passive instrument for the fabrication of degrees—*Hinc illæ lachrymæ Academicæ.*

MR. GREEN'S INTENDED PLAN OF REFORM.

Upon looking at the title of a pamphlet by Mr. Green, which has just appeared*, we imagined Mr. Green must have been more fortunate than us Editors, in getting an early peep at *the* intended plan of medical reform. However, we soon found the learned Professor meant only to propound a scheme of his own, which, in truth, he does in a very transcendental fashion. He commences with the definition of a liberal profession, whereof a part is "the application of science, by the actual possessors of the same, to the needs and commodities of social man:" from this definition he elaborates the due qualifications of a practitioner, to wit, 1st. "technical knowledge," 2ndly, "scientific insight," and, 3rdly, "the character of a gentleman," as pursuing a profession, in contradistinction to a trade. With the education of the practitioner, he commences almost from the cradle. Its indispensable requisities are described to be—1. "The knowledge of *words*, their definite import, and right use, as grounded in grammar, and evinced by a *correct style*." 2. "The knowledge of the elements of *mathematical science*, as the discipline of the pure sense." 3. "The knowledge of *experimental science*, as affording the requisite discipline of the senses." 4. "The knowledge of *logic*, as the laws of right reasoning, the forms of all legitimate conclusion, and the criterion of truth and falsehood." 5. "The knowledges properly *medical*," and 6. "morals." After pointing out the "*ordonnance* of mind" acquired in boyhood by the education of the senses and of the memory, he supposes the *understanding* and *judgment* sufficiently ripened at sixteen for their proper "disciplinary exercise." "Now as mathematics are the universal and necessary forms of *sensuous* experience, so does logic," &c.; whereupon the learned Professor dilates upon the properties of the higher elements of education. We are next favoured by an acute deduction of the number of professions, from the natural division of "the universal needs for the well-being of social man." The learned Professor insists that nothing short of an University education can bestow a proper degree of polish upon the student; "an University being alone capable of affording systematic instruction, a discipline that is the pledge of moral conduct and gentlemanly feelings, and alone fitted to maintain the alliance of the professions, and the unity of a learned class." Here the learned Professor parts company with the lawyer and divine, and is obliged subsequently to speak of the proposed University as "peculiarly medical;" and then he condenses the result of a long deduction on the character of an University into a defi-

* Suggestions respecting the Intended Plan of Medical Reform, &c. By J. H. Green, F.R.S., &c., &c. Highley, 1834.

nition, and proposes the establishment of a "*Metropolitan University, under the control and regulation of the Governing Council of the medical profession* (*or Medical Synod*), *with the power of conferring degrees.*"

On the plan of education we are constrained to be very concise at present; and we shall confine ourselves to the medical department. The student is supposed to commence his studies at eighteen; and, after three years' study, he is to be examined for the degree of *Inceptor-Graduate of Physiology*, at which time he is supposed to be educated as a general practitioner; he is then to pass an examination before the governing council, who enrol him as a *Licentiate*. After a period of three years more, devoted principally to hospital attendance, he may pass a further examination, and become a *Graduate in Physiology*, whereupon he again applies for a licence to practise from the General Council, which entitles him to the rank of *Doctor in Medicine, or Master in Surgery*, there being no distinction made in obtaining either degree, except that the examination in Therapeutics should be medical or surgical, at the option of the candidate. The Graduate in Physiology may acquire the further title of *Doctor in Midwifery*, by devoting three years to its practical study. Thus the learned Professor's scheme proposes the following distinctions:—1. *Licentiates in Medicine, Surgery, and Midwifery*, or general practitioners; 2. *Doctors in Medicine*, or physicians; 3. *Masters in Surgery;* 4. *Doctors in Medicine and Midwifery*. And further, "the general practitioner should be authorised to charge for his time, care, and attendance, without being degraded, or even permitted to degrade his profession, by a tradesman's bill in detail for his particular medicines." When we have added to these details, that the still higher honour of a *Professorship* is reserved for men who have distinguished themselves by extraordinary talents and exertions, who should be alone entitled to fill the chairs of the Metropolitan University, or to become private teachers, we have expounded the whole of the learned Professor's plan for re-organising the profession. In most of this part of the learned Professor's scheme, we give him credit for much liberality and more judgment than we can accord to other parts of his performance. Some of the proposed arrangements coincide with opinions already advanced in this Journal.

The selection of the component members of the *National Council of Medicine*, is evidently a question of much importance. The scintillations of the learned Professor on this subject are so brilliant, that they dazzle with excessive light, and we cannot see our way through his argument. However, his conclusion is, that the *governing body should* select and appoint its members. A specimen of the argument may be useful. "Appointed, therefore, by the highest authority, and exercising an influence which evermore works *a supra in inferius*, till, as the product of its own attractive and assimilative action, a correspondent ascension gradually takes place; a college thus framed, perfects itself into a circle, ever working from above, yet ever returning on itself." After this matchless illustration, we have only to add, that professors, doctors in medicine, masters in surgery, and doctors in medicine and midwifery, are, according to the scheme, alone eligible to the council.

Thus have we enabled our readers to form some conception of the learned Professor's plan of Medical Reform; but we can convey but a very inadequate idea of

the pleasure to be derived from a perusal of the pamphlet. Amidst much to provoke mirth, there will be found much matter for reflection.

PARLIAMENTARY INQUIRY.

THE investigation is going on with increased spirit—not a cranny will be left unsearched. We are not at liberty to print the particulars; but we must say, the examination which took place this week, gave infinite satisfaction to an immense number of the profession who were present. Mr. Warburton shows himself a master of his subject, and merits the full confidence of every friend of Reform.

Reviews.

A Treatise on the Composition and Medical Properties of the Mineral Waters of England, with instructive Observations on the Drinking of the Waters, and the Use of the several Baths. By Sir CHARLES SCUDAMORE, M.D., F.R.S., &c. Second Edition, 8vo. pp. 215. London: 1833. Longman and Co.

Cases Illustrating and confirming the Remedial Power of the Inhalation of Iodine and Conium in Tubercular Phthisis, and various disordered States of the Lungs and Air Passages. By Sir CHARLES SCUDAMORE, M.D., F.R.S., &c. Second Edition, 8vo. pp. 227. London: 1834. Longman and Co.

ABOUT three years ago, the first edition of this work appeared; and we animadverted on the conduct of the author in withholding from the profession his mode of employing the inhalation of iodine. Some of our contemporaries followed our example, and Sir Charles was compelled to publish his formulæ. We also proved that Dr. Murray, now Sir James Murray, physician to the Marquis of Anglesey, had anticipated, as may be seen by referring to his Essays on Heat, Humidity, &c., 1829.

We are happy to state that the author has now placed his statements fairly and fully before the profession; and expresses his firm conviction, that the inhalation of iodine is productive of results highly and permanently beneficial in consumption, but fails in some cases. The author narrates examples of cure and of death after the use of the remedy he advocates, and he avoids the empiricism of some of the profession and quacks, who can prevent and cure all cases of consumption. The formulæ used by Sir Charles is the following placed in a glass vessel:—

℞. Iodinæ, gr. v.,
Potassæ hydriodat. gr. iij.,
Aquæ distillatæ, 3v.,
Alcoholis, 3ij.,
Tinct. conii, 3vi *.

Sit mistura.

The conium is added before using the inhalation, to diminish the irritating effects of the iodine. The remedy is used twice or thrice a-day, together with ordinary medicines, and friction to the chest.

Some well-marked cases of pulmonary consumption are detailed in which a cure was effected. We have inquired of Sir James Murray how far his subsequent experience enabled him to speak in favour of the ioduretted inhalation, and his reply was, that it fell short of his expectations. M. Gannal's cases, cured by chlorine, seem also well-marked, and yet we have not found his remedy of any benefit in the third state of consumption. We used it in a case of a lady, who was afterwards seen by Dr. Davies, of Broad-street, without any effect, and also in another, with Mr. Matthews, of Hunter-street, Brunswick-square. In both cases much irritation was produced, and the inhalation was discontinued.

When we consider the pathology of tubercular consumption, the situation of tubercles, their immense number in different states of development, progress, and termination, and the number of abscesses of various sizes in the lung, we confess we entertain no hope for a patient in the second or third stage of the disease.

Were we able to discover incipient tubercles, and saturate the system with iodine, we might fairly expect great benefit, and perhaps a cure; but when a lung becomes

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* A saturated tincture.

studded with tubercles and abscesses of various sizes, and there is every probability of the existence of similar disease in the other side of the chest, we may palliate but cannot cure consumption. We agree with our author, that much relief may be afforded, and life prolonged, by remedies, in cases of consumption; but we cannot believe that a cure can be established when such an important organ as a lung is totally destroyed by disease.

This second work, on the mineral waters of England, is the best extant, though silent on those of other countries. The author might have supplied the defect, as he would have enhanced the value of his treatise, and made it one of reference and authority. In a future edition, we think he ought to avail himself of this hint, and he will find the matter ready to his hand in an article on the subject published in the London Encyclopædia and Medical and Physical Journal. He would also find much matter in the new French Dictionaries of Medicine.

Annual Report of the Royal Jennerian and London Vaccine Institution. 1834.

Traité de la Vaccine et des Eruptions Varioleuses ou Varioliformes, ouvrage rédigé sur la demande du Gouvernement. Par M. J. B. Bousquet, &c., &c. 8vo. pp. 367. Paris, 1833. J. B. Balliere.

It is highly gratifying to every philanthropist to learn that the great Jennerian discovery sheds blessings on the human race in all parts of the civilised world, as appears by the lengthened correspondence from all parts of the globe, addressed to Dr. Epps, the Medical Director of the London Vaccine Institution. The profession in all countries are almost universally in favour of vaccination; but there are some few against it. Those conversant with the history of the ravages of small-pox, of the deformity produced by it, of the loss of vision, excitement of scrofulous abscesses, congestions and inflammations of the brain, lungs, &c., cannot for a moment sanction the transmission or diffusion of the cause of such evils. If medical practitioners informed those prejudiced against vaccination, of the dangers it prevents, very few could, we apprehend, be found to resist the conviction of its inestimable value. We very much regret that prejudices still exist, even in this country, as will appear by the following extract:—

"As to the progress of vaccination in this country, your Board has still to express their regret that much prejudice against this boon still exists, and that, in distant parts of England, even *medical* men perpetuate, by all means in their power, the small-pox. And the Board think it their duty, though painful, to record the following extract from a letter received by Dr. Epps, the Director, from J. D. Hawker, Esq., Surgeon, of Stratton, Cornwall:—'I live in a remote district, where a strong prejudice exists against the vaccine practice, and, like all prejudices, cannot be supported when the simple question is asked, 'Why do you object to it?' The small-pox has just broken out amongst us like a plague, and though endeavouring to promote vaccination, being a strong supporter thereof, I have been compelled to inoculate for the small-pox nearly 200 children. The prejudice against vaccination is supported very strongly by some *medical men* here. I should imagine,' adds Mr. Hawker, 'that this is almost the only place where vaccination has been completely shut out till I came down.'

"In regard to this gentleman, the Board have the pleasure of stating that he has delivered a lecture at the Stratton Literary Institution in behalf of vaccination, which lecture Mr. Hawker has published, and it will, no doubt, be productive of much good; and the Board, considering the exertions of this gentleman in the cause of vaccination, beg to recommend him to the Governors as worthy of being elected an Honorary Member of the Institution."

We have only space to add, that the work of M. Bousquet is ably executed. It will be perused with advantage by every medical practitioner.

British Hospital Reports.

ST. GEORGE'S HOSPITAL.

Ulcers of the Rectum.

Clinical remarks by Mr. Brodie.—These are neither common or uncommon, and are more usually met with in private than in hospital practice. A patient will come to you, for instance, complaining of severe pain after voiding each fæcal evacuation, but there will be discharge; and if you make an examination,

you will not find any swelling or abscess; but just within the back part of the gut, and opposite to the os coccygis, you will feel with the finger a rugged, rough, irregular ulcer, but very superficial and small. The patient will complain of great pain on the examination being made. If nothing is done for such an ulcer as this, you will find all the symptoms and the pain after every stool to become much aggravated; the diameter of the ulcer will become enlarged and increased, the patient's countenance will become sallow, and the powers of the constitution will suffer. Well, how is such an ulcer as this to be treated, and how is it to be healed? Local applications can hardly be made use of in such cases as these, nor am I, indeed, aware that any such are useful in these affections. You may give the Ward's paste, which acts locally; if you give it by the mouth it becomes mixed with the fæces, and is thus applied to the part. It may be mixed with soap, in the proportion of 1 to 3, and used as a suppository, a method which will sometimes be found both useful and advantageous to the patient, and under which treatment I have known some recover. It is, however, generally best to give this medicine internally, the size of a nutmeg, three times in the day, and the confectio sennæ with sulphur every night to soften the fæces, as hard ones only tend to aggravate the disease. The Ward's paste (confectio piperis nigri) only effects a cure, after being used for a long time; it acts as a stimulus to the parts affected, and alters their action, and heals them. But when you are called to a patient in whom the disease is in an advanced state, you will generally find the Ward's paste fail, and in such a case what are you to do? I will tell you:—The disease is *always situated just above the sphincter muscle, and opposite to the point where this muscle is attached to the os coccygis.* The ulcer strains and irritates it; and if you divide the sphincter ani you cure the disease. Divide the muscle, then, with a straight probe-pointed bistoury, and set the parts free, and you will find that the ulcer will speedily heal. There are some cases in which a minor operation was contrived for the cure of this affection by Mr. Copeland. He proposed to divide the mucous membrane, and some few of the muscular fibres above and below the ulcer. This was done by introducing the finger into the gut, as a director, and passing upon it a probe-pointed bistoury, with which the parts were divided. This operation answers very well in slight cases, in which, indeed, it is only to be used, and causes no inconvenience or confinement to the patient. I have known it fail, and I have known it succeed. This division of the sphincter ani muscle is not recommended in books. When I was a student, this operation was neither known or practised. M. Roux told me it was first performed by his father-in-law, M. Bourgier; I then performed it, and have continued to do so frequently ever since. I consider it an operation highly important to the science of surgery, and of great advantage to patients.

Division of the Sphincter Ani.

There are many cases in which this is useful; I will mention some of these to you. In ulcers of the rectum (as above), this operation is useful. In cases of eruptions and psoriasis about the margin of the anus, you may try the use of common fuller's earth, or the unguentum zinci, or the unguentum hydrargyci nitrates to the parts; but if this is neglected, you will find fissures forming around the margin of the anus, which frequently are very troublesome, but these you may soon relieve by dividing the sphincter ani. There are cases in which the sphincter ani becomes spasmodically contracted, the patient has great pain after every large stool of hard fæcal matter, which pain frequently extends up to the loins, and will last for many hours, and render the patient's life miserable. On examining the part, you will find the sphincter muscle very much enlarged in volume, and contracting strongly on the finger. This affection is more commonly met with in women than in men. It is generally an hysterical affection of the part, which lays the foundation of the disease, which renders the part prone to spasm. In these cases the division of the sphincter ani relieves the patient completely of the disease. I have known a patient cured of this affection by these means, after it had existed for five years. Attention should, of course, be paid to the state of the bowels and the general health.

Cases sometimes occur, in which from some cause there exists an ulcerated communication between the vagina and rectum, and the fæces pass through this ulcerated opening into the vagina. Now a thing of this kind happening in a young woman makes her very miserable. Mr. Copeland had a case of this kind, in which he divided the sphincter muscle for its cure. He reasoned very properly on it; for, said he, if it cures ulcers of the rectum, why should it not also cure this. He performed it in two cases, and in each the ulcerated opening closed up. I saw a case of this kind under the care of Dr. Jewel, and here there was a thickening of the textures and the ulcerated orifice. I divided the sphincter ani in this case, and the ulcer had almost entirely healed, and I was led to believe that she was well, but I find that she passes fæces through the bladder.

There are another set of cases, in which the division of the sphincter ani is useful: I allude to cases of fistula in ano. This fistula in general runs through the substance of the sphincter muscle in its whole course. Now, why does not such a fistula heal? Because it is situated in a muscular part, and for the same reason that an abscess in the calf of the leg will not heal. The common cure of such a fistula is to divide it, and heal it to the bottom,

but the cure is frequently very tardy. I have known the disease to last after the wound has been healed. A fresh sinus will sometimes form, if it be crammed too full so as to prevent the matter from escaping. In operating on such cases, I lay the fistula open to the gut; if it be large, I divide the whole substance of the muscle; if small, I merely separate some of the fibres, so as to set the neighbouring parts at liberty. I have done this operation now for some years, and I find the occurrence of a fresh sinus to be a very rare thing. The management of such cases is indeed very easy and simple; there is seldom any particular dressing required: put a poultice on the part, and let the bowels remain costive. There is no fear of union by the first intention, as the action of the muscle keeps the divided surfaces apart. In some cases I use no dressing whatever, and merely touch the parts occasionally with the nitrate of silver. In performing this operation, you should only divide that side of the muscle in which the fistula is situated. Never divide the muscle on the side towards the vagina, for if you do the patient will for ever afterwards have incontinence of fæces. If, however, the fistula be in a female, and be situated anteriorly, you should make a double oblique incision so as to form a valve. You should have a piece of lint by you dipped in Ruspini's styptic; and should any hæmorrhage occur, keep this plug pressed against the part for the space of a quarter of an hour: the wound soon heals. I never yet met with a case in which there was incontinence of fæces.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON FOR THE ENSUING WEEK.

Mon.	Anniversary of the Phrenological Society	8	P.M.
Tues.	Institution of Civil Engineers	8	P.M.
	Horticultural Society	1	P.M.
	Linnæan Society	8	P.M.
Wed.	Society of Arts	7½	P.M.
Thur.	Zoological Society	3	P.M.

ROYAL COLLEGE OF SURGEONS.

NAMES of Candidates who received Diplomas during the last month.

James P. Babington	Aldermanbury.
Richard Eades	Dublin.
James E. Burton	County Cork.
Frederick J. Clark	London.
Henry J. Lindeman	Southampton.
Henry C. Johnson	Sackville Street.
James F. Marson	
Henry James Johnson	Suffolk Place.
Robert Archibald	Hereford.
Henry Hamblin	Stoney Stratford.
Cornelius Harrison	Canterbury.
Richard C. Raymond	Listowell.
John Wynne	St. Asaph.
Phibbs W. Cullen	Bannerhamilton, Leitrim.
Myles M'Donnell	Boyle.
Hugh Welsh Diamond	King-st., Soho.
Richard Woods Cooke	Burrisoleigh, Tipperary.
Henry Brunskill	Pembroke Place, Pimlico.
William Squire	Wandsworth-rd.
Christopher B. Emmett	Hounslow.
George Parsons	Devizes.
Samuel Hadwen	Lutterworth.
William Bevan	Swansea.
George Horton	Bromsgrove.

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, March 20th.

William Batchelour	London.
Edward Bourne	Cheadle.
Anthony William Clarke	Pimlico.
Thomas Wilson Dyson	———
Edwin Ellis	London.
John Henry Earle	Norfolk.
Daniel Gingell	Thornbury.
Charles Law	Worksop.
Henry Pargeter	Fordingbridge.

METEOROLOGICAL JOURNAL.

MONTH. March, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
20		42	47	37	30·22	30·20	69	70	E.S.E.	S.E.	Cloudy	Fine	Fine
21		42	49	41	30·17	30·10	70	69	E.S.E.	S.S.E.	———	———	———
22		47	52	38	29·93	29.85	69	68	W.S.W.	W.	Fine	———	———
23		47	54	41	29·72	29·63	68	69	W.S.W.	W.	———	———	Cloudy
24		49	50	36	29·56	29·62	69	68	N.W.	N.	Cloudy	———	Fine
25	○	40	46	34	29·67	29·81	68	67	N.N.E.	N.	Fine	———	———
26		38	45	36	29·96	29·84	66	65	N.W.	W.	———	———	———

50, *High Holborn*. WILLIAM HARRIS and Co.

ALL Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 114. SATURDAY, APRIL 5, 1834. Vol. V.

LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXXIII., DELIVERED APRIL 8, 1833.

Gentlemen, — There are two principles which I wish particularly to inculcate: 1st, that it is not every inflammation and temporary obstruction of the lachrymal sac and duct which require the introduction of instruments down the duct into the nose; 2nd, that when the obstruction is permanent, you should puncture the sac, and attack the obstruction in this manner. This is much better than any display of ingenuity by throwing lotions into the sac through the lachrymal puncta and canals. We are thus, I think, more likely permanently to destroy the right action of these delicate organs, than to remove the stoppage of the flow of the contents of the sac into the nose.

In the *second stage*, when resolution is no longer practicable, the cold lotion may be laid aside for emollient applications; and as soon as the sac is so distended with mucus and pus, that the centre of the swelling begins to soften, and a fluctuation to be perceptible, a puncture should be made large enough for the ready discharge of the contents of the sac. Having made an opening, I would avoid immediately passing a probe from the puncture down into the nose, and merely inject tepid water with a lachrymal syringe gently down the nasal duct, a plan which may be repeated every day if the fluid pass into the nose. This seems to me better practice than the premature employment of a probe. It is the method I have followed at the Bloomsbury Dispensary, and in private practice, with frequent success, and never with any harm, even though other measures may become necessary.

When, by means of antiphlogistic treatment, the inflammation of the membrane of the sac has subsided, and by this and other measures the mucous secretion from it has been brought into a healthy state, and all the induration has disappeared, you may then think of adopting some plan for the re-establishment of the passage through the nasal duct, if it should not have already become pervious under the previous antiphlogistic treatment, as often happens when the inflammation is of a healthy kind.

What I have now said principally relates to acute inflammation of the lachrymal sac; but, gentlemen, this part is still more liable to *chronic inflammation*, the external appearance of which form of disease is well represented in this coloured engraving. Sometimes, and especially in scrofulous subjects, the lachrymal sac becomes considerably distended with mucus, without any previous active inflammation in it. The inconvenience first noticed, is a weakness of the eye, from the tears collecting at the internal canthus. Whenever the patient looks at minute objects, he finds a tear ready to drop over the cheek; and, to relieve himself from this annoyance, he is obliged to press upon the sac, so as to force its contents down into the nose. In this case, the nostril is generally remarked to be in a drier condition than it ought to be in the natural or healthy state of the lachrymal organs. Things go on in this way a considerable time, until it is at length found, that the tears cannot any longer be made to descend by pressing upon the tumour in the corner of the eye; but, instead of doing so, they regurgitate by the puncta lachrymalia, mixed with pus and mucus.

Now, gentlemen, I wish you to remember that the mucous membrane of the sac is the chief seat of this chronic inflammation. Sometimes the lachrymal canals, the sac, and the nasal duct are all affected together, and sometimes merely the lachrymal canals. After a certain period, the effects of the inflammation generally extend, more or less, to the mucous membrane of the eye-lids, and even to the eye-itself.

In many individuals the complaint disappears during summer, but returns at the commencement of cold or wet weather.

In the course of this disorder, the lachrymal sac is indeed liable to occasional attacks of more active inflammation, in which the skin may become red and painful, and the nasal duct and lachrymal canals completely obstructed. Unless the inflammation be resolved, the swelling points and bursts, and the opening, if neglected, becomes a true *fistula lachrymalis*.

The case now under consideration resembles the other, arising from acute inflammation of the lachrymal passages, but modified by scrofula. Hence, it often follows the state of the constitution left after measles, small pox, and scarlet fever.

The *treatment of chronic inflammation of the lachrymal sac* consists in first endeavouring to remove the inflammation; and, if you succeed in this purpose early enough, you will prevent suppuration and ulceration of the sac, the formation of a *fistula lachrymalis*, as it is called, the nasal duct will not be permanently obstructed, and the tears and mucus will resume their proper course into the nostril.

If, after the cure of the inflammation, the passage should not be free, and the sac remain distended, you may endeavour to press the fluid with which it is filled down into the nostril, placing the finger for this purpose between the puncta and the sac, and pressing from the puncta towards the nose. This should be done occasionally, either by the surgeon or the patient himself. You may also instil into the corner of the eye a few drops of a lotion containing 2 grs. of the nitrate of silver, or from 2 to 4 grs. of the sulphate of zinc, to an ounce of distilled water; and the application may be repeated every day or every second day, according to circumstances.

I think Mr. Lawrence has given very judicious advice on this subject, especially with reference to the mischief likely to accrue from irritating the lachrymal puncta and canals with syringes. You should be content, as I have said, with merely dropping the collyrium into the inner canthus of the eye, whence it will be absorbed into the lachrymal sac and ducts, so as to operate upon the mucous membrane. When you drop any collyrium into the nasal angle of the eye, in order that such fluid may be absorbed by the lachrymal puncta, the patient should lie upon his back, and continue quietly in this position for a short time after the operation.

When the palpebral conjunctiva and Meibomian glands are affected, you may employ salves, the best of which are the ointment of the nitrate of quicksilver, in the proportion of one-third of it to two-thirds of spermaceti ointment; the red or white precipitate of mercury ointment in the proportion of one scruple of the powder to one ounce of lard; or the nitrate of silver ointment, from five to ten grains to an ounce. Undoubtedly, when suppuration cannot be prevented, emollient poultices and fomentations are advisable; and, as soon as the abscess is distinctly formed, you make an opening in the sac by an incision or a puncture.

On examinining the nasal duct, we now generally find it contracted at one or several points; and, for the removal of the obstruction, you are next to introduce a common silver probe, and then employ an instrument called a *nail-headed style*, in order to remove the disposition of the passage to close again. This instrument may be worn for an unlimited time without any material annoyance. The eye-lids being drawn outwards, so as to put the orbicularis palpebrarum on the stretch, you may make a puncture in the sac with a lancet, and a large quantity of mucus and puriform matter will be immediately discharged. A common silver probe is then to be passed into the sac, and thence down the nasal duct as far as the nostril, so as to clear away the obstruction. It should be introduced horizontally, till it touches the nasal side of the sac; it should then be raised into a vertical position, and its point directed downwards and a little backwards. If its point meet with any obstruction, you must not immediately conclude that there is an obliteration of the duct; you must press it down a little more strongly, but not with violence, turning it round between the fingers, and giving it different directions. In this way the obstacle may frequently be overcome, and the probe will suddenly descend. The probe is then to be withdrawn, and a little tepid water injected; after which, the style is to be introduced sufficiently far to bring its head in contact with the skin, or the court-plaster, which is sometimes applied when a freeish opening has been made. However, I see no utility in making a formal extensive incision: all that is required is a puncture to let out the matter, and to allow the style to be introduced; and what proves the inutility of a larger wound, is the very circumstance of its being requisite to close a part of it with court-plaster, as soon almost as made, namely,—all that portion which exceeds what is necessary for the ready passage of the style.

In a few days the wound heals up, with the exception of the opening filled by the style. The instrument is to be withdrawn two or three times a-week, and tepid water, or some slightly astringent lotion, injected through the nasal duct.

After the style has been worn a little time, the *blennorrhœa of the sac*, as it is termed, disappears almost entirely. The tears and mucus, absorbed by the lachrymal canals, would seem to be conveyed along its surface through the nasal duct, and thus the functions of the parts being restored, the inflammation and discharge quickly subside.

Sometimes, after the style has been worn one, two, or three months, it is discontinued, and the opening heals up; but a relapse takes place, and it is necessary to introduce the style again, and to continue it for some

weeks longer. What proves how little inconvenience is commonly felt from its presence is, that the patient will often express a preference to wearing it a very long time, rather than subject himself to the slightest chance of a return of the disorder.

When the head of the style is covered with black sealing wax, it causes also little or no disfigurement. The instrument must be taken out and cleaned occasionally, however long it may be worn. After the parts have become habituated to it, I find that taking it out once a-week is quite sufficient. If left in too long, it may be so corroded as to break in the part.

When the style, on being first used, creates much irritation, it is better to withdraw it, and, after clearing away all obstruction in the ductus nasalis once more with a probe, you must be content with injecting tepid water through the nasal duct by means of Anel's syringe, using at the same time leeches, emollient applications, and aperient medicines. Instead of a style, metallic tubes are employed by some practitioners; Baron Dupuytren prefers them: probably they answer as well as the style; but the latter is what I have been accustomed to. I will show you the operation on the dead subject in the course of a few days.

Gentlemen, when a probe cannot be got through the obstruction in the nasal duct at the first trial, you may leave the probe, or, what is better, a piece of catgut, or bougie, in the passage, and daily repeat the attempt to overcome the stoppage. If the obliterated state of a portion of the nasal duct still prevents success, the right practice consists in perforating it by means of a small triangular perforator. This is a much better method than drilling a hole in the os unguis, and removing any portion of this bone with forceps, or destroying it with the cautery. If the perforated part of the duct should not admit of being kept open after the style has been worn a long time, the patient must continue to wear it or a small gold tube. Caries of the os unguis, so frequent formerly, is now rarely met with, a proof that it was generally occasioned by wrong treatment.

With respect to *general treatment*. In scrofulous cases, chronic inflammation of the lining of the sac and nasal duct will sometimes not yield, unless an attempt be made to improve the state of the constitution by alteratives, tonics, and iodine medicines. You may also usefully combine with such treatment blisters behind the ears, or a seton in the nape of the neck, and iodine lotions, according to the formulæ given by Dr. Lugol.

Hernia of the lachrymal sac, or the *relaxation* of it, left after the cure of chronic inflammation of it, is to be treated by compression, joined with the application of an astringent lotion, both to the outside of the tumour and to the internal surface of the sac. Compresses are to be wet with it, and some of it dropped into the lacus lachrymarum, and left to be absorbed by the puncta.

Hydrops of the lachrymal sac is the swelling produced by the accumulation of mucus in it, in consequence of an obstructed state of the lachrymal canals and nasal duct. The natural secretion of mucus in the sac goes on, but as it can neither be discharged by the lachrymal canals, nor by the nasal duct, it collects, so as to form a tumour, which has been known to attain the size of a pigeon's egg. In the treatment, the sac is to be opened, its contents discharged, and injections used, for removing any thick mucus which may remain. A little lint is to be put into the sac, and next day the lachrymal canals and nasal duct are to be examined, and the causes of the accumulation having been ascertained, you are to aim at their removal.

Obstruction of the Puncta Lachrymalia and Lachrymal Canals.—Gentlemen, the puncta lachrymalia are sometimes congenitally deficient; such a case, I scarcely need tell you, is hopeless. Sometimes the puncta and canals are constricted, but pervious; and occasionally they become blocked up with calcareous matter deposited from the tears. The most frequent cause of their obstruction is a thickening of the membrane lining them, a consequence of previous inflammation.

When calcareous matter is present, it must be removed as soon as its presence has been detected by means of Anel's probe, made expressly for the purpose of examining the lachrymal puncta and ducts, and for removing any slight obstruction in them. When they are stopped up with mucus, they may, with these instruments, easily be made pervious again.

If you are examining the superior puncture and lachrymal duct, the point of the probe is first to be introduced from below upwards, till it reach the angle of the canal. It is then to be directed circularly downwards and inwards.

In examining the inferior duct, the point of the probe is first passed from above downwards, and then horizontally towards the sac.

When with these instruments you cannot decidedly make out whether there is an obstruction in the puncta or not, you may drop into the lacus lachrymarum a drop of an aqueous solution of saffron, while the patient lies upon his back. If the canals execute their office, you will see this coloured fluid disappear, without falling over the cheek.

When the puncta and canals are completely obliterated, the case is irremediable; for, were you to think of forming new puncta and ducts, you could not give them the organisation essential to make them of any use.

You will also meet with cases, in which a *stillicidium lachrymarum* arises from atony and relaxation of the lachrymal puncta and canals, in consequence of previous inflammation, or the too frequent irritation of them with probes and syringes. The puncta are seen to be widely open, and incapable of contraction.

For the cure of this form of diseases, Beer recommends an astringent collyrium, made of distilled water and a small proportion of the sulphate of iron, and camphorated spirit, or the tinct. opii. It is to be dropped out of a pen, or director, into the inner angle, frequently in the course of the day; the patient being kept for some time on his back after each application.

In old persons, this kind of stillicidium is attended with more or less separation of the lower eyelid from the eye. It may be somewhat relieved by astringent collyria; but, I believe, is rarely cured.

From what I have said, I hope you fully understand, that a stillicidium may be caused by any obstacle to the passage of the tears into the nose, as polypi or fungous tumours of the nose pressing upon the nasal duct. It has likewise been known to be produced by diseases of the antrum, exostoses, caries of the bones of the face, &c.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XV.

Acute and Chronic Hepatitis—Pathological Differences—Effect of Climate—Disease in Animals—General and Local Symptoms—Character of Fever—Pain of Shoulder—Use of Pleximeter—Complication with Jaundice—Resolution—Abscess—Various Openings of the Abscess—Cicatrisation.

GENTLEMEN,—I propose to-day to draw your attention to the subject of inflammation of the liver. This is the disease which you meet with in books under the general name of hepatitis, but it is of great importance to distinguish between acute and chronic hepatitis for this reason;—acute hepatitis implies something specific, an organic change, the nature of which is well known and accurately defined; but chronic hepatitis implies nothing of this certainty of the nature of organic change, inasmuch as there is no single one of the recognised disorganisations of the liver, which may not, and have not occurred, with chronic hepatitis as an exciting cause, or a prominent symptom. When we speak of acute hepatic inflammation, we speak of a disease, of which the structural lesions are sufficiently understood; but when we treat of chronic hepatitis, we treat of a disease in which there may be a great variety of organic changes. Chronic irritation of the liver may in one patient be followed by the development of hydatids; in another by cancer, or tubercle; in a third by hypertrophy of one or both of its elementary tissues; in a fourth by atrophy; and in a fifth by abscess; so that under the chronic form of hepatitis we may have many different lesions comprised. Under the acute form we have only vascularity, softening, yellow degeneration, and suppuration. These, which are the ordinary results of acute hepatic inflammation, are the same as the results of active inflammation of other parenchymatous organs.

It is an interesting fact, and connected with the predisposition to acute diseases of the abdominal viscera in warm climates, that acute hepatitis is much more prevalent in those countries than it is here, and this is particularly true with respect to the East Indies. You recollect, in one of my lectures, I alluded to the greater susceptibility to disease, the extraordinary nervous excitability of the digestive mucous membrane in warm latitudes, and hence that a large proportion of the diseases of those climates was characterised by the predominance of inflammation in the stomach and intestines. The same thing occurs with respect to the organs which are connected with the digestive tube, and hence it is that diseases of the liver and spleen are so frequently met with between the tropics. A very remarkable fact, bearing on this point, has been mentioned to me by Staff-Surgeon Blest. He states that, in the East Indies, hepatic disease in animals is no unusual occurrence; that *animals brought to India from more temperate climates are peculiarly subject to it*, and that in them it is a common cause of death. He has seen many cases of hepatic abscess in dromedaries and horses under these circumstances; a fact of great interest when considered with the liability to *tubercle* in animals brought from *warm climates* to these countries. In these countries acute hepatitis in its highest degree is a rare disease; in fact so rare, that it is only in our own time that any thing like a series of cases, by which you could compare the disease in these countries with a similar affection in others, have been published. A series of cases by Louis, and another by Dr. Graves and myself, published some time since, are all that we have on the subject. It is somewhat extraordinary that a sort of epidemic tendency to acute hepatic inflammation and the formation of abscess occurred in these countries about the middle of the year 1828. Up to this period abscess of the liver was looked upon as a very rare disease in Ireland; a case of it was met with in hospital once perhaps in twelve months or two years; but at the period to which I allude, almost every great hospital in Dublin had several cases, and in the Meath alone we had a great number, out of which seven or eight proved fatal.

We have now to consider this acute inflammation of the liver:—and first, with respect to the symptoms. Were I lecturing on pathology merely, I would commence with the organic changes; but as I have chiefly kept in view, during my present course, the practice of medicine, I shall begin by detailing the symptoms. You will get a good idea of the symptoms of acute hepatic inflammation by dividing them into local and general; by doing

this you will simplify the matter and acquire accurate and defined notions of the disease. Now, the local symptoms are, pain in the region of the liver, tenderness over the affected organ, and a degree of tumefaction perceptible to the touch; pain, tenderness, swelling,—here are the local symptoms. What are the general? Inflammatory fever and lesion of the digestive function; and in addition to this, if the case be severe, you have functional derangement of the respiratory and cerebral systems. You have then, in a case of acute hepatitis, the general symptoms of inflammatory fever with lesion of the digestive function, and if the case be severe, of the respiratory and even cerebral systems, the local symptoms being pain, tenderness, and tumefaction.

Now, with respect to the character of the fever which accompanies this disease, it is in all cases nearly the same, and here we come to an interesting and curious fact. You recollect, that in speaking of gastro-enteric inflammation, I alluded to the nature of the accompanying fever, and stated that it was (commonly) of a low character, and that there were no local inflammations in which the fever was so often typhoid as in the affections of the gastro-intestinal surface. This, I believe, has been one great cause of the ignorance of medical practitioners with respect to gastric and enteric inflammations; they have been most commonly looked upon as cases of typhus and treated accordingly. In acute hepatitis, however, we do not observe this typhoid prostration. Though closely connected with the gastro-intestinal system, the liver does not in its acute inflammatory state, produce the same manifest depression of the vital powers. On the contrary, we have, in the early period of the disease in this country, high inflammatory fever, hot skin, and full bounding pulse; a state in which few would be afraid to employ the lancet with boldness. Patients labouring under acute inflammation of the liver, generally have high sympathetic fever, a full, strong, and accelerated pulse, with the local symptoms above described, and, in addition to these, we frequently observe bilious vomiting, considerable thirst, derangement of the bowels, and scanty high-coloured urine. The tumefaction is more or less evident, and when this is accompanied by severe pain, there is considerable difficulty of breathing, a circumstance which sometimes occasions this disease to be mistaken for pleurisy. There are two remarks to be made on this subject. In the first place, it sometimes happens that acute inflammation of the liver and of the lower part of the lung occur at the same time, particularly where inflammation attacks the diaphragmatic surface of the liver. Here you frequently have an extension of the inflammatory process to the corresponding surface of the pleura, or the two diseases co-exist from the first. Under such circumstances, disputes as to which organ is engaged are often unnecessary. Again, in the early period, and when the attack is acute, the diagnosis of inflammation of the diaphragmatic surfaces of the liver or pleura is comparatively of little consequence, as both demand the use of calomel and opium, leeches and the lancet; and, in the early stages at least, both are amenable to the same treatment. But it is not so in the chronic stage of either. Here the diagnosis is of great importance; and when I come to treat of pleuritis I shall draw your attention to some researches of mine on this subject, which I hope have set this question at rest.

The pain which accompanies acute hepatitis varies much in situation. Sometimes it is felt in the shoulder, sometimes under the short ribs, sometimes in the loins, and frequently in the epigastrium. You have all heard of pain at the top of the shoulder as a common symptom of liver disease, in fact, so common as to be looked upon by some as a pathognomonic symptom. I believe that a great deal too much stress has been laid on this circumstance. It is now discovered, that so far from being a constant, or even a common, symptom, it is one which is of exceedingly rare occurrence. I have never seen a case of acute hepatitis with pain in the shoulder; I have sometimes observed it in chronic, but never, to my recollection, in acute cases. Andral states, that it is very seldom met with; Dr. Mackintosh says the same, and, if I recollect aright, looks upon it as a symptom not worth inquiring about. Now, I have seen some medical men who considered this pain in the shoulder as a diagnostic of such value, that if it happened to be absent they concluded there was no hepatic disease. The fact is, that it is anything but constant. You may have it in some cases, particularly of chronic hepatitis, and not in others; besides, it frequently depends upon other causes—for instance, upon pneumonia of the top of the right lung, or it may be caused by incipient phthisis, aneurism of the arteria innominata, or right subclavian artery, and other diseases. It is of very little consequence whether it be absent or present; and the only reason why I dwell upon it is, to show you its real value as a symptom.

There is one remarkable circumstance connected with the pain of an acute hepatitis. In one case, you will find that the pain is very acute and constant, in another, that little or none is felt; and when you come to investigate the cause of this after death, it generally happens, that in cases where the pain was violent the inflammation existed on the surface of the liver, and in those where little suffering was experienced, deep in the substance of that organ. This is a curious fact; but it may be looked upon as an illustration of a general law, *that if we consider inflammatory affections of the solid viscera, we shall find that the more superficial the inflammation, the more painful it is; and, on the other hand, the more deep-seated it is, the more is it latent, so far as pain is concerned.* Thus: if you take a case of inflammation of the sub-

stance or central parts of the brain, you will find that the disease is to be recognised often not by pain, but by the lesions of the sentient and locomotive powers; whereas, in inflammations of the membranes, on the surface of the same organ, one of the most prominent symptoms is agonising headach. In the next place, go to the lung,—take a case of deep-seated pneumonia, and contrast its almost painless character with the lancinating torture of an acute pleuro-pneumony. In pneumonia the pain is dull, and scarcely complained of; but pleuritis, unaccompanied by acute suffering, is extremely rare; in fact, where you have the signs of inflammation of the parenchymatous tissue of the lung, with sharp pains in the chest, you may very safely make the diagnosis of pleuro-pneumony. The same absence of pain is by no means unusual in inflammatory affections of the mucous membrane of the intestines; but if the inflammation should chance to extend to its peritoneal investment, you will have this state rapidly exchanged for one of intense suffering. So it is with respect to the liver: disease on the surface of that organ is attended with severe pain; but enormous destruction of its deep-seated parts may take place, and your patient complain merely of a sense of uneasiness.

A late author on hepatic affections, Dr. Bell, who has written a treatise on the diseases of India, describes two forms of acute hepatic inflammation, which are different as to their seat and character. In one of these, which he terms *sero-hepatitis*, the disease is on the surface of the liver; in the other, which he terms *puro-hepatitis*, it exists in the centre. In the sero-hepatitis, he states that the patient is attacked with sudden pain in the region of the liver, and this is so severe that even the weight of the bed-clothes is insupportable; the patient cannot bear to turn or lie on his left side, from the pressure exerted in that position on the inflamed organ. But the deep-seated, or puro-hepatitis, may go on in such a latent manner that the first symptoms you have of the existence of liver disease are those which mark the occurrence of suppuration. Neither the patient nor his medical attendant will have reason to suspect inflammation of the liver, until the constitutional and local symptoms of the suppurative process direct attention to that organ. Such are the statements of Dr. Bell, which I believe to be correct, as they are supported by the concurrent testimony of many persons who have practised in India, with whom I have conversed on this subject. Mr. Annesly makes the same assertion; and such was our experience in the succession of cases of hepatic abscess which were under treatment in the Meath Hospital during the year 1828.

The next symptom which we have to consider is the tumefaction of the liver, and this, gentlemen, is one of considerable importance. In order, however, to estimate the extent of this tumefaction with any degree of accuracy, you must take one preliminary step, and that is, to have the bowels fully evacuated. If the intestines are filled with feculent matter or gas, you cannot do this in a proper manner. A few hours before you make your examination, give the patient a full purgative draught, assisted, if necessary, by a strong purgative enema. In this way you empty the belly of collections of feculent matter and æriform fluid, and then you can with certainty and satisfaction ascertain the extent of the swelling. You will then be able (when your patient is laid in bed), perhaps, to see at once the extent of the tumefaction, particularly where the parietes are not thick or loaded with fat; at all events you will be able to feel it with your hand, and in every case you can ascertain it by mediate percussion with the plexímeter. I do not know any more important adjuvant, in making out the diagnosis of an enlarged liver, than the use of mediate percussion. For instance, suppose you have a patient labouring under acute hepatitis, and that the tenderness of the organ is so great that he cannot allow you to make the requisite degree of pressure to ascertain the extent of the swelling; take the top of your stethoscope, apply it over the region of the liver, make use of light percussion, and you will find, with the greatest accuracy, how far the tumefaction of the liver extends by the dulness of sound heard over the inflamed organ and exactly limited to it. In this way you can make a most satisfactory examination, without giving your patient any pain, and this is a matter of some importance, as you will meet with many cases in which there is exquisite tenderness, and where the patient will not bear the slightest pressure. I would advise you, therefore, to practise this mode; it gives little or no pain, it is exceedingly simple, and I have not the slightest doubt of its accuracy. Now the value of this tumefaction, as a sign of the existence of hepatic inflammation, depends very much on the recent nature of the attack. If a man who was in perfect health a few days back complains of pain in his right side, and has a tumour in that situation, it is to be presumed that this tumour does not depend upon the presence of a collection of fluid in the pleura, and consequently that the tumefaction is not produced by an empyema. Then, if in connexion with fever and pain in the right side you can ascertain the existence of a tumour in the region of the liver, and that it has occurred within a short space of time, you may be pretty sure that it is not an empyema, but an inflamed and enlarged liver.

Jaundice has also been considered as a symptom of hepatic inflammation, but it is one which is by no means constant. Again, you may have most extensive hepatitis with slight jaundice, and universal and intense jaundice with trifling or no hepatitis, and what is equally singular, you may have very little perceptible disease of the liver with scanty secretion of bile; and, on the other hand, the

liver may be burrowed with abscesses, and at the same time you find bilious stools, and after death the gall-bladder may be found filled with pure healthy bile. I thought at one time that I could explain the presence or absence of jaundice in cases of hepatitis, by supposing that where it occurred the jaundice was the result of inflammation of the gastro-duodenal mucous membrane; and to prove this, I drew up a table of cases, of which one half were complicated with jaundice and the other not. I found, however, that in a great number of cases, where the tube was free from disease, the hepatitis was complicated with jaundice; and in a similar number of cases, where the same circumstances were observed, the tube was in a state of disease. So that we may have, as you perceive, hepatitis and jaundice with and without disease of the intestinal tube; and whether we look to the cases of hepatic inflammation, unaccompanied or complicated with jaundice, the state of the gastro-intestinal mucous membrane throws as yet no light on the subject. It appears, then, that the occurrence or non-occurrence of gastro-duodenitis does not explain why it is that in one case of hepatic inflaammation jaundice is a prominent symptom, and in another is completely absent.

In some cases of acute inflammation of the liver the natural secretion of that organ seems to be totally annihilated. A curious case of this kind occurred under the care of Dr. Graves, in the Meath Hospital, where the slightest trace of bile did not exist in the gall-bladder, which was filled with a transparent mucus. In some instances you will find plenty of bile discharged, in others none; in some patients the stools are observed to be clay-coloured, or very faintly tinged with bile, in others they are healthy, and natural in colour as well as consistence. From our own experience, and from studying the series of cases published by Louis, we have come to the conclusion, that neither the presence nor the absence of bile in the stools affords any positive or useful information as to the different stages of this disease, its progress or termination.

Acute hepatitis terminates in a variety of modes. It may terminate by resolution,—here the organ returns to its former healthy state without any appreciable change of structure or function; it may terminate by the formation of matter,—here we have suppuration and abscess; it may terminate in gangrene; and, lastly, it may, without the occurrence of suppuration or gangrene, pass into chronic hepatitis, of which the result may be a variety of morbid changes in the organ itself. When the patient is so fortunate as to meet with the first of these terminations, the fever, pain, and tumefaction, gradually disappear. On making an examination with the plexímeter, you will find that part of the belly which was rendered dull by the tumefied liver becomes clear on percussion; you will find also that the dulness of the lower part of the chest on the right side is removed, the patient can breathe without any difficulty, and lies on the affected side without inconvenience. But when the disease passes into the suppurative stage, the train of phenomena exhibit a marked difference. What we generally observe under such circumstances in this country is, that there is a change in the constitutional symptoms; the fever, which has been hitherto inflammatory, now becomes hectic. The pulse continues quick, but is diminished in strength and volume; the countenance becomes pale and collapsed, the patient feels languid, restless, and disposed to sweat, and his perspiration has a sour smell. He may also have a miliary eruption, and this continues for some time, with an increase or persistance in the size of the hepatic tumour. When these symptoms appear, there is every probability that matter is forming or has been already formed. The patient then begins to complain of increased weight in the region of the liver, and in some cases the integuments over that organ are swollen and slightly discoloured. I have observed that in some instances the pain concentrated itself in one point, and in this situation it was afterwards found that abscess had formed. These are the ordinary symptoms which usher in or accompany the suppurative stage of hepatic inflammation; but there are also cases, even in this climate, where this marked change of symptoms is not seen, and where abscess forms rapidly and with symptoms which might be supposed to belong to the early period of the disease. This, however, is particularly true with respect to hepatic abscess in the East Indies.

I believe I mentioned in a former lecture a very curious fact, namely, that it has been often found impossible to salivate persons labouring under hepatic abscess, so that the presence of matter or not in the liver may be determined by the circumstance of the patient being susceptible or not of the full effect of mercury. The liver in this case seems to illustrate that pathological law which I alluded to in speaking of dysentery, that the more intense an inflammation, the greater is the difficulty of producing ptyalism. My friend, staff-surgeon Marshall, and also Mr. Annesly, agree in stating, that it is exceedingly rare to find a case of hepatic abscess in which the salivary glands have been affected by mercury, and our experience of the disease in this country exactly coincides with their opinion. It has been also observed, that hepatic abscess may form in an insidious and latent manner, when it happens to be complicated with disease of other organs. This affords us an illustration of a law already laid down, that the more complicated an affection is, the more obscure is its character. Again, we may, as the result of acute hepatitis, have one or two vast cavities formed in the substance of the liver, or we may have a number of very small abscesses. I

recollect a case which occurred some time ago near this city; the patient exhibited the symptoms, and was, in fact, supposed to labour under intermittent fever. After some time death took place, and on dissection a number of small abscesses were found in the liver, of which, during life, there was no symptom, except that which I have just mentioned.

When an hepatic abscess attains a certain magnitude, it has a tendency to burst and discharge its contents. If it escapes externally, it makes its way in a great variety of directions, sometimes in the epigastric, sometimes in the hypochondriac, sometimes in the lumbar region, and there are cases on record, in which the matter has burst in the right axilla, by a sinuous passage beneath the integuments of the chest. When it bursts internally, it sometimes perforates the diaphragm, and gets into the cavity of the pleura, or what is more commonly the case, into the substance of the lung. The matter of an hepatic abscess very rarely gets into the pleural sac, and hence we very seldom have an empyema as the result of this occurrence, because the pleura being extremely liable to adhesion as a consequence of the inflammatory process, and the passage of matter being always preceded by inflammation, the opposed surfaces of the pleura become glued together by coagulable lymph, which prevents the hepatic pus from getting into the pleura, at the same time that it favours its passage into the lung. The opening into the lung is one of ordinary occurrence; many cases of it are on record, and serious as the lesion may appear, it is, perhaps, one of the best modes in which hepatic abscess may terminate by internal opening. Many persons have recovered after such a termination, and I have seen myself three cases in which it was certain, and a fourth in which it was probable, that the matter had been expectorated by the mouth, with a favourable issue. We are, then, as far as the records of medicine and our experience in the Meath Hospital go, warranted in looking on this termination as a favourable one. Hepatic abscess may also open into the pericardium, but this is very rare, there being only one case of this kind, which is given by an American author. It may open into various parts of the intestinal canal, the stomach, duodenum, and colon; it may also discharge its contents into the right kidney, into the vena cava, or into the peritoneum, and thus cause violent peritonitis and death.

The diagnosis of these different openings of an hepatic abscess is easy, and founded on the same principle, the occurrence of new and extraordinary symptoms connected with the adjacent viscera which were not before diseased,—symptoms of a sudden discharge of pus from or into these organs. Suppose you have a case of hepatic abscess, and that during the progress of the disease the patient has sudden and enormous expectoration of purulent matter, without any preceding signs of inflammation of the lung, it is probable that the abscess has opened into the lung; or suppose that during an attack of acute hepatic disease, your patient is all at once seized with nausea, and vomits a quantity of purulent matter, and immediately after this you perceive that the tumefaction of the liver subsides. Here the matter has been discharged into the stomach, in other cases you have it discharged into the duodenum or colon. Again, you may have instances where the matter gets into the peritoneum; here you may observe the occurrence of rapid peritonitis. So that in all cases of this kind, the diagnosis is founded on the same principle, *the occurrence of discharge of pus from or into organs which previously had been considered to be in a healthy state, and this coinciding with a subsidence of the original tumour.*

In persons, who under such circumstances recover, it is natural to expect that cicatrisations should exist in the liver. Louis states that he has never seen this; with respect to our cases of hepatitis, we can only say that the fatality of the disease has afforded us no opportunity of investigating this point of morbid anatomy. Mr. Annesly, however, in his work on the diseases of India, has given drawings exhibiting this appearance. I recollect one case of a man in the Meath Hospital, who had been a soldier in the East India Company's service, and had been treated for liver disease; this man died of phthisis, and on dissection the surface of the right lobe of the liver was found puckered, forming a hollow with a cartilaginous basis, strongly resembling what we might suppose to be the cicatrix of an abscess.

LECTURES
ON THE
PHYSICAL EDUCATION AND DISEASES OF INFANTS AND CHILDREN,
BY DR. RYAN,
At the Westminster Dispensary, 1833.

LECTURE XVI.
Diagnosis of Infantile Diseases.

Gentlemen,—There is much difficulty in distinguishing the diseases of children, for at this early age, there is no language or reason on the part of the sufferers to assist us; and at a later period, when the power of speech is developed, we can place little, if any reliance, upon the answers to our interrogatories. We are therefore obliged to employ the signs of diseases of adults—symptomatology—and to deduce our inferences from this and pathology, so as to arrive at correct conclusions.

It is highly necessary to direct your attention to the usual symptoms of disease in the different organs of the body. Some writers have said, that the state of the countenance, the degree of plumpness, or emaciation, the

nate of the breathing, the deviations of the stools from the orange-yellow colour, the drawing up of the lower, and the convulsive motions of the upper limbs, are the chief indices of infantile diseases; but were we to content ourselves with this catalogue, we should take a very superficial and imperfect view of the subject, and form very wrong and dangerous conclusions. We shall therefore consider the matter somewhat more minutely.

The difficulty of arriving at a correct diagnosis in diseases of children, is one of the chief causes of the great mortality among them. Such was the opinion of Wichmann, (Ideen Zur Diagnostick, Einleitung). It is an ancient axiom, "a knowledge of a disease is half the cure." Baglive has well observed, "Antequam de remediis statuatur, primum constare oportet, qui morbus, et quæ morbi causa: alioquin inutilis opera, inutile omne consilium,"—before we attend to remedies, it behoves us, in the first place, to determine the disease, and the cause of it, otherwise all our efforts and consultations are useless. Let us suppose a superficially informed practitioner, who confounds diseases whose symptoms are somewhat similar, but whose causes and treatment are totally different, and we can easily comprehend the dangerous and fatal consequences of such mistakes. If we contrast this dangerous empiric with a well-informed practitioner, who, at one view, discovers the nature of the disease, and employs the proper treatment, we shall observe how different are the results of the practice of these individuals; how beneficial that of the one, how destructive that of the other.

I need scarcely observe, that it requires a perfect knowledge of physiology and pathology to form a correct diagnosis of diseases, and of therapeutics to remedy them.

Physiology teaches us the natural functions of the body, circulation, respiration, digestion, innervation, &c.; pathology the disordered states of these; and therapeutics the indications and means of cure. We must, therefore, apply these sciences to the different ages, sexes, habits, temperaments, idiosyncrasies, or peculiarities of constitution.

Judicious and scientific physicians follow a regular method or order, in their examination of the symptoms of disease. They first observe the state of the countenance, tongue, pulse, digestive and respiratory systems. They successively pass in review, the functions of the body, ascertain the local symptoms in the head, chest, abdomen, and in any other part which may be affected. Patients seldom suppose that their medical attendants can, in a few minutes, comprehend the nature of their complaints; but this is easily done, in the majority of cases, by well-informed practitioners.

When we look at a patient, his countenance not only indicates the condition of his general health, but likewise of his intellectual faculties and muscular power; the state of his respiration is easily appreciated; the conditions of his tongue and appetite are indices of the digestive system—of his alvine and urinary evacuations, while his pulse marks the state of his circulation. The history of his disease and the state of his feelings will determine whether his complaint is acute or chronic.

All practical physicians examine the whole functions of the body in a few minutes, and follow a regular method, such as that proposed by M. Chaussier, in his Tableau de Semeiotique Générale, which I shall briefly notice. This order consists in examining successively, 1st. the *face* and the differences which it presents, considered altogether, and in particular, of the regions and organs which compose it, such as the forehead, the eyebrows, the eyes, the eyelids, the temples, the cheeks, the ears, the nose, the mouth, the lips, the chin; 2nd. the *attitude* of the patient in bed, if he is obliged to rest in the sitting posture, on one side, on his back, abdomen, &c.; 3rd. the *skin*, its colour, spots, eruptions, temperature, and its dependencies, the nails and hair; 4th. the *vital functions*, which comprise the *motility*, the augmentation of which is manifested by tension, erythism, contraction, tonic or atonic spasms, general or partial; the *diminution* by lassitude, prostration, paralysis; the *irregularity* by anxiety, jactation or restlessness, cramps, subsultus tendinum, or starting of the tendons, carphologie, or grasping at imaginary objects, crocidism, or picking at the bed clothes; the *sensibility*, which may be increased or diminished, and characterised by pain, stupor, or apathy; the *caloricity*, or temperature, the diminution of which causes chilliness, rigors, or shiverings, horripilation, trembling of the limbs, chattering of the teeth; the augmentation of which causes a dry, burning, mordicant heat; the *sleep*, which may be absent, disturbed, or so profound as to approach stupor or coma; the *circulation*, which indicates the action of the heart and the different kinds of pulse; the *respiration*, the disorder of which is characterised by dyspnœa, or difficulty of breathing, orthopnœa, or breathing in the sitting posture, oppression, suffocation, cough, hiccup, and the other phenomena discoverable by auscultation, percussion, succussion, and mensuration of the chest; 5th. the *sensorial functions*, which comprise the external senses, and may be increased, or diminished, or enfeebled, as loss of vision, hearing, smell, taste, touch; the *internal senses*, the alteration of which is characterised by difficulty or nullity of perception, confusion of ideas, vacillation of the memory, fallacy of the judgment, whence result different kinds of delirium, stupidity, idiocy, mania, &c.; the *voice*, which may be raucous, or hoarse, obscure, bass, shrill, whispering, moaning; and the speech or articulation, which may be imperfect or suppressed, as in aphonia; the *movements of the extremities* or limbs, as when difficulty and pain render the position fatiguing; locomotion, or walking, vacillating or impossible; 6th. the *nutritive functions*, the order of which

is *digestion*, to judge of which, we examine successively the teeth, gums, above all the tongue, the state of the abdomen, epigastrium, or pit of the stomach, the umbilicus or navel, the hypochondriac, hypogastric and inguinal regions, which include the whole anterior surface of the abdomen; and next consider the state of the appetite, thirst, depraved taste, mastication, deglutition or swallowing, if there be indigestion, acid, alkaline insipid vomiting, flatuosites or flatulence, borborygmi, rumbling in the abdomen, &c.; the secretions and excretions, which may be augmented, diminished, suppressed, or depraved, among which we are to observe the cutaneous perspiration, the urine and its quantity, its appearance, sediment, its frequent or rare, difficult, painful, involuntary, or no ejection; the alvine excretions more or less abundant, their vitiated conditions, the saliva, expectoration, and the nasal, pulmonic, uterine, intestinal, and hæmorrhoidal hæmorrhages; *nutrition*, the derangement of which rapidly produces emaciation, or local engorgements, exuberances, changes of tissue, &c.; the *absorption*, which may be augmented, diminished, or suppressed, whence result swellings, œdema, or atrophy of parts; 7th. the *genital functions*, whose powers may be increased or diminished; and the physician will terminate his examination by considering individual circumstances, as the age, sex, constitution, stature, volume, conformation of the body, regimen, morals, passions, education and mode of life, or habitual occupation; while he also attends to habitation, climate, season, and constitution of the atmosphere. It is by the comparison and analysis of these various circumstances that we can arrive at a correct conclusion on the nature of disease.

In acute complaints our object is to ascertain speedily the nature of the malady; but in chronic cases we should inquire into the previous history of the patient, and of the diseases of his immediate relations.

We should next ascertain the physiological and pathological conditions of the patient at the different periods of life; and pay particular attention to the septenary divisions of the ancients, such as infancy, puberty, adult age, and senescence; and learn the state of the functions during the different eras, and also the disorders and diseases from which the patient suffered, as eruptions on the scalp, cerebral affections, glandular tumours in the neck, groins, or abdomen; eruptive diseases, as measles, small-pox, scarlatina, hooping-cough, &c., during childhood; pulmonic affections, as catarrh, hæmoptysis or spitting of blood, disorders and diseases of the organs in the chest and abdomen, are to be suspected after the age of puberty.

A great degree of importance was attached by the ancients to the septenary periods, especially by the Egyptians and Pythagoreans, and we find them noticed by the illustrious Shakspeare. It was held that the age of man was comprised in seven decades of revolutions of the earth round the sun; and that the life of man consists of hours, days, and years, and his health is influenced by seasons.

Hippocrates ascribed much power to lunar influence. The synodical or mean period of lunation is four times seven, or twenty-eight days; and the father of medicine divided the period of seven into two of three days and a half each, which he considered as influential over disease, whether for better or worse. Hence the origin of critical days. In the early ages very little was done in the commencement of diseases; and it was, therefore, much easier than it is at present, when active remedies are employed, to form an opinion upon crises.

The periodicity of disorders is known to every observant practitioner. The recurrence of the paroxysms of intermittent fevers, and of neuralgia in different parts of the body, is known to every one engaged in practice. Menstruation recurs every twenty-eighth day, or one lunar month, and ten times this period is the term of utero-gestation.

We have this fact upon unquestionable authority, as appears by the words of Solomon: "In my mother's womb was I fashioned to be flesh in the time of ten months." It is certain, however, that the duration of pregnancy may vary; but it is worthy of notice that the lunar period of twenty-eight days is made up by adding the units of the number seven: 1, 2, 3, 4, 5, 6, 7—28. Kirkland mentions a curious fact in support of the diurnal or lunar influence upon the human body. He states that a clergyman in Gloucestershire of his acquaintance, was able to predict the time of parturition with astonishing accuracy, and was consulted very much on the subject. Nurses very often assert that if the process of labour commences at a certain hour in the morning, it may extend to the same hour in the evening, or a little later; and this is sometimes the case. There are many curious statements in Balfour's work on sol-lunar influence; and the following extract from the celebrated Stahl, though evidently liable to exceptions, may be cited:—

"A seven months' child will live. If a child breathe freely the seventh hour after birth, it will survive. On the seventh day the remains of the navel-string drop off. At twice seven days, the infant notices the light; at thrice seven notices objects; at seven months the teeth begin to appear; at twice seven months the child begins to walk; at thrice seven months it begins to articulate; at four times the period it walks alone; at seven years the teeth are renewed; at twice seven years the beard appears; at thrice the period the body acquires its growth; at four times seven years life is in perfection, and continues so until five times seven years; at six times seven years the strength and health begin to fail; at seven times seven the mind has attained maturity; and ten times seven years is the

full age of man, after which period life in general is only trouble and vexation." Blumenbach observes that a large proportion of aged persons die at 84—12 x 7.

Though we cannot subscribe to the foregoing doctrine, we must admit that the development of both body and mind is progressive, and that the seasons have great influence on both. The difference of our moral and physical states in gloomy and fine weather are known to every one.

It is by the former inquiries that we can learn the peculiar disposition and constitution of our patient, and his predisposition or liability to certain diseases. Great attention has been paid to the constitution from the earliest period, as every one knows that recovery will more speedily happen when this is good, than when it is debilitated or injured.

The temperaments must also be duly considered. These are divided into the sanguineous, nervous, lymphatic, melancholic, or bilious, and, according to some, the muscular, or athletic, and genital.

The vascular or circulatory system, predominates in those of a sanguineous temperament: the pulse is strong, the blood is vigourously circulated to all parts of the body, all organs are well nourished, perform their functions well, and hence the health is good, the body is symmetrical, and the mental powers are highly developed. Persons of this temperament will suffer most severely from fevers and inflammations, and will require copious bloodletting, free purgation, and all remedies of a depressing character; in a word, the most powerful treatment, such as could not be borne with safety by melancholic or nervous persons. The knowledge, therefore, of the prevailing temperaments enables us to form a correct notion of the predisposition to disease, and also of the indications of treatment. It would be foreign to my present purpose to dilate upon the temperaments and their modifications, as these are fully described in works on physiology; but I may observe that it is often difficult to distinguish them as defined, on account of difference of constitution caused by marriage.

In our examination of diseases, we must attend to idiosyncrasies, or peculiarities of constitution. We observe the greatest difference in this respect, which will explain peculiar symptoms, and modify our treatment. From the preceding statements it is manifest, that in investigating the nature of disease, we pass in review all organs and functions in the body, compare their natural and disordered or diseased conditions, consider them in reference to age, sex, constitution, temperament, idiosyncrasy, habit, occupation, climate, season, aliment, drink, exercise, passions, and habitual diseases; and, finally, employ those remedies which control, arrest, or remove the varied deviations from health. We are much assisted by the definitions of diseases laid down by systematic authors on the practice of medicine. The first and grand question which every physician should determine in investigating illness is, what is the disease; is it disorder of function only, is it inflammation or its consequences, is it a complication of both? and his conclusion will determine the treatment, which must vary according to the nature of the malady. In simple disorder of function, indicated by *occasional* pain, spasm, or convulsions, we advise sedatives; while in those cases which are characterised by fever and *constant* pain, depletion and antiphlogistic remedies are indispensable. Though this is a received opinion, it is necessary to observe that disorders and diseases are, in general, so complicated, that it often happens, we are unable to determine which form is really the cause of suffering. But in general a correct opinion is formed, after having considered every symptom, however trivial.

Such is the plan of ascertaining the nature of disease both in private and hospital practice. During acute diseases, it is highly improper for students to annoy the afflicted sufferers, by repeatedly asking the same questions. This conduct is generally and properly prevented in hospitals, and was severely and justly censured by Martial:—

Languebam; sed tu comitatus protinus ad me
Venisti centum, Symmache, discipulis.
Centum me tetigêre manus, Aquilone gelatæ
Non habui febrem, Symmache, nunc habeo.

It is necessary in all cases to compare the physiological, or natural, and the pathological, or morbid states of the organs and their functions, to determine their alterations, and to form an accurate diagnosis. An experienced and scientific physician can, in many cases, discover the nature of the disease without a single interrogation, and this tact is of vast importance in infantile complaints. The celebrated Stoh was in the habit of discovering the trades of his patients, and veterinary surgeons arrive at their conclusions by the sense of vision alone. If children are able to speak, we cannot depend on their answers, when questioned about their feelings during disease. Again, many adults mislead us by substituting their ideas and fears for their sensations; for example, they say they are feverish, have inward fever or inflammation, without the slightest correct notion of the nature or symptoms of these diseases. Again, some persons conceal their symptoms, others exaggerate them; but we can seldom be deceived, when we take physiology and pathology as our guides.

In our diagnosis of diseases we employ all our senses. Vision enables us to judge of the habit and constitution, of the form, colour, size, and movements of different parts. The countenance and attitude of the sick claim especial attention in our discrimination of the nature and result of disease. The supine position, for instance, is characteristic of profound debility or prostration of strength, as we

observe at the approach of death, and also in inflammations of the abdominal viscera, or in gastro-cephalitic cases, when the organs in the head and abdomen are simultaneously affected. When the patient lies on his abdomen, he labours under colic, or intestinal pains, without inflammation. He reposes on the affected side in many diseases—in dropsy of the chest, inflammation of the lungs, liver, &c.

The changes in the colour of the skin are remarkable in diseases: the skin is a pale yellow in chronic liver complaint; in painters' colic, of a greenish yellow; in chlorosis, white; in anasarca, lepra, or after severe hæmorrhage, of a pale yellow; a leaden colour in cancer; brown or blackish in purpura; blue in malignant cholera. The physiognomy enables us to detect a great number of diseases.

When there is a determination of blood to the head, as in cerebral congestion, incipient hydrocephalus, apoplexy, fevers, eruptive diseases, small-pox, scarlatina, measles, bleeding from the nose, and on an access of mania or hydrophobia, or delirium, the face is red, swollen, and sometimes livid; in consumption, the eyes are brilliant, the cheek bones prominent and covered by a red patch, the cheeks are thin and closely approaching the teeth; in inflammation of the lung, pleura, or liver, the side of the face which corresponds to that of the organ affected, is often red; and the face is red or livid in aneurism or hypertrophy of the heart. The countenance is distressed in cholera, colic, inflammation of the bowels, and all painful diseases; is contorted in convulsions; and the features are changed and sharpened (*facies Hippocratica*) at the approach of death.

The different parts of the face, taken separately, present diagnostic signs. Of these, the eyes are the most expressive of the morbid condition. They indicate the secrets of the mind and body, as well observed by Hippocrates:—"Ut oculi valent, sic ipsa persona." The numerous communications between the branches of the fifth pair of nerves which preside over vision, and the great sympathetic, so admirably illustrated by Sir Charles Bell, whose office it is to transmit to the brain all visceral sensations, convey to the eyes all the morbid changes of the internal organs. It would be easy to offer an immense number of proofs of the validity of this conclusion. In forming a diagnosis, we examine the external and internal parts of the eye, the colour, state of the pupil, and the motion of the organ. The eye is suffused or red in affections of the brain, as apoplexy, incipient hydrocephalus, in fevers, in exanthemata, as measles, small-pox, and scarlatina; the sclerotic coat is of a pearly white colour in consumption, bluish in scrofula, yellowish in jaundice or chronic liver disease. The pupil may be dilated, contracted, or closed, and movable or immovable. The globe of the eye may be fixed or immovable in apoplexy, compression of the brain, from whatever cause, depression of bone, congestion, hydrocephalus, in amaurosis, during narcotism and catalepsy; or agitated by oscillatory or rotatory motions, in strabismus or squinting, hysteria, epilepsy, and convulsive affections. The eyes are turned up during sleep in ventricular arachnitis, in the last stages of various diseases, or at the approach, or in the agonies, of death.

The eyelids, eyelashes, and eyebrows, afford signs of diseases. The eyebrows are elevated in all the agreeable passions, as joy, astonishment, pleasure; are depressed in grief and anger; and are contracted in painful and convulsive diseases, as inflammation of the iris, retina, and globe of the eye. The eyelids are agitated in epilepsy, mania, hysteria, and in many diseases in which the eye is acutely sensitive to impressions of light; they are depressed in apoplexy, congestion of the brain, effusion (hydrocephalus), and paralysis. It is held by some observers, that the eyelashes are elongated in those predisposed to scrofula and consumption; but this is not always the case; they fall off in several cutaneous diseases, as certain kinds of ringworm, &c.

The tears are effused on the cheek in many complaints—in catarrh, influenza, in obstruction of the nasal ducts, in coryza or cold in the head, in measles, small-pox, scarlatina, in hysteria, dyspepsia, and hypochondriasis, and at the approach of death.

The sense of taste is affected in various diseases. It may be depraved in different degrees, or entirely absent.

The condition of the tongue is indicative of health or disease. This organ has a strong sympathy with the stomach on account of its mucous or external membrane, which is continuous throughout the whole digestive tube, as a part of the digestive apparatus, and as being intimately connected with the stomach by the pneumo-gastric, par vagum, or eighth pair of nerves. Hence we observe its dryness, humidity, colour, size, and motions. It is dry, contracted, and retracted, in the last stages of typhus, inflammations of the organs in the head, chest, abdomen, and all parts of the body. It is humid, soft, and pale, in all diseases of debility, in scrofula, dropsy, delirium tremens, or that peculiar mental aberration, with tremors of the upper and lower extremities, consequent on inebriety.

Its colour is white in the last disorder, in irritation or pain in the stomach and bowels, or in the digestive organs, in the different kinds of palsy, asthenia, and in many chronic diseases; but the tongue does not invariably sympathise with the digestive organs. This colour is characteristic of inflammation of the mucous follicles of the digestive organs, stomach, bowels, &c., and may become grayish, yellowish, brownish, or blackish, according to the severity of the disease. It is now an established axiom that the tongue may become dry, brown, or black during the progress of external as well as internal diseases as after wounds, fractures, febrile erup-

tions, measles, small pox, scarlatina, or acute diseases in the head, chest, abdomen, and pelvis. In speaking of all these diseases it is a common remark to say, that typhoid symptoms have supervened, and that the conditions of the tongue just noticed are frequently observed. This fact has led some to contend that typhus is not always an idiopathic disease, but is often symptomatic of local affections.

The tongue is generally red in gastritis or inflammation of the stomach, in scarlatina, measles, and small pox, and in most fevers. When it becomes black, there is most acute and fatal inflammation present, though recovery may happen. It may be affected with aphthous, venereal, and scorbutic ulcerations. The tongue is white on the sides and yellowish in the centre in dyspepsia, and its coats or furs may be modified, according as the individual sleeps with his mouth closed or open. It is swelled in many diseases, as cancer, after the use of mercury, in aphthæ or thrush, in small pox, &c. At the approach of death the patient cannot protrude the tongue beyond the teeth; and this happens in affections of the brain, apoplexy, cerebral congestion, effusion into the ventricles of the brain (hydrocephalus), congestion caused by the sudden appearance of eruptive fevers, scarlatina, measles, small pox, &c.

The signs of disease which are furnished by the external ear are relative to its form and secretions. The ear may be red or livid in organic diseases of the heart or large blood vessels, in all cases in which the respiration is impeded, and in which there is determination of blood to the brain, such as those mentioned in the description of the signs afforded by the countenance. The secretion of wax may be augmented, altered, or diminished in acute or chronic inflammation of the mucous membrane of the ear. There may be a copious, fetid, purulent discharge from the ear, induced by cold, fevers, as typhus, scarlatina, &c.

The sense of hearing may be diminished in compression or congestion of the brain during the progress of fevers and various diseases. M. Broussais considers smallness of the lobe of the ear as a sign of scrofula; and M. Jolly observes that the cretins of Valais offer this disposition very generally.

The size of the nose is increased in coryza, or cold in the head, in scrofulous and scorbutic diseases, in elephantiasis, and with many intemperate persons. It is diminished in size, and is sharpened in nervous disorders, in chronic diseases, and especially in consumption. It is red in all diseases of the head which are characterised by increased vascular action, in coryza, acne, &c.; it is pale or livid in the cold stage of ague and in typhus fevers. A child picks its nose when it suffers from irritation, inflammation, or ulceration of the bowels, and when it is irritated by the presence of worms in the rectum.

The rapid and convulsive motions of the nostrils indicate laborious respiration, as in inflammation of the respiratory organs, typhus, small-pox, measles, scarlatina, and at the approach of death.

The examination of the lips and gums is highly important in the discrimination of diseases. The different parts of the mouth are lined by mucous membrane, which is continued into the lungs and digestive organs, and hence we find these indicative of pulmonic and gastro-enteric inflammations. Thus the lips are red and dry in most of the pulmonic or abdominal inflammations; they are pale in dropsies after severe hæmorrhage; they are blue in cold stages of common, continued, and intermittent fevers, in asthma, in aneurism of the heart or large vessels; and they become livid or black in apoplexy, cerebral congestion, asphyxia from strangulation, suffocation, submersion, or drowning. The lips are parched, and covered with a dark or black fur (sordes), in the last stages of typhus and other fevers, as the eruptive, infantile, remittent, &c.; they are covered with an eruption after exposure to cold, in syphilis and cutaneous diseases; they are ulcerated in scrofula, syphilis, and scurvy; they become tremulous on the approach of vomiting, diarrhœa, delirium, epilepsy, hysteria, convulsions, delirium tremens, &c, and they are separated in convulsions, from compression of the brain, which we often observe in cases of children.

The gums are pale in chlorosis, dropsy, scrofula, anemia, after profuse hæmorrhage; they are red in inflammation of the digestive organs, scarlatina, and dentition; they are swollen, spongy, bloody, and exhale a fœtid odour, in scurvy, purpura hæmorrhagica, and sometimes in the last stage of typhus.

The teeth are remarkably white in consumption, yellow in dyspepsia, derangement or disease of the liver or kidney, become carious during pregnancy and indigestion, are covered with a brown or black sordes in typhus and low fevers, and also in gastro-intestinal inflammations.

After having examined the different parts of the face and mouth, we proceed to inspect the neck, chest, abdomen, and extremities; and we employ all our senses of vision, audition, gustation, olfaction, and palpation, in our investigations. When the neck is short and thick, it is a sign of an apoplectic tendency; a long thin neck, with high shoulders and a flattened chest, indicate a predisposition to pulmonary disease; and the veins of the neck are distended in certain diseases of the heart or great vessels.

The examination of the surface of the chest affords the explication of an immense number of diseases in the lungs and heart; and this is made by auscultation, percussion, succussion, and mensuration.

The condition of the abdomen will enable us to discover hernia, and many diseases of

the viscera contained in it, as enlargement of the liver, spleen, intestines, &c.

The spinal column will be affected in numerous disorders of the viscera of the chest and abdomen, an admirable illustration of which I lately witnessed in a case, with my friend Mr. Mason, of Newington.

The external genitals will be infiltrated with serum in dropsies; the retraction of one or both testes indicates disease in the kidney, ureter, or bladder; there are painful erections in blennorrhagia, disease of the prostate gland, stricture of the urethra, irritation of the cerebellum, in hydrophobia, epilepsy; there is pain in the glans penis in stone in the bladder, and itching in this part when gastric or intestinal irritation exists in children.

The extremities or limbs are altered in size, colour, in the power of motion. The inferior ones are swollen, or œdematous, in dropsies, enlargement of the liver or spleen, in diseases of the valves of the heart, and in fact in all diseases in which there is an obstruction to the free circulation of the blood through the veins.

As soon as we have concluded this general examination, we proceed to notice the secretions and excretions.

We examine the state of the skin to ascertain the degree of temperature, whether it is dry or moist, or the perspiration is general or partial; we observe lachrymation, or flow of tears, in coryza (cold in the head), in measles, in the different sore throats, or quinsies, hysteria, hypochondriasis, if the nasal mucus is increased or diminished in quantity. We know that salivation, or ptyalism, may be produced by mercury, may precede epilepsy, or be present in indigestion, small-pox, dentition, &c.

The sputa, or expectoration, presents various modifications, is mucous in catarrh, tenacious in bronchitis, sanguinolent in hæmoptysis or spitting of blood, greenish, grayish, or puriform, in chronic catarrh, or bronchitis, purulent in consumption, and black and extremely fetid in gangrene of the lung.

The matters ejected by vomiting afford signs of disease, and enable us to discover the cause in many cases. When blood is vomited, mixed with alimentary matter, the disease is termed hæmatemesis; when a large quantity of limpid fluid, like water, of an acid, saltish, or insipid taste, pyrosis or water-brash is present; and in certain obstructions of the intestines, as strangulated hernia, ileus, &c., fæcal matter has been vomited. In yellow fever a black fluid is ejected, in chronic dyspepsia, in cancer of the stomach, a dark matter, like coffee grounds, may be vomited, and in abscess of the liver or stomach, purulent matter may be discharged from the stomach.

In injuries of the head and chronic diseases of the brain, and also in the early months of pregnancy, there may be frequent or even constant vomiting for a few hours or even weeks. I lately attended a lady, with Mr. Matthews, of Bermondsey-street, who was in her first pregnancy, who vomited every thing taken into the stomach for more than a month, in defiance to all remedies, and I have repeatedly met with cases nearly similar.

The alvine evacuations afford signs of disease. They may vary in quantity, consistence, and colour, and should be examined and described by the patient in chronic diseases, and inspected daily in all acute cases. The healthful colour of the fæces is a dark yellow, similar to wetted rhubarb, and a light yellow in children. Any difference in colour is a proof of disease. The fæces are dark in chronic disease of the liver, in many of the forms of indigestion, hypochondriasis, and mælena; white in jaundice; liquid, mucous, and sanguinolent in dysentery; they are solidified and flattened in stricture, or narrowing of the rectum, and in enlargement of the prostate gland; purulent in ulceration of the intestine; green, brown, or black, in certain diseases of children, and sometimes containing fatty matter.

The condition of the urine must also be examined; the quantity is in an inverse proportion to that of the perspiration. When it is diminished, the watery or serous part of the blood is deposited in other tissues, unless carried off by the skin or lungs. When the urine is diminished in scarlatina, anasarca soon occurs, and in pleurisy or peritonitis there will be effusion into the chest or abdomen, causing hydrothorax and ascites. The urine may be high coloured, dark, black, white, yellow, red, or mixed with blood, and deposit various sediments, which afford signs of disease. It may be very much diminished, or entirely suppressed, or increased to several pints daily, as in diabetes.

The function of menstruation is liable to much derangement, and must be always attended to when the other sex are the subjects of disease. The sense of vision is often assisted in the detection of diseases by microscopes, speculums, &c.; and that of hearing by the stethoscope, percussion, and succussion, or shaking the body: the sense of touch is of immense value in investigating diseases. The application of the hand enables us to judge of the augmentation or diminution of the structure of many organs, of the changes of configuration and variations of temperature. Pressure on the abdomen will afford us evidence of inflammation in the stomach, liver, spleen bowels, womb, &c., while by palpation, or gentle percussion, we discover fluctuation in dropsies, in abscesses, and, by pressure with the finger, we make a depression, or pit, in dropsy of the limbs, and hence the term pitting on pressure, which is a positive sign of dropsy. Touch co-operates with other means to enable us to detect pregnancy and fix its date, the progress of parturition, and the presence of various diseases, tumours, polypi, cancer, &c.; stricture and other diseases of the rectum, stone in the bladder, en-

largement of the prostate gland, hernia, stricture of the urethra, œsophagus, lachrymal, and aural passages. The hand applied to different parts of the body facilitates our discerning of the temperature, and with it we feel the pulse, that valuable diagnostic in a vast number of diseases, but not to be relied on in cases of children. The heat varies very considerably; some persons complain of icy coldness when the temperature is much higher than natural. The heat is acrid and mordant in typhus and other low fevers; while a general sense of coldness, preceded by rigors, or shivering, in acute diseases, causes an internal heat, which is characteristic of congestion of the deep-seated organs, and often of inflammation.

The sense of smell elucidates the diagnosis of diseases. Every age, sex, temperament, people, season, passion, aliment, and occupation impresses on the animal economy a peculiar odour. The odour of the excretions is acid in infants, sometimes like that of milk, sweetish and amniotic in woman, and more or less seminal in man. All the secretions may acquire accidental odours from certain aliments or drinks, as from truffles, garlic, asparagus, alcohol, opium, prussic acid, &c., which may be perceived in the perspiration, urine, expired air, &c.; the axillary, inguinal transpiration, that of the feet and of the head, have an odour more or less fetid in the adult, from which the infant and old man are exempt. The acid odour is perceived in miliary and eruptive fevers, in scrofula, syphilis; the fetidity of the breath is an indication of ozœna, scurvy, mercurial salivation, carious teeth, and the odour of a mouse sometimes supervenes on low fevers, mania, and epilepsy. The cutaneous diseases have their peculiar odours, as in small pox, porrigo, &c.; so also menstrual and lochial discharges. The cadaverous odour of the expired air or breath, and of the alvine and urinary discharges, afford evidence of disease. The signs afforded by the sense of smell, I have condensed from M. Jolly's article on Diagnosis in the *Dict. de Med. et Chir. Prat.*

The sense of taste is seldom employed at present in the diagnosis of disease. The sweet taste of the urine is characteristic of one species of diabetes. The physicians of antiquity, according to Alexander of Trallia, explored the tastes of the different excretions. He states that they tasted successively the gastric, bronchial, alvine, and urinary excretions. Few practitioners of our times carry their zeal so far as to explore the different morbid products in this manner.

When we have examined the whole functions of the body, as now described, we next proceed to interrogate the patient; and the mode which you have seen me pursue at St. John's Hospital is worthy of your adoption. The history of each case is taken down very minutely in the following manner:—I inquire the name, age, residence, occupation, habits, state of general health, hereditary and former diseases; attend to the age and sex, whether the patient is married or single, the temperament, idiosyncrasy, the nature of the present illness, the situation of pain—whether this is continued or intermittent, deep-seated or superficial, acute or slight, fixed or movable; and, after examining the brain and nervous system, the intellectual faculties, locomotive powers, the senses, the digestive, circulatory, respiratory, secretory, nutritive, and generative systems, together with the condition of the excretions, after a careful review of the principles of pathology, determine the important question, what is the disorder or disease?

In cases of children we must leave no part of the external surface of the body unexamined; and by attending to the symptomatology and pathology of adults, we can, in almost every instance, arrive at a correct conclusion as to the nature of disease.

I have now enumerated some of the signs or diagnostics of diseases, because, until very lately, there was little attention paid to the subject in elementary works upon the practice of medicine; and the special diagnosis given of individual diseases is much too short for the information of medical students and junior practitioners. There are, however, some recent publications which treat largely on this branch of science: such as Dr. Marshall Hall's on Diagnosis; his article, Symptomatology, in the Cyclopædia of Practical Medicine; Professor Quain's Translation of M. Martinet's Pathology; Dr. Hooper's Physician's Vademecum; Dr. Armstrong's Lectures on the Practice of Medicine (just published); the Dictionnaire de Medécine et Chirurgie Pratique, 1831, art. DIAGNOSTIC; Dictionnaire du Diagnostic, par M. Helian, 1771; Treatise on the Diagnosis and Prognosis of Diseases, by P. S. Price, 1792; Semeiotique, ou Traité des Signes des Maladies, par Landre-Beauvais, 1808; Semeiologie Générale, par F.G. Double, 1811—1822; Symptomatology, by A. P. Buchan, M.D., 1824; Dr. Forbes's Translation of M. Laennec's Treatise on Auscultation; Dr. Ryland's Translation of Collin's work on the different Modes of Exploring the Chest; Rucco on the Pulse, &c.

ESSAY ON THE STRUCTURE AND FUNCTIONS OF THE SKIN.

BY M.M. BRESCHET ET ROUSSEL DE VAUZEME.

Read by the former to the Académie Royale des Sciences, on their sitting, 27th of Jan., 1834.

Rerum natura sacra sua non simul tradit aliud hæc ætas aliud quæ non subibit, adspiciet. —*Senæger Nat. Quest.*, lib. viii. c. cxxxv, xxxi.

SEVERAL memoirs, which have been presented by me to this Academy, on the structure of

the auditory apparatus, considered in the different families of the vertebrated animals, memoirs upon which reports have been made by M. Cuvier et M. Dumeril, have shown that I was making persevering researches on the organs of sense. It is to complete these labours that I have undertaken to examine the anatomical composition of the skin. As I am deprived of zoological collections, I often find it difficult to provide the means of making dissections. A young physician, M. Roussel de Vauzéme, zealous in forwarding natural history, had undertaken for the interests of this science, a voyage on board a whaler. Amongst the products of his tour, he had collected a vast number of cutaneous tissues, the spoils of the cetaceous tribe, and principally of the *Balæna Mysticetus*. I thought this an excellent opportunity of investigating the structure of the skin, and I immediately undertook this study with M. Roussel de Vauzéme; we combined our zeal and efforts in drawing up the note which I now present, and which being merely the analysis of the first part of our researches, should be considered as belonging to M. de Vauzéme and myself in common. When we compare what science possesses on the structure and disposition of the various apparatus of vision, audition, motion, and sanguineous circulation, &c., with what we know on the anatomical composition of the skin, it is evident that every thing remains to be done on this important anatomical and physiological subject. From *Malpigia* down to our times, it has been thought sufficient to distinguish in the integumentary envelopes, the dermis, the papillary body, the mucous body, the epidermis, and its appendages; but the intimate structure of each of these parts has not been rigorously defined, and generally hypotheses have been substituted for strict anatomical observations. Thanks to the fortunate circumstances which have favoured us, we have been able to discover dispositions till then unknown, or simply in part unfolded. These dispositions having been once recognised in cetaceous and other large mamiferous animals, we have obtained easily a sight of them on man, and on the greater number of the vertebrated tribes.

The principal parts of the skin that we wish to bring before the attention of the Academy, are, first, the dermis; secondly, the nervous papillæ; thirdly, the apparatus for the secretion of perspiration, composed of a glandulous parenchyma, and of the sudoriforous or hydrophorous canals; fourthly, the apparatus for inhalation, or the absorbent ducts; fifthly, the organs producing horny matter, or the *keratogenous* apparatus; sixthly, the organs producing colouring matter, or the chromatogenous apparatus.

1st. *The Dermis.*—Its form is that of a membrane stretched over the whole surface of the body; its internal surface is formed by a rough interlacement of lamellæ, or of fibrous filaments, which gradually become more dense towards the external surface, and finally constitute a firm and solid plane. The dermis is perforated by a great number of openings, some of which give passage to nervous filaments, others to small glandular organs, whose excretory duct passes through the thickness of the dermis to open on the external surface.

A great number of adipose vesicles may be observed to unite in bunches around the globules we have just mentioned. Lastly, it is penetrated by an infinity of lymphatic vessels. On its external surface the dermis seems to blend itself with the parenchyma of the organs which secrete the colouring matter, and with the papillary tissue. The dermis, according to us, is nothing more than a fibrous canvas, traversed by organs of a very different nature.

2nd. *The Nervous Apparatus of the Skin and Papillary Bodies.*—It is known that the nervous filaments proceeding from the various trunks, dispersed in different directions throughout the cellular tissue, ramify and subdivide to infinity on approaching the cutis. It is possible with perseverance to follow them as far as this membrane, where they are in general lost, on account of their tenuity, or the opacity of the tissues.

It would be impossible to distinguish nervous filaments amidst the vascular interlacement of the cutis, if the points at which they emerge were not visible. In fact, it is discovered, that on approaching the surface of the cutis, bundles of nervous filaments become slender, and, as if very pulpy, direct themselves towards, and finally penetrate, the base of the papillæ.

The papillæ are arranged in a continuous series; their form is that of a cone, whose base extends into the cutis, and the summit

terminates in a rounded point. Each prolongation penetrates into the horny substance constituting the epidermis and corpus mucosum, as a sword is received into its sheath; it is this which causes the internal surface of the former to represent the exact number and arrangement of the papillæ by its symmetrical depressions. On separating these two portions of skin, the epidermis is readily removed, but the papillæ always remain firmly adherent to the cutis by their base. The direction of the papillæ in the horny layer constituting the epidermis is slightly oblique. The horny substance furnishes a proper sheath, which covers them with a hood-like investment, in addition to the neurilema which they receive from the cutis. These papillæ sprout from the cutis in innumerable quantities; thus the horny tissue is as pierced as a sieve.

In the skin of the whale, the papillæ are several lines in length, present an enlarged base and summit, which terminate in an olivary eminence. They terminate not far from the superficies in a slight inclination, after having traversed nearly the entire thickness of the horny tissue of the epidermis. Their external appearance presents a pearly and opaque whiteness. On examination by means of a powerful lens, the nerve presents through the neurilema undulated striæ, which proceed from the base of each papillæ, where they are very distinct, and become less marked in proportion as they approach the terminal expansion, where they form concentric arches or loops. Not the slightest vestige of any filament, of any prolongation proceeding from the summit of these papillæ to communicate with the adjacent tissues, can be detected.

The mode in which the nerves that arrive at the cutaneous tissue, in order to constitute the papillæ, terminate, is exceedingly curious.

The papillæ, studied, in the first place, on the whale, where they offer the highest degree of development, and afterwards examined on the human skin, where their tenuity does not permit their just perception, present the same arrangement and the same structure. Before we commenced our experiments, the mode in which the filaments which constitute the papillæ terminate was unknown, and the nervous endowment of these organs still contested, since Gaultier considered them as essentially vascular.

The final termination of the nerves still remained to be ascertained, and science presented only to inquiring genius observations, presumptions, and hypotheses, in place of facts. The diverse opinions which anatomists entertain on this subject, are capable of being classed under three heads.

A.—It is presumed that the nerves lose themselves in the primitive tissue, or woof of these organs, and become identified with their own peculiar substance; hence it is impossible to recognise and appreciate the mode in which the nervous chords terminate.

B.—The nerves, incapable of being distributed throughout every part of the same tissue, and of all organic systems without exception, are surrounded by a peculiar atmosphere, by means of which they extend their action to a certain distance, very nearly in the same manner as the electric fluid is observed to exercise an influence on remote bodies by the force of attraction and repulsion.

C.—The termination by means of arches, has been attributed to nerves, and hence these organs may be compared to a galvanic apparatus. Deeply reflecting and high talented individuals have already signalised this arrangement, as regards the nerves of motion, and my own observations, not only on what appertains to the superficies of the body, but the additional researches that I have made on various other organs, especially the auditory, lend an additional support to the facts already advanced by a member of this Academy. The knowledge of these anatomical conformations, which possess so much physiological importance, will conduct to a more perfect comprehension of the phenomena of motion and sensation. This discovery, however, requires to be verified by multiplied facts; but these observations ought to excite the curiosity of natural philosophers, since they appear to indicate that the laws which govern inert and organised bodies are identical.

3rd. *Of the Apparatus concerned in the Cutaneous Exhalation, or of the sudoriforous and hydrophorous Canals.*—These organs occupy the entire substance of the skin, from the interior of the epidermis as far as the most superficial layer of the epidermis, where it terminates in numerous apertures.

Its composition consists in an organ of secretion and an excretory canal. The organ of

secretion is situated in the substance of the cutis, surrounded by numerous capillaries which penetrate its tissue; its form is that of a small vesicle, from the superior part of which emanates a spheroidal canal, which traverses the cutis and the entire thickness of the horny epidermic layer; and hence proceeds, after having described very spherical circumvolutions, to open itself on the exterior surface of the skin in the projecting lines, which this general envelope presents.

This spiral arrangement of the excretory canals enables them to present an aperture which is exceedingly oblique, and almost parallel to the plain of the cutaneous tissue. Both margins of this aperture become closed by the approximation of the superior and inferior parietes of the tube. On examining, by means of a magnifying glass, the perspiration which transudes from the surface of the skin, it is seen that the exit of the first drop is preceded by an elevation of a point of the epidermis, resembling the action of a valve. The spiral conformation of the sudoriforous, in man, is very curious; it explains the reason why the epidermis, evidently permitting the passage of excreted fluids, has always appeared imperfect. In short, when a piece of integument is removed from the dead or living body, the *hydrophorous tubes*, lacerated by the violence which has been exercised, retract, and thus close the small apertures existing in the epidermis.

(*To be continued.*)

ON THE OCCURRENCE OF SUPERNUMERARY CERVICAL RIBS IN THE HUMAN BODY.

BY ARCHIBALD DYMOCK, M.D.

The present case occurred in the body of a male, apparently of about twenty-eight years of age, of full growth, and remarkably good proportions, none of the other organs showing any deviation from their normal state. Unfortunately the putrefactive process had advanced so far as to prevent the investigation of the relation of the adjacent soft textures. The present description must therefore be limited to a detail of the appearances presented by the bones themselves *.

On either side of the seventh cervical *vertebra* is placed an oblong bony process, which is articulated to the former at two points, namely, at the upper and lateral part of the body, and at the external or free extremity of the *transverse process*. These bony processes run in a curved direction outwards and forwards, immediately above, and almost parallel with, the first pair of true ribs, their course only varying from that of the latter, in so far as it describes a portion of a circle of smaller diameter. Of these bones, that on the left side is the larger, its length being nearly three inches, and that of its fellow being only an inch and a half. Their vertebral extremity possesses more strength and thickness than their anterior; and their body assumes a rounded and slightly twisted form, being almost entirely deprived of that flattened configuration which forms a characteristic feature in the dorsal ribs.

Each of these rudimentary ribs is furnished with a tuberosity and head, which are connected to the *vertebra prominens* exactly in the same manner as the corresponding points of the regular ribs are articulated to their respective dorsal vertebræ, namely, by ligaments and synovial membrane. Betwixt the tuberosity and head there is a prominent line or ridge directed obliquely downwards and outwards; and on the inner side of this is placed a groove, along which the vertebral artery passes before entering the hole in the transverse process of the sixth vertebra of the neck. Anteriorly, these processes terminate rather abruptly, and without any cartilaginous prolongation; that on the left side being somewhat increased in size, and connected to the following rib by a strong fasciculus of tendinous fibres.

The *body* of the *vertebra prominens* is unusually deep, approximating very closely in point of size to that of the first dorsal; besides which, it presents one complete costal impres-

* In the *Mémoires présentés à l'Académie des Sciences*, M. Sue remarks, in cases of supernumerary cervical ribs, the chest is rendered more capacious in its vertical diameter; the sacro-lumbar, and other long muscles of the back, have an additional tendon; the large vessels arising from the heart are longer, in consequence of that organ remaining in its natural position, and there are two additional sets of intercostal arteries and muscles.

tion, and a demi-facette on each side. The *foramen* generally found in its transverse process (and which Meckel affirms never affords passage to more than a branch of the vertebral vein) is here absent, an omission that offers another point of resemblance in addition to those above mentioned, which the seventh cervical vertebra has to the dorsal.

From the preceding facts, I think we can have little difficulty in considering these processes of bone as the rudiments of ribs, no doubt rarely developed to such a magnitude, but not on that account rendering our conclusion less satisfactory or more open to fallacy. Two arguments may be adduced in support of this: first, that precisely similar cases have been recorded; and secondly, that such apparently anomalous cases are not only not inconsistent, but are actually in perfect unison with those laws of organisation which nature follows in the construction of animal bodies.

Most systematic authors on anatomy notice an occasional increase or diminution in the number of the ribs; but there are comparatively few who have met with such deviations themselves, and still fewer who have given anything like a minute account of what fell under their observation. Galen, Columbus, Ruysch, Valverda, Riolau, Fallopius, Peccolomini, Winslow, and others, have each seen cases, but have not given the details whether the supernumerary ribs were met with in the cervical or lumbar regions.

M. Hunauld, in the *Mémoires de l'Academie Royale des Sciences* for 1740, has given four delineations, in one of which the additional rib reaches the *sternum*. Professor Otto, of Breslau, has alluded to the occurrence of ribs in connexion with the seventh cervical *vertebra*; and mentions in his *Anatomie Pathologischeu*, that two specimens are preserved in the Museum there. He saw a third in the Museum at Christiania in the skeleton of an adult; on one side the rib extended as far as the breast-bone, on the other only to the middle of the first true rib. He likewise notices a fourth case in the collection of the Josephine Academy at Vienna. In the *Deutch. Archiv. für die Physiologie*, Meckel records another example, which is chiefly remarkable from a synovial apparatus at its anterior extremity. These cases are amply sufficient to explain that such anomalous developments are not to be found in some merely fortuitous deviation on the part of nature, but must be explained by those uniform and perfect laws which regulate her in the formation of beings.

The organised osteogeny of the cervical vertebræ was first discovered, and afterwards described, by M. Hunauld in the memoir before referred to. It has since been confirmed more particularly by Bechard and Meckel, who have demonstrated that the *vertebra prominens* has invariably two points of ossification, in addition to those met with in the other vertebræ of the neck. They are placed one on each side, in a transverse direction, before the pedicle which connects the lateral processes to the body. They are said to be visible so early as the second month of uterine life, and at the third and half to be a couple of lines in length. Towards the fifth or sixth year, the internal extremity of each horizontal bony nucleus unites itself to the anterior part of the pedicle, and lateral part of the body of the vertebra; the external extremity unites itself simply to the summit of the transverse process.

In cases where rudimentary ribs are formed upon this vertebra, there is no difference whatever in the order or nature of the above phenomena, unless that they are carried on with more activity. The external extremity of the horizontal plate of bone, instead of terminating at the summit of the transverse process, passes beyond it, and there is either a complete cervical rib extending to the sternum, or one more imperfect, which ends at some intermediate point, a variation probably produced and dependent upon the presence or absence of additional intercostal arteries. The supernumerary ribs are seldom exactly alike, there being sometimes only one, and sometimes one more fully developed than its fellow. They have seldom been met with except in connexion with the *vertebra prominens*, a circumstance that might have been anticipated from a knowledge of the preceding facts.

Of the practical importance of these cases, it is unnecessary to speak. In tying the subclavian artery, such a conformation might occasion some embarrassment, but the extreme rarity of such an occurrence renders any further remarks superfluous.—*Edin. Med. Jour.*

Foreign Medicine.

Experiments upon the Créosote, or the Immediate Principle of Tar.

BY M. COSTER.

We find, says the author, in an English work written long back by Berkley, more than five hundred cures obtained by the use of tar water. He stated that if any medicine was entitled to be called a specific it was this. Aware of the exaggerated description of Berkley, and his singular way of explaining the operations of this remedy, M. Coster thinks that still it ought not to be rejected as entirely useless, and expresses his astonishment that a medicine once esteemed so valuable, should have fallen into such complete discredit. For the last year and a half he has employed the tar water in a great number of varied cases, and amongst other diseases, states that nothing has proved of more efficacy during the convalescence of cholera. Soon after the observations upon the créosote by M. Reichenbach (*vide Med. and Surg. Journal, vol.* iv., *page* 732), M. Coster determined to make trial of it in some cases, and the following is the result of his researches into its merits.

1st. In a case of chronic inflammation of the free border of the eyelids, accompanied in many places with little suppurating ulcers, he touched the parts with an aqueous solution of créosote (made by adding 12 drops of this substance to 2 ounces of water), twice in the day: the disease had existed for many years, but after the application of this solution for ten days, the cure was complete.

2nd. In seven cases of violent toothach, in which the teeth were all carious, the créosote caused the instantaneous cessation of the pain, and arrested the progress of the disease in the teeth.

3rd. An injection of an extremely diluted solution, was made into an abscess of long standing, which communicated with the coxo-femoral articulation, in a young child; at first acute pains were produced, but in the course of an hour they had completed ceased. The remedy was applied daily, and with such decided benefit, that the child, who before could not even move in bed, now sat up, without suffering any pain.

4th. He next employed the créosote in a young girl affected with lepra. The disease had not only attacked the exterior of the body, which was thereby much altered, but the interior of the mouth was covered with fetid ulcerations, the respiration hoarse, and this girl appeared to be menaced with suffocation; the créosote is now being administered both internally and externally, and appears, as far as the case has hitherto proceeded, to be attended with much benefit.—*Gazette des Hôpitaux.*

Funeral of M. Bennati.

The funeral of M. Bennati took place on the 12th March, in the cemetery of Montmartre. Two orations were delivered on the occasion, one by M. Julia de Fontenelle, in the name of the Physical and Chemical Society of Paris, the other by M. Davet, in the name of his countrymen.

M. Bennati was born in 1798, and was killed by being knocked down in the Boulevards by the runaway horse of a lancer; he lived only twelve hours after the accident. On examination of his body, fracture of the occipital bone and orbitar portion of the frontal was found, with considerable effusion of blood.

Chronic Catarrh of the Bladder.

This disease does not always occupy the whole of the internal surface of the bladder, but is often confined to the neck, in which case the patient holds his water pretty well, but the first jet is accompanied by a viscid, mucous matter, analogous to that discharged from the vagina in affections of the internal surface of the neck of the uterus. M. Tanchon speaks highly of a seton applied to the pubes in these cases, attention to diet, with turpentine, and the balsams (especially storax) being at the same time prescribed; these remedies, without the seton, he has found unsuccessful.

On the Mechanism of the Sounds of the Heart.

BY M. MAGENDIE.

The physiological explanation given by Laennec of the sounds of the heart, is founded rather upon deductions drawn from the time and place where they are produced, than from direct observation. The one on the left side, he concluded, arose from the contraction of the ventricles, the other, heard at the lower part of the sternum, from the contraction of the

auricles: as to the immediate cause of the sounds, he attributed them to vibrations of the muscular fibres, at the moment of their contraction. The experiments of Hope prove that the contraction of the auricles precedes the first sound of the heart; that it is followed by no particular sound, and that the second sound coincides with the dilatation of the ventricles. More recently, M. Ronanet has attempted to prove that they were caused by the flow of blood against the valves. All these explanations appeared to M. Magendie unfounded, and he made numerous experiments, which tend to prove that the first sound is owing to the shock of the apex of the heart against the walls of the chest, and that the second arises from the anterior part of the right ventricle, at the moment of its dilatation, striking the sternum and right side of the thorax.

M. Bouilland, however, thinks, that simple and ingenious as the theory of this physiologist may appear, it is not entirely satisfactory. Yet, in presence of an authority as imposing, and of facts as positive, as those related by M. Magendie, we at least must still remain in doubt on the theory which attributed the double sound of the heart to the motion of the valves. M. Bouilland exposed the heart of a vigorous cock, in which he had previously distinctly heard the double sound: he first applied his naked ear, and afterwards the stethoscope, while the heart was yet enveloped by the pericardium, and then after that membrane had been removed, and in both instances the double sound was evident, although there was no contact between the heart and parietes of the chest, particularly between it and the sternum. He perceived a particular sound from the friction of the organ against the stethoscope, but it was very different to the *tic-tac* of the heart. It was removed from the chest, and continued to beat for some moments, either spontaneously or from artificial stimulus, but in this state no sound could be perceived. The same results were obtained by experiments on two rabbits; the sounds were heard distinctly when the heart was no longer in contact with the walls of the chest.

New Composition for Issue Peas.

M. Frigerio has communicated to the Academy of Medicine a notice of a new kind of issue peas, composed of resin, powdered mezereon, marshmallow, and orris root, which can be moulded to any size, and made more or less active in their composition, according to circumstances. They excite a more regular and abundant discharge, without causing the pain and inflammation that frequently arises from the swelling of peas made of the root of the iris.

New Method of employing Spirit of Mezereon.

M. Leroux thinks that the employment of this substance is more easy, and its results quicker and more certain, if the extract is dissolved in a solution of soap and alcohol. A combination which enters the skin more easily is the result. The part is to be rubbed with a flannel, soaked in this liniment; in six or eight hours a number of small pimples appear; but it is necessary to rub the part two or three times, and cover it with flannel. It has been frequently employed with success in acute rheumatism, and some affections of the stomach attended with vomiting, and even in hooping-cough. It is much more active and less painful than the tartarised antimony ointment.

Cancerous Disease of the Bones.

M. Sanson exhibited to the Academy of Medicine the bones of the vertebral column and extremities of a woman who died in the Hôtel Dieu, and which offered a remarkable example of the cancerous diathesis.

The woman, aged 40, was admitted with cancer of the breast; but, as M. Dupuytren thought an operation impracticable, she went out of the hospital, but returned in four or five months in a dying state. Besides the cancer in her breast, she had several tumours in the abdomen. In moving in her bed she broke her thigh; and, in setting this fracture, the femur of the opposite side was broken. On the examination of her body, schirrous tubercles were found in the parietes of the abdomen and lumbar muscles, in the lungs and liver; the heart, spleen, and kidneys were alone free from them. The osseous system was loaded with them: one, the size of a walnut, was found in the structure of the frontal bone. The bodies of most of the

vertebræ, and the cancellous structure of the thigh-bones, contained an enormous quantity: some of them were in a softened state. Where they were most developed the walls of the bones were thin; and in these parts the fractures had occurred.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, March 29th, 1834.

Dr. Gregory in the Chair.

Falsehoods of the Medical Gazette—Dr. Gregory and the one Faculty—Neuralgia—Strychnine—Veratria.

Mr. Hunt rose to call the attention of the meeting to a gross attack made upon the Society in the *Medical Gazette*, which caricatured their proceedings, and contained a tissue of falsehoods from beginning to end. He hoped there was no member of the Society who was capable of writing such an article, and he was willing to suppose the writer wished to play a hoax on the editor of the journal to which he alluded. He proposed that the Secretary should read the article of which he complained, which dramatised the proceedings of the Society.

Dr. James Somerville, Mr. Pettigrew, Mr. Costello, and Mr. Smith objected to the Secretary's reading the article, but called upon the mover to do so.

Mr. Hunt then read the obnoxious and mendacious document; and then observed that it not only insulted the Society at large, but the individual who now filled the chair.

Dr. Gregory felt called upon to explain the part he took in the debates on reform, and denied that he had acted inconsistently. He opposed the eighth resolution, relative to the one faculty, in consequence of the comments made upon it by Dr. Somerville, for he never intended to sanction the fusion, if he might be allowed the term, of the different ranks of the profession into one faculty. He proposed an amendment to the effect of petitioning for a governing body; but he had no idea of sanctioning the destruction of the existing medical corporations. He did not draw up the original resolution with regard to one faculty, and afterwards oppose it, as alleged by Mr. Hunt; and if the original resolution were expunged from the minutes, he would cheerfully sign the petition on the table.

Mr. Hunt felt that his honour and character were now questioned, and he therefore called upon Dr. Somerville, at whose house Dr. Gregory penned the eighth resolution, to state the fact.

Dr. Somerville then stated that Dr. Gregory had penned the resolution, and

A Gentleman emphatically declared that he had copied the eighth resolution from Dr. Gregory's hand-writing for Dr. Johnson.

Dr. Johnson observed that the resolution was drawn up by Dr. Gregory, and did not differ from that inserted in the petition. The words faculty and governing body meant in reality the same thing, and those who thought otherwise, made a distinction without a difference. He thought that the article which gave rise to the present conversation, was too contemptible to deserve serious notice.

Mr. Salmon remarked that Dr. Gregory, in asking to rescind the original resolution, went, in his opinion, much too far, when he imagined the Society would do any such thing for his signature to the petition.

Mr. Costello read the clause in the petition, and commented upon it and the original eighth resolution, which he considered identical. But to remove all doubt, he moved that the minute of the former be read.

A gentleman seconded the motion.

Dr. Somerville hoped Mr. Costello would withdraw his motion, as the whole matter was unworthy of serious consideration.

The subject then dropped, and

Dr. Johnson rose to call the attention of the Society to a matter more congenial to their objects, a history of disease. A clergyman had applied to him since the last meeting, who suffered for two years from tic douloureux of the left eye. The paroxysm was preceded by a tingling sensation in the lips and cheeks, great depression of spirits, and it lasted for ten or twelve hours, when he vomited a greenish fluid, and the disorder immediately ceased. A variety of remedies had been tried without any benefit.

Mr. Costello had known quinine effect a cure in such cases.

Dr. Ryan wished to learn the state of the general health and digestive system of the patient under the care of Dr. Johnson.

Dr. Johnson replied, that both were good; that the patient was forty years of age. The nitrate of silver was the remedy employed at present.

Dr. Ryan would suggest the strychnine; he had found it better than any other remedy. He was happy to be enabled to inform the Society, that a nobleman, whose case was lately noticed, was now free from his neuralgia; but whether from strychnine he could not say, as he heard of the favourable issue from an individual who did not belong to the profession.

Mr. Costello asked was it the case of the Marquis of Anglesey.

Dr. Ryan replied in the affirmative.

Dr. Johnson wished to inquire from the Society, whether any member had tried veratria, as he had found it fail in three cases.

A gentleman said that he had used it in one case, and that it removed the skin of the face. The strength of the ointment he employed was six grains to two drachms of adeps.

Dr. Johnson observed that this was too strong; the proportion he used was ten grains to the ounce.

Mr. Savory related three cases of facial neuralgia relieved by the veratria, but in less quantity than mentioned by the preceding speakers; the proportion of the ointment in common use was six grains to the ounce of adeps. He had prepared at least three prescriptions daily for the last six weeks. One gentleman brought him one in English, ordering an ounce of veratria to the ounce of adeps. He said this was a mistake, and advised him to try the usual ointment, which he did with advantage. A great deal would depend upon the genuineness of the medicine,—the price was very high,—the ounce of ointment could not be had for less than fourteen shillings.

A gentlemen mentioned the case of Mr. Day, which was well known to the public. That gentleman had apoplexy, followed by amaurosis and neuralgia in different parts of the body. He used a quarter of a grain of strychnine four times a-day for ten weeks, and was nearly cured of his neuralgia. He would ask Dr. Johnson if he had examined the state of the blood in neuralgic cases?

Dr. Johnson replied in the negative.

The gentleman said that in cases that defied all remedies, he found the blood depraved; and, by giving medicines to restore it to its normal condition, he succeeded in nearly curing the neuralgia.—Adjourned.

ROYAL COLLEGE OF PHYSICIANS.

On Monday last a meeting was held at the Royal College of Physicians—Sir Henry Halford in the Chair—and one worse attended has not taken place since the commencement of the season. There were not a dozen eminent individuals present, and the Chair was supported by Dr. Maton and an individual whose name we could not learn. The majority of the meeting consisted of junior members of the profession and students. It is a glaring fact, that the licentiates of the College are not allowed to enter their own hall without a special invitation or leave from the president and fellows, nor to introduce a friend.

Dr. F. Hawkins read a paper by Dr. Williams, of St. Thomas's Hospital, on the Pathology and Treatment of Syphilis, which was elegantly written. The ravages of the disease in the different tissues were illustrated by cases; and the narrator mentioned that he had derived the best results from hydriodate of potass in cases of syphilitic affections of the tendinous sheaths of the fingers.

The conversation turned on Medical Reform, and it was the general opinion that the College monopoly and insolence were at an end.

MEDICAL REFORM.

A public meeting of medical practitioners was held on Tuesday in the Tontine Hotel, Glasgow, for the purpose of expressing their opinions, and to petition Parliament on the subject of Medical Reform. Dr. Andrew Buchanan was chosen chairman. Several excellent speeches were delivered in support of the resolutions, setting forth many of the evils which oppress the profession, and pointing out various remedies, the principal of which consisted in effecting an adequate and uniform curiculum of education in all the medical schools throughout the kingdom, and a thorough revision of the system of licensing. A committee was appointed to draw up a petition to the legislature, embodying the resolutions, which, we understand, is to be forwarded to his grace the Duke of Hamilton, and to Mr. James Oswald, for presentation in the respective Houses of Parliament.

THE
London Medical & Surgical Journal
Saturday, April 5, 1834.

THE COLLEGE OF PHYSICIANS AND THE HOSPITAL LECTURERS.

THE temptation of an increased rent must be considerable when a landlord resolves to pull down a house already tenanted, and build a fairer and more commodious tenement on its site;—as long as brick and mortar will hold together, and keep the premises, to all appearance, wind and water tight, there is a chance in favour of the old building. In the country it may even crumble into dust through all the stages of ruin:—it is easier to build on a new foundation than to clear the old. In a city, however, the public interest interferes: but, until the dilapidated structure is condemned, by public authority, as dangerous to externs as well as interns, and its removal enforced, the greedy landlord has recourse to all manner of shifts and contrivances to

"Patch a wall to expel the winter's flaw,"

that the unwary tenant may be seduced to inhabit the plastered ruin *.

This passage in the natural history of decayed houses, has its parallel in the history of decayed and rotten Corporations; some have gone to ruin unheeded, while others, of the stamp of the College of Physicians, resort to all the artifices of plaster to hide their slips and flaws, and present a mimic front of fair cut stone, and pillars, and flowered capitals, notwithstanding that the foundations have slipped and the walls are opening. The public architect must interpose; in our example he has interposed, and the whole building is condemned. *A new structure must be raised.*

Not to pursue the metaphor farther, it is beyond the limits of controversy, that all the medical corporations of the United Kingdom, sixteen, we believe, in number, are at this present moment on their trial to render an account of their deeds; and that it depends upon the resolution of the Parliamentary Committee, which will doubtless be sanctioned by the legislature, to decide what shall be the measure of their power for the future, if any of them shall survive the result. Some must be abolished; others will become co-ordinate schools of medicine for the whole profession, where the science will be taught upon an uniform plan;—other schools will be raised in the metropolis, where the first and best ought to be found. But, after all these arrangements, there remains the task of assigning a head to the members,—of depositing the government of the profession, as a liberal profession worthy above all others of the patronage of the state, in some body alive to its honour, composed of its most distinguished ornaments, zealous to promote and direct medical studies, according to the advanced state of knowledge, and meriting by these qualities the confidence of the humblest individual belonging to the profession. This high office of controlling the whole body of medical practitioners, whether physicians, surgeons, or apothecaries, is now at the disposal of the legislature; and it is characteristic of the College of Physicians,—that Corporation, whose desertion of its proper duties, whose abuse of the powers it has exercised contrary to law, has been most flagrant,—it is a crowning specimen of its effrontery, that, at the very time when its misgovernment and delinquency is about to be presented from the confes-

* Nos urbem colimus tenui tibicine fultam
Magna parte sui: nam sic labentibus obstat
Villicus, et veteris rimæ contexit hiatum
Securos pendente jubet dormire ruinâ.

sions of its rulers at the bar of the House of Commons, it is using every machination, by its emissaries and underlings, to claim for itself the honourable, the important trust of conferring medical degrees.

So deeply-rooted is the disgust excited by the conduct of that Corporation, that we apprehend, if it were even thoroughly purged of its active instruments—if its President and his whole train were displaced to-morrow, and its laws remodelled upon the justest principles, the very name has become offensive, and would entail mistrust upon any institution, however differently constituted. But, *unless* the whole machinery is altered, *unless* every atom of the old stuff is removed, it would be impossible to satisfy the profession with a governing body bearing such an inauspicious name.

It would not be polite to reveal the whisperings of certain retainers of the College, touching the examination as far as it has gone. Suffice it to say—if it is necessary to say—the confident assurance of these gentry is not warranted by what passes in the Committee Room. We are not at liberty to disclose in print the result of the investigation; but, when the time comes, we shall startle the talkers with a reminiscence of their prophecies.

Some weeks ago we noticed some hole-and-corner proceeding of certain persons, calling themselves the Lecturers of the Great Schools, to wit, the Hospital Lecturers. They—whose conduct and operations are well known, whose influence in lowering professional acquirements in the bulk of practitioners, and in degrading the College of Surgeons to be an instrument of their monopoly is undoubted—are, it is understood, now pressing forward in behalf of the College of Physicians, in humble confidence, if that body acquire the power of conferring the doctorate, it will not forget to serve its friends in their turn. We have an eye upon these reciprocal kindnesses. Any manœuvres of the kind can be of little avail in obstructing the course of Medical Reform; but they are clear indications of the ruling passion for power and monopoly, strong in the agonies of expiring, and their disclosure serves to put the cautious on their guard against the devices of the enemy.

DR. GREGORY AND THE WESTMINSTER MEDICAL SOCIETY.

We are not about to resume the whole subject of the Westminster Medical Society affair; but we must refer our readers to the report of the proceedings on Saturday evening last, for a fitting commentary on an article, or two articles, in a late number of the *Medical Gazette*, alluding to the petition to Parliament presented by the Society, which was alleged not to be in accordance with the one faculty resolution. Upon this allegation a superstructure of dramatic abuse was raised by a correspondent in our cotemporary, and a leader was got up to point the malice of the communication. Dr. Gregory exhibited an exemplar of endurance on past occasions, rivalled only by the specimen of obstinate immobility he presented on the late occasion. His adhesion to the Chair indicated a power beyond mere inertia; for every possible effort was unavailing to move him. We recommend the phrenologists to favour us with some remarks upon the organ of sitting, which may perhaps explain the phenomenon.

In truth, and in earnest, it was painful to see a gentleman put himself in such a position. It was plainly the general opinion that the Doctor had written one or both of the articles, in ridicule of the Society over which he so often presides. The practice of that journal in receiving *rankling*

shafts from many quarters, as it openly professed, favours the supposition. Words of very strong import, impeaching the truth of our cotemporary's articles, were hurled at the chair in very unsparing measure. The Doctor should have either disclaimed at once the articles in question, and bastardised them upon some of the "no-ones,"—for no man with a name would indite a falsehood,—or else, right or wrong, he should not persevere in presiding over the body he was supposed to have insulted, and should have stood openly on his defence—we should then commend his spirit at least. No man can pretend not to understand such broad imputations against his fair dealing, as we are sorry to see the Doctor's passive endurance submitted to: — the slightest whisper ought to be enough.

MR. GUTHRIE'S CLAIMS TO THE INVENTION OF URETHRAL INSTRUMENTS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—Mr. Guthrie, in his Clinical Lecture published in your Journal of the 15th ult., gives an account of an instrument for dilating the urethra, which he speaks of as being *his* invention. Judge of my surprise, therefore, when, on reading it, I discovered that it was an instrument made by me, slightly modified, at Mr. Guthrie's suggestion, from one wholly my own invention. Mr. Guthrie may suppose that I have only now to resign into his hands the honour of an invention, which, with his characteristic modesty, he has hitherto permitted me to enjoy, and to be grateful for his kind forbearance in having so long granted me this privilege; but I must beg to be allowed permission to prove my claim to the merit of having contrived this instrument, by a plain statement of facts, through the medium of your Journal, which has been made the means of depriving me of the credit of it, and I trust it will have the effect of repairing the injury done to me by Mr. Guthrie, and also to refresh his memory with respect to the point at issue.

In the latter end of the year 1820 Sir A. Cooper called on me, and gave me a drawing of an instrument which he wished to have made for the purpose of extracting small calculi from the bladder of a patient, through the urethra. I made the instrument according to his instructions, but it was found not to answer the purpose. I then said that I thought I could contrive an instrument which would effect the proposed object, by making it to open *in the bladder instead of the urethra.* This, Sir Astley Cooper said, was just what he wanted; I made the instrument, and its success was complete. Sir Astley called on me a few days after, and told me that he had extracted several calculi through the urethra, and among them several large ones, which he had accomplished by opening the instrument while in the urethra, and *dilating it sufficiently to allow of their passage,* but that there still remained many more in the bladder. Soon after this I took Sir Astley another instrument, much more perfect, with which he was so highly pleased that he kept it, and returned me the former one, thanking me for the trouble I had taken *. Some months after Mr. Guthrie suggested to me the idea of an instrument *on the same principle,* but with three blades instead of two, for the purpose of dilating stricture, which I accordingly made. This is the instrument in question, which Mr. Guthrie calls his. I have always called it "Weiss's Dilator," and no objection was made to the appellation until about five years ago, when Mr. Guthrie called on me, and stated verbally what he has now published. This I disproved, as I thought, to his satisfaction, by producing my workman's book, by which the priority of construction of the two-bladed instrument was manifest. Since then he has never mentioned the subject to me, and I thought he had abandoned the notion of claiming it, until I saw his statement reiterated in your pages.

The reputation of the surgeon in his professional capacity, and of the mechanic in his occupation, is separate and distinct; and it would not really be a greater assumption on the part of the mechanic to arrogate to himself the merit of a successful operation, because he

* An account of this case will be found in the Medico-Chirurgical Transactions, Vol. II., page 349.

had made the instrument with which it had been performed, than for the surgeon to lay claim to the credit of the invention of the instrument, because he had suggested the object of the instrument wanted. The instrument spoken of above, that I made for Sir Astley Cooper from his drawings and instructions, was his—not mine; the one that I afterwards made according to my own plan is mine—the idea of it was mine—the principle of it was carried into effect by me; and Sir A. Cooper always allowed me the credit of it. Mr. Guthrie's suggestion was only a modification, as I said before, of my instrument; the merit of his suggestion I neither dispute nor claim; but the instrument with *three* blades is still my invention, as it was before with *two*.

I should not need to encroach upon your space, or to intrude myself upon the attention of your readers on this occasion, were not the degree of merit that fairly belongs to me, too frequently claimed by others, and not only my share of praise, but of "solid pudding," denied me. The only reward a mechanic can reap from the success of his ingenuity, is the preference given to him in his business, and, at least, the profits arising from making those instruments of his own invention; but the reverse is too frequently the case; it has often happened to me, that my improved instruments have been ordered from other makers, who have never invented any new instruments, but profited by copying those of others. In proof of this, I may be allowed to mention a fact, which shows the extent of the injury that has been done by such misrepresentations as this of Mr. Guthrie, for Sir James M'Gregor wrote to the secretary-at-war, stating, upon whose authority I do not know, that the inventions and improvements to which I laid claim, and had published in my book, did not belong to me, and to that I owe the loss of my business for supplying the army with instruments. Mr. Guthrie being well aware of this circumstance, I am therefore the more sorry and surprised to find him trying to injure what I most value, character and reputation.

I am, Gentlemen,
Your obedient servant,

62, *Strand*, JOHN WEISS.
26th March, 1834.

MR. GREEN'S SUGGESTIONS FOR NEW MODELLING THE MEDICAL PROFESSION.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—Whatever comes before the profession with the sanction of an authoritative name, deserves consideration even beyond its real and intrinsic merits. I view in this light Mr. Green's "Suggestions respecting the Intended Plan of Medical Reform, &c.," as announced in your last Journal. All my knowledge of it arises from that source, and no doubt you have correctly stated its leading features. The writer evinces a laudable desire to secure to medical practitioners the high advantages of a liberal education; but there is no originality in this, for medical men of all ranks have partaken largely of the prevailing thirst after knowledge in all its necessary and useful departments. But there is also an aristocracy of feeling indicated by Mr. Green, that reminds us of an often quoted apothegm, which fell from the lips of our present distinguished Premier. He appears to say, "our order" must be maintained, and kept at a distance from the commonalty of the profession. The general practitioner is to be an "Inceptor Graduate of Physiology," with three years' professional education; and should he resolve, as most would resolve, to have five or six years of preliminary qualification, he still appears before the public under a designation which is associated with only half the professional education of the "Doctor in Medicine" or the "Master in Surgery." The men who have to qualify for the most comprehensive duties, to meet exigencies in medicine, in surgery, and in midwifery, and who, in country practice, cannot obtain assistance in every emergency, are to be allowed to practice with qualifications by no means equal to what are now required of them, whilst the higher order of practitioners are required to go through a process of study much superior to what is now demanded.

I am sure that neither the community nor the general practitioners will feel under any obligation to Mr. Green for his proposition. The former, with rapidly advancing intelligence, will not thank him for his effort to provide a class of medical men, interwoven

with the best interests of society, who are undeserving of their highest confidence; and the latter, with a growing sense of high responsibility, and with a consciousness of having received a measure of respect and confidence somewhat commensurate with their heightened qualifications, will not be satisfied to fall back thirty years as to the relation they sustain to their more honoured brethren, or to abandon a post in which they possess the power of applying knowledge with some efficiency, to one of the best of purposes,—the alleviation of human misery. Will Mr. Green tell us that his considerations have been directed by solicitude to provide a class of men whose education shall not be too expensive? The motive may be laudable, but it is short-sighted. It will be a pitiful economy for a man to prepare for a station in which he will neither ensure respect nor trust, and the boon offered by these concessions, of being authorised to charge attendance, is a requital of little value when that attendance does not ensure the highest reward,—*esteem and confidence*. If the attainment of the higher qualifications is inaccessible to the general body of medical men, it will be far better to lessen the expenses than to lower the competency.

My brethren in general practice, I trust, will ever aim at occupying a position of real merit and utility; and this will not be incompatible with the maintenance of courteousness towards other departments of medical and surgical practice, and of rectitude towards the public. Whether the legislature give the right or not, I have the proof that general practitioners may now, satisfactorily to all parties, abandon the degrading habit of paying themselves by medicine; and this does not interfere with the existence of the most friendly relations to those enlightened men who have chalked out for themselves a narrower circle of practice either as physicians or as surgeons.

I am, Gentlemen,

Your obedient servant,

39, *Trinity-square*, W. Cooke.
April 1*st*, 1834.

PERVIOUSNESS OF THE BODY TO AIR.

Dr. Graves cites several authorities—Frank, Dalton, Mitchell—that the whole substance of the body is pervious to air, and that this fluid may cause emphysema and tympanitis without the secretion of gases and lesion of tissues. It leads to the probability of the existence of gaseous matters of very various kinds in almost every part of the animal frame, resident there molecularly, and not *en masse*, but susceptible of being collected into the great cavities, or the cells of the tissue or blood vessels, by mechanical or electrical influence, or the attractive interstitial agency of other masses of air."—*Dublin Journ. of Med. Science.*

MEETING OF THE MEDICAL PROFESSION.

A meeting of the medical practitioners of the city and county of Cork, was held on Tuesday, the 18th ult., Dr. D. B. Bullen in the chair—for the purpose of taking into consideration a communication about to be made by the Permanent Medical Committee to the Board of Superintendence, for the better regulation of the duties of the medical officers of Dispensaries.

This communication was approved of by the meeting, and ordered to be transmitted to the Board on the following day, with some trifling alterations.

The recommendation of the Committee, if attended to by the Board, will, it is hoped, have the effect of correcting many of the abuses which at present exist in Dispensaries, as far as practicable under a vitiated system of local government, and will serve to protect the medical officers of these establishments in the conscientious discharge of their arduous duties.

The attention of the meeting was also directed to the important investigation into all branches of the medical profession in this empire, which is at present conducting by a "Committee of the House of Commons." The meeting considered it of the highest importance that proper and useful information should be afforded to the Parliamentary Committee, with respect to the state of the profession in this part of the country, and the many abuses which were allowed to exist in it at present.

This was considered the more necessary, as there is an absolute certainty of the report of the Committee (of which Mr. Warburton is Chairman) being adopted by Parliament as

the basis of some new legislative enactment, to render the profession as useful to the community as possible, and also to increase its respectability.

The meeting accordingly deputed Dr. John L. M'Carthy, one of the members of the Permanent Medical Committee of this county, to communicate personally with Mr. Warburton, and to tender evidence on the state of the profession in this county to the parliamentary Committee.

Dr. Bennett, Secretary to the Permanent Medical Committee, was requested to communicate immediately to Mr. Warburton the result of the above meeting, some correspondence having already passed between them on this subject prior to the meeting being held.

French Hospital Reports.

HÔTEL DIEU.

Marked Cerebral Symptoms—No Lesion found in the Brain.

On the 10th of January a youth, ætat. 19, was admitted for illness of four days' duration, during three of which he had been delirious; the body was in continual agitation, and his intellectual faculties seemed entirely gone; the face was pale; the pulse small and depressed; tongue dry; small hacking cough; sonorous râle over the sternum; expectoration and difficulty of breathing, from collections of mucus in the air passages. As he had been bled on the evening before, eight leeches were placed behind his ears, cold applications were applied to his head, which was shaved, and an enema with senna was given to him. The question was, whether the symptoms were primitive in the brain, and consequent upon inflammation of its membranes, or whether they were consecutive to the asphyxia, which appeared to threaten the patient, from the collection of mucus in the bronchial tubes: the diagnosis of M. Piorry was meningitis. The cerebral membranes and substance were examined after death, which occurred rapidly, but were perfectly healthy. There was a small quantity of fluid in the spinal canal, but the medulla spinalis was normal; viscera of the abdomen sound; both lungs were in a state of inflammation, and contained small tubercles collected into masses; in the right lung, at the lower part, there was cavity sufficiently large to contain a walnut.

Epilepsy—Tumours in the Dura Mater—Ramollisement of the Corpora Striata and Thalami Optici.

Marie Chassin, 56 years of age, was seized with symptoms of violent epilepsy, after undergoing various distresses of mind. Delirium supervened on this attack, and lasted many days. On the 7th of January she presented the following symptoms:—contractions and rigidity of the limbs; epileptic tremulousness; some of the movements of the body automatic, others voluntary; she could hear and see, but was unable to answer questions; mental powers affected. Bleeding, cold compresses to the head, and hot cataplasms to the extremities, were prescribed. On the 8th she answered yes to every question: in other respects much the same. Recourse was had to purgative enemata, blisters to the head, &c., but the disease pursued its course, and terminated, on the 13th of January, in death. The diagnosis was epilepsy, inflammation of the left side of the brain, affection of the thalami optici, of the corpora striata, and of the membranes of the brain.

Autopsy.—Chest—Bloody froth in the bronchi; lungs engorged with blood at their inferior lobes; large ecchymosis between the abdominal muscles; nothing remarkable in the digestive canal. *Head.*—Hard fibrous tumours, the size of hemp-seeds, in the dura mater, penetrating into the brain; arachnoid and pia mater injected; the interior of the thalamus opticus and of the left corpus striatus in a state of ramollisement; the brain in the neighbourhood of these bodies also partook of this softening and was of a gray colour, furrowed with red lines.

HÔPITAL DES ENFANS MALADES.

General Œdema—Autopsy.

— Duval, æt. 8, was admitted with general œdema, which commenced some time previous in the legs, thighs, and scrotum, then made its appearance in the abdomen, and finally, after affecting the superior extremities, attacked the face and eyelids. It did not appear from the history which could be obtained from his mother, that he had suffered, previous to the development of the œdema, from either fever

or palpitation. The pulse was 100, small, but regular; respiration easy; and the digestive organs apparently in good order. By the aid of purgatives and diuretics much relief was obtained, but at the end of some days he was attacked with measles, accompanied by acute bronchitis. He, however, became better, and at his own request was removed from the hospital; on the 23rd of the same month (September) he was again admitted as a patient, with all his symptoms greatly aggravated. The urine was scanty and albuminous; there was pneumonia of the right lung, and great emaciation; the anasarcous state still persisting. In spite of treatment, he was attacked with convulsions, became comatose, and died on the 7th of October.

Autopsy.—Head—Venous congestion of the membranes; serum beneath the arachnoid, both above and at the base of the brain; cerebral substance itself pale, but of the natural consistence. *Chest*—Three ounces of fluid in each pleura; the superior lobe on the right side hepatised, and containing in the interior a great number of gray semi-transparent granulations; the inferior right lobe partially hepatised, and gorged with blood. In the inferior portion of the right lung, there is a tubercular mass as large as a walnut. Fluid to a small extent in the pericardium. *Abdomen*—Considerable quantity of fluid in the peritoneum and cellular membrane within the pelvis; liver, stomach, and spleen presented nothing remarkable; the kidneys of the usual size, of a yellowish brown colour, soft and friable, and filled with a number of small white points the size of pins' heads. This appearance pervades the whole structure of these organs.

HÔPITAL DE LA PITIE.

Pneumonia--General Bleeding--Large Doses of Antimonia Tartarizati—Cure.

A sadler, æt. 58, who had suffered for some time from slight catarrhal attacks, but not of sufficient importance to oblige him to suspend his occupation, was seized in the commencement of December, 1833, with acute bronchitis, which, after lasting six weeks, appeared to have entirely ceased. For nine days he was perfectly free from all symptoms, but at the end of this time, without any evident cause, he was suddenly seized with rigor, followed by heat and fever; his cough manifested itself again, and was much more vehement and distressing than on the first attack. At this time he was at home, and, although compelled to keep his bed, did not take any other medicine than powdered rhubarb.

On the 30th of January, 1834, the day of his admission into the hospital, the respiration and pulse was accelerated; in the left subclavian region, the sound on auscultation was obscure, but was of the bronchial character; under the scapula of the same side there was evidently the râle crepitant, and a slight echoing of the voice might be heard in this situation. The cough was very troublesome, and was followed by expectoration, the nature of which could not be known, as it had not been preserved. The sensorium was slightly affected; his face was of a pale yellow colour; and for some days his bowels had been constipated. Emollient enemata and bleeding were prescribed, together with a tisane of mallows.

31st. The blood drawn from his arm was cupped and buffed; his pulse has risen a little, and is now 84; the bronchial respiration and the râle crepitant are still audible; the expectoration is viscid and semi-transparent; the bowels have been freely opened; six grains of tartarised antimony, in six ounces of water, were prescribed: a portion to be taken every two or three hours.

Although there is no pain in the side there could be no doubt, according to M. Louis, from the other symptoms, that pneumonia at the upper part of both lobes existed. The exhibition of the tartarised antimony was followed by eight or ten evacuations, and, during the first day, with vomiting; on the following day the dose was increased, the vomiting ceased, and the number of evacuations was reduced to four. M. Louis observed, that the best way of overcoming the diarrhœa and vomiting, caused by the tartarised antimony, was to increase the dose.

At the end of the second day, under the continued employment of this medicine, the symptoms were greatly diminished, the sound under the clavicle was less dull, and the crepitating râle less distinct; the pulse had fallen to 76, and the expectoration was less viscid: in a few days he left the hospital well.

British Hospital Reports.

ST. GEORGE'S HOSPITAL.

Fracture of the Lower Jaw.

William Stummett, æt. 22, a healthy-looking young countryman, was brought to the hospital, Dec. 13th, by a practitioner from the country, for Mr. Brodie's advice, under the following circumstances. About a month ago he fell from a cart, which did not stun him, but gave him several severe cuts about the head and face, which are now healed. He received from the fall a double fracture of the lower jaw, and there is now considerable swelling of the integumental surface in the neighbourhood; with great displacement of the fractured ends of the bone; the fracture is oblique on either side of the jaw, and is situated partly between the deas sapientia and first molar tooth. Considerable force is required to approximate the fractured ends of the bone together. Mr. Brodie made several efforts without success, but told the gentlemen present that he would give the case his best attention, and hoped the result would be favourable.

16th. Mr. Brodie ordered three teeth to be extracted from the upper jaw; the fracture was then reduced after much difficulty and repeated efforts, and a bandage was applied, going over the head and under and around the jaw.

23rd. The fractured ends of the bone have slipped from their position, and there is consequently considerable displacement. He complains of a great soreness of the throat, with much fever. Pulse 121; tongue white; bowels not open; face greatly flushed; skin hot and dry.

℞. Hydrarg. submur. gr. iv. h. n. h. s. s.
Haust. sennæ cras primo mane sumend.
Haust. salivæ ℥ iss. quartis horis sumend.

25th. Fever abated; tongue clean; bowels open; skin cool.

Jan. 1st. The fractured ends of the bones having been replaced, they are at present in very good apposition. The swelling of the face and soreness of the throat have abated, and the general health is good.

19th. The fracture has partially united, and he was therefore made an out-patient.

MIDDLESEX HOSPITAL.

Syphilitic Iritis in conjunction with Lepra Alphoides.

Fred. Churchhill, æt. 24, admitted under Mr. Mayo, Jan. 27, 1834, for an affection of the right eye.

The conjunctiva was inflamed, and presented several congeries of distended vessels; the iris was also changed in colour, being of a cloudy greenish hue, while the left was of a light blue cast. He complained of dimness of sight, but of little pain.

He was also affected with a dry, scaly eruption, the patches of which were thin, white, and circular, and situated upon a dry, red, slightly elevated base, the cuticle over which was exceedingly thin and smooth.

The eruption was situated on the head, face, arms, back, chest, thighs, and prepuce; it was, however, thickest on the back part of the arms, especially near the elbows, on the back, and on the prepuce, which last was covered by it; the face, chest, and thighs had only a few, and these were very small. As the history of the case, he states that six months ago he had an attack of gonorrhœa, for which he took cubebs and purgative medicines. Three months subsequently he had a small sore on the end of the glans penis, and swellings in both groins, for which he took a little mercury, and applied some leeches. The sore soon healed, but the swellings remained for six weeks, and then subsided.

Three weeks previously, however, to the swellings in the groin subsiding, an eruption of small red pimples made its appearance on the arms; these increasing in size, were surmounted by whitish mealy scales, which soon fell off, and were followed by others of a larger size, circular form, and of a more opaque white colour. This process of falling off and reproduction was frequently repeated, as the bases extended themselves; the scales in several places attained the size of a sixpence, the others varying in size from that down to a mere pimple. The bases were, as already stated, slightly raised, red, and dry, there never having been any discharge from them. The gonorrhœa had only ceased about ten days before his admission.

Hirudines xij. Temp. diet.
Calom. gr. ij., patr. opii. gr. ss. 4tis horis sumendus.

24th. Eye much relieved by the application of the leeches; iris more clouded, and the pupil more contracted and irregular.

Pil. hydrarg. gr. x.
Pulv. opii, gr. ½. Misce o. nocte.
Pil. hydrarg. gr. v. o. mane.

and as the bowels had not been relieved for several days,

Ol. ricini ℥vj. statim.

Feb. 9th. In about five days after taking the last prescribed medicine the mouth became a little tender, from which time the eruption has been evidently yielding, the scales falling off, and either not being again replaced, or, if so, being exceedingly thin, and not so firmly attached.

The iris is not quite so discoloured, but is still cloudy; the dimness of sight is not as yet altered, and the conjunctiva is becoming more inflamed.

Hirudines viij. Temp. diet.
Rep. pil.

10th. The eye is a little but not much relieved, the vessels of the conjunctiva being still distended.

Hirudines et temp. diet.
Rep. pil.

16th. Inflammation of the eye abated, and the iris is regaining its natural colour; the sight, however, is not at all improved. The scales have continued falling off, there being now but few remaining. The mouth is not more affected than when previously mentioned, there being only a very slight distaste in it, and a trifling degree of tenderness.

Rep. pil. hydrarg. c. opii, o. nocte.
Pil hydrarg. gr. x. o. mane.

21st. The opacity and discoloration of the iris are now removed, it having regained its natural colour; the margin of the pupil is still however slightly irregular. The sight is much clearer than it was, but he still complains of things appearing as in a mist.

WESTMINSTER HOSPITAL.

Encysted Tumour of the Scalp.

A few days ago a middle aged woman was brought into the operating theatre, having a large oval tumour on the back of her head. She stated, that some years ago she had received a blow on the part from a pole falling on her head: soon after this swelling made its appearance, and gradually increased in dimensions. Sir Anthony Carlisle having made an incision in the tumour, a considerable quantity of a yellowish fluid escaped; he then lost no time in carefully removing the cyst from its surrounding attachments. Adhesive plaster was then applied to the incision, and the patient walked home.

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, March 27th.

Robert Romley Cheyne . .	——
John M'Farlane . .	Hutton Rudley, Yorksh.
Thomas James Proudlove	Chester.
Joshua Southwood . .	London.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON FOR THE ENSUING WEEK.

MON.	Royal Geographical Society	9 P.M.
	Medical Society of London	8 P.M.
	Harveian Society . . .	8 P.M.
	Phrenological Society . .	8 P.M.
TUES.	Institution of Civil Engineers	8 P.M.
	Medico-Chirurgical Society	½8 P.M.
	Medico-Botanical Society .	8 P.M.
	Zoological Society (*Scientific business.*)	½8 P.M.
WED.	Royal Society of Literature	3 P.M.
	Society of Arts	¼7 P.M.
	Geological Society . . .	½8 P.M.
FRI. ...	Astronomical Society . .	8 P.M.
SAT.	Royal Asiatic Society . .	2 P.M.
	Westminster Med. Society	8 P.M.

BOOKS.

THE Edinburgh Medical and Surgical Journal, for April, 1834.

The Medico-Chirurgical Review. April, 1834.

The Medical Quarterly Review. No. III. April, 1834.

Le Censeur Médical, Journal de Littérature, de Philosophie et de Bibliographie Médicales, Françaises et Etrangères. Janvier, 1834.

A Series of Anatomical Plates in Lithography, with References and Physiological Comments, illustrating the Structures of the Different Parts of the Human Body. Edited by JONES QUAIN, M.D., Professor of Anatomy in the University of London. Fasciculus XI. Taylor.

The Principles and Practice of Obstetric Medicine, in a Series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children. Illustrated by numerous Plates. By DAVID D. DAVIS, M.D., Professor of Midwifery in the University of London. Part XXX. Taylor.

METEOROLOGICAL JOURNAL.

MONTH. March, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
27		46	53	44	29·86	29·82	68	73	W.S.W.	S.S.W.	Fine	Fine	Cloudy
28		49	55	42	29·47	29·35	76	76	S.W.	S.W.	Cloudy	Rain	——
29		48	53	39	29·45	29.55	74	70	W.S W.	S.W.	Fine	Fine	——
30		46	53	37	29·70	29·62	70	72	S.W.	S.W.	——	——	Rain
31		40	50	38	29·66	29·81	72	70	N.W.	W.S.W.	——	——	Fine
April 1		47	52	44	29·91	30·01	69	70	W.N.W.	N.W.E.	——	——	——
2		49	56	48	30·03	30·04	70	72	S.S.W.	S.W.	Rain	Cloudy	Cloudy

The quantity of rain fallen in March was $\frac{24}{100}$ of an inch.

50, *High Holborn.* WILLIAM HARRIS and Co.

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LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXXIV., DELIVERED APRIL 9, 1833.

Gentlemen,—Let me this evening request your attention to *Diseases of the Eyelids*, and I may begin with observing, that *inflammation of the eyelids* is not so disposed to involve the eyeball, as external inflammation of the latter is to extend itself to the former. However, if the inflammation of the eye be restricted to its internal textures, then the eyelids are not affected. When abscesses form in the cellular tissue of the eyelids, an early opening should be made in them, as the most likely means of preventing the extension of the disease, and subsequent eversion of the part. Passing over wounds, phlegmonous and erysipelatous inflammation of the eyelids, the treatment of which is regulated by general principles, I request your attention first to

Catarrhal Inflammation of the Eyelids, which affects their mucous membrane and the glands of Meibomius, beginning near the margins of the eyelids, which become sore, and are affected with heat and dryness. The lining of the lids assumes a red, thickened, and villous appearance, so that, if everted, it will sometimes look like a piece of scarlet velvet. When the lids are moved, the pain is severe, because then the inflamed surface rubs against the globe of the eye; and hence you will generally remark that, in every severe case, the patient keeps the eye more or less shut, and the eyelids motionless. In the beginning of the attack, the natural mucous secretion is suppressed, and hence a sensation of dryness and stiffness; but, after a little while, this feeling subsides, because now the secretion of mucus recommences, and is even more abundant than natural, though altered in quality, and somewhat like pus. The secretion from the Meibomian glands is also changed, so that it has a share in making the eyelids stick together, which happens in the night in such a degree, that the patient cannot open the eye in the morning.

Catarrhal inflammation of the eyelids is mostly produced by atmospheric causes, and such as usually bring on inflammation of other mucous membranes. But inflammation of the lining of these parts is sometimes owing to its being habitually exposed to the irritation of smoke, or of an atmosphere impregnated with gas or vapour of a stimulating kind, minute particles of lime, &c. The influence of any of these causes will be rendered more powerful, if the patient be uncleanly, or intemperate.

Gentlemen, the *treatment* is of the following kind. In the early stage, during which the inflammation is always more or less acute, antiphlogistic remedies are proper: apply leeches, tepid lotions, and the unguentum cetacei, to the edges of the eyelids, in order to keep them from becoming adherent in the night-time. Let the patient's bowels be kept well open; at first, indeed, it is better to give him some brisk purgative medicine. These means, if the case be one of sufficient severity, are to be followed up by a blister on the nape of the neck. When the acute form of the complaint has been subdued, you must employ astringent lotions, and stimulating applications, especially the vinum opii, and the ung. hydrarg. nitratis, which latter is to be melted, and put on the edges of the eyelids with a camel hair pencil. At first, it ought to be weakened by being mixed with an equal quantity of the ung. cetacei.

Ophthalmia Tarsi, or *Psorophthalmia*, is merely a chronic inflammation of the lining of the eyelids, or rather, I should say, of their margins, occasioning their adhesion together in the night, a degree of soreness and itching in the parts, and a falling off of the eyelashes. The Meibomian glands are considerably implicated. When the lining of the eyelids has been frequently in the state of chronic inflammation, especially in old subjects, not only are the eyelashes lost, but the edges of the

lids, instead of being angular, become rounded, and present an habitually raw and red appearance, which is technically named *lippitudo*, or *bleariedness*.

When ophthalmia tarsi has continued for a long while, or been neglected, the orifices of the ducts of the Meibomian glands, placed along the inner margin of one or both eyelids, may be partially or totally obliterated; and it is chiefly in such examples that you will observe that the eyelashes are lost, and the edge of the lids rounded off. Sometimes, indeed, an eversion of the lower eyelid takes place, from a contraction of the frequently excoriated parts of the adjoining skin of the cheek, or you may have an inversion of the part, from the effect of previous ulcerations on the inside of it.

When a person is troubled with ophthalmia tarsi, or psorophthalmy, he should never attempt to open his eyes in the morning, till the glutinous matter, which makes the eyelids and eyelashes adhere together, has been properly softened and dissolved, so that it may be done without pain. For this purpose, the margins of the eyelids and the eyelashes should be anointed with a small quantity of spermaceti cerate. Then a piece of soft sponge, wrung out of hot water, is to be held over the eyelids for a few minutes, after which the eye will admit of being opened without pain. All the gummy matter should be removed, because, so long as it remains, no eye-water nor salve can be brought in contact with the principal seats of the complaint.

The first indication, or that of diminishing inflammation, may be further promoted by fomenting the eyelids with a decoction of camomile flowers, applying leeches to the eyelids, and giving aperient medicines.

In very bad cases, I recommend you to cover the eyelids at night with a bread and water poultice, included in a bag of fine muslin, the margins of the eyelids being first smeared with a little of the spermaceti ointment.

The second indication, or that of healing the ulcerated and excoriated parts of the lid, is fulfilled by applying to them the unguentum hydrargyri nitratis, more or less weakened at first with a proportion of lard. I like this ointment as well as any; but certain practitioners are in the custom of using others; as, for instance, salves, containing the red or white precipitate of mercury, in the proportion of 10 or 12 grs. of the former, or 30 grs. of the latter, to an ounce of lard.

When you notice small ulcerations along the margins of the eyelids, I recommend you to touch them with the nitrate of silver, or a strong solution of it; and, in bad cases, it is best, before using the caustic, to extract the eyelashes, for if their bulbs are suffered to be destroyed by the ulceration, they will not be reproduced.

The *third indication*, or that of improving the general health, requires the employment of tonic and alterative medicines, sea bathing, pure air, and regular exercise.

The hordeolum, or *stye*, is generally compared to a little boil, of about the size of a barleycorn, projecting from the eyelid. It is of a deep red colour, attended at first with itching, and afterwards considerable tenderness, and even more pain than might be expected from so trivial a swelling. Sometimes the irritation is such, that the conjunctiva is partially inflamed, and the motion of the eyelid productive of great annoyance. It is the nature of a stye to suppurate very slowly; but at length it does suppurate, points, and bursts; and after discharging a minute quantity of curdy matter and disorganised cellular membrane, it usually subsides and disappears. But if any of the sloughy matter remain within it, the disease is apt to return, or to degenerate into a hard, white, chronic tumour, that is very slow in undergoing any change, and is technically named *grando*, from having been compared to a hailstone. I have attended young persons, who have been annoyed for several weeks by a succession of styes, one forming as soon as another had been cured.

The *treatment of a stye* may be of the following kind. In the beginning, cold applications, as the lotio plumbi acetatis, or a cold bread poultice, made with the same or iced-water, are proper; but you will rarely succeed in preventing the disease from coming forward. However, you may first try what cold applications and aperient medicines will do; and when suppuration is obviously taking place, exchange them for warm poultices and fomentations. As soon as you see a white point on the apex of the little tumour, provided the tumour is slow in bursting of itself, I advise you to make a small puncture in it; but avoid doing this unnecessarily or prematurely, as you would thus only increase the inflammation, without obtaining any discharge of what is contained in the stye. The pus and sloughy cellular substance are then to be pressed out, and the poultice put on again. When the sloughy cellular membrane is slow in coming out, the cavity may be touched with lunar caustic, or with the end of a probe dipped in sulphuric acid.

I think the best way of treating the tumour termed *grando*, or *chalazion*, is to open it, press out its contents, and touch the interior of the cyst with a piece of lunar caustic scraped to a point.

The next subject, gentlemen, is *encysted tumours of the eyelids*, which are not unfrequent cases, their seat being generally in the cellular substance, connecting the integuments of the lid with the orbicular muscle; but they may be more deeply placed, so as to be covered not only by the orbicularis but by the levator muscle. The more fluid kinds sometimes grow to the size of a pigeon's egg; but the steatomatous ones rarely become larger than a filbert. These tumours

often contain, besides the ordinary matter of encysted swellings, small short hairs, entirely destitute of bulbs and tubes.

The encysted swellings, not closely connected with the tarsal cartilage, are to be treated precisely on the same principles which apply to ordinary swellings of a similar character in other situations; but if they should be intimately connected with that cartilage, a formal dissection of them out would be difficult without cutting a portion of the cartilage away. Now this kind of operation is found to be needless. The best plan is to evert the eyelid, and, at the point where it appears to be thin and most closely connected with the base of the swelling, to make a free puncture through the cartilage, by which the contents of the swelling, if fluid, will be discharged; but if found not to be fluid, a second cut may be made across the first, and the four angular flaps snipped off with scissars.

Gentlemen, no doubt all of you have had opportunities of seeing what is termed *ectropium*, or *eversion of the eyelids*, a case productive of vast annoyance and considerable disfigurement. The lower eyelid is most frequently affected, its edge falling downwards and forwards away from the eyeball, which is no longer duly covered and protected. This exposure of the lower portion of the eye, and of the conjunctiva of the eyelid, produces in these parts a degree of inflammation, attended with constant pain and redness, and thickening of the membrane, which is at length converted into a hard callous substance, lying just under the eyeball. As the flow of tears towards the inner angle, and through the puncta lachrymalia, is also obstructed, they fall over the cheek, which is apt to become excoriated.

Ectropium may arise from various causes, which considerably influence the treatment; for it may be either a permanent or only a temporary deformity, which will subside of itself on the abatement of the inflammation that has given rise to it. Thus you will meet with *ectropium from acute inflammation of the conjunctiva*. When it affects the upper lid, it is in some degree accidental. A child, for example, is labouring under acute purulent ophthalmy, and the surgeon, in order to examine the eye, or remove the copious discharge, everts the upper eyelid, the child begins to cry violently, and all attempts to reduce the lid to its natural position are found to be ineffectual. It soon becomes greatly distended with blood; and even, if it admit of being replaced, it is generally everted again as soon as the child begins to cry. When this variety of ectropium affects the lower eyelid, it is not produced in this accidental way, but altogether by the swelling and protrusion of the inflamed conjunctiva.

Here you must foresee, without my mentioning it, that the *treatment of ectropium from acute inflammation of the conjunctiva* requires, 1st, scarification of the everted conjunctiva; 2nd, after the swelling of the eyelids has been lessened by the discharge of blood, the part may generally be reduced; 3rd, if the inflammation be not very acute, the lid is to be kept from quitting its natural position by means of a compress and roller. In the contrary case, every thing must be avoided likely to make the child cry; and the attendants are to be instructed how to replace the eyelid, if it should happen to become everted again. A collyrium containing alum, the nitrate of silver, or sulphate of copper must be applied frequently, for the purpose of checking the purulent discharge.

When scarifications fail to remove or prevent the eversion, you may cut away a portion of the swollen conjunctiva. The bleeding which follows will prove of great service. Afterwards strips of plaster, passed from the upper to the lower lid, and a compress and bandage will prevent the return of the displacement.

Ectropium of the lower eyelid from relaxation is most frequent in elderly persons, as a consequence of *chronic inflammation of the conjunctiva* and Meibomian glands. From constant exposure, the inside of the everted lid becomes red, firm, and almost insensible, and the lower punctum lachrymale displaced forwards. These various circumstances are necessarily productive of a weeping of the eye, a *stillicidium lachrymarum*, and of various degrees of inflammation of the eyeball itself.

I may next inform you, gentlemen, that the *treatment of ectropium of the lower eyelid from relaxation* consists, first, in removing the inflamed state of the eyelids and conjunctiva, and then in applying escharotics to the exposed conjunctiva, for the purpose of obviating the tendency to a return of the displacement. I recommend you to try scarifications of the inflamed conjunctiva, and subsequently to apply the sulphate of copper, or nitrate of silver, and a compress and roller. In inveterate cases, a portion of the thickened and relaxed conjunctiva is to be removed.

Gentlemen, there is a species of *ectropium of the lower eyelid, consequent to excoriation of it and the cheek, resulting from long-continued ophthalmia tarsi*, and it is alleged to be one of the most common forms of the disease. In this case, you will notice that the edges of the lid are rounded off, the orifices of the Meibomian glands partially or completely obliterated, the eyelashes destroyed, and a considerable portion of inflamed conjunctiva exposed to view. The ophthalmia tarsi is to be removed by the means explained in the last lecture. The skin of the everted lid is to be smeared with zinc ointment, and the exposed conjunctiva scarified and touched with nitrate of silver. Should these means not prove effectual, a portion of the conjunctiva must be removed. In bad cases, resisting this treatment, the practice of cutting out a portion

of the cartilage of the shape of the letter V is sometimes adopted.

Next, gentlemen, I may briefly advert to the *ectropium of the lower eyelid, from disunion of it from the upper one at the temporal angle.* This is seldom seen, except in old persons who have been long afflicted with inflammation of the margins of the eyelids, and have had a succession of ulcers near the outer commissure. The treatment requires an operation similar in principle to that performed for the cure of harelip, namely,—the edges of the disunited commissure are to be cut off, and the parts then united by means of a suture. The diseased state of the eyelids, however, should be first cured.

Of Ectropium.—Most of the examples, which I have met with, have arisen from the *contraction of a cicatrix.* In fact, the deformity is not an unfrequent consequence of a wound, an abscess, an ulcer, or a burn. In slight cases the simple operation of removing a fold of the conjunctiva may be sufficient; but some examples are met with in which the degree of eversion is very great, the length of the eye-lid in the transverse direction much increased, and its outer surface fixed by adhesions. Here the cicatrix must first be divided, in order to loosen the lid from its unnatural position, and then a portion of the conjunctiva is to be removed; but, for the purpose of counteracting the morbid elongation of the lid from one canthus to the other, it is sometimes necessary to remove a portion of the whole thickness of the tarsal cartilage, shaped like the letter V, and then bring the edges of the wound together with a suture.

Then, gentlemen, amongst the numerous diseases of these parts I have to explain one to you, which is exactly the reverse of the preceding: I allude to what is named *entropium* or *inversion* of the eyelids, which is mostly seen in old subjects, in whom the skin of these parts is loose and redundant, and thrown into folds. When the upper eyelid is inverted in the slightest degree, a considerable irritation of the eye is produced; but when a large portion of it is so displaced, the case becomes truly afflicting. The friction of the eyelashes against the eye is incessant, attended with immense suffering, the eye itself inflames, the cornea ulcerates, or becomes opaque, and the eye-sight is ultimately destroyed.

When proper treatment is adopted early, the entropium may generally be cured by cutting away a fold of the integuments, near the edge of the tarsus. You first take up a portion of them with the entropium forceps, and observe whether what you hold is sufficient to bring the eyelid into its right position; if so, you cut it off with a small pair of curved scissars, and unite the edges of the wound with one or two sutures, which you may withdraw the next day, as the wound will then have united.

Another method of cure is that of producing a contraction of the skin of the eye-lid, by cautiously applying across its central part a little sulphuric acid, by means of a thin bit of wood dipped in it, and rubbed upon an oval space, a little longer than the extent of the inversion, and from three to six lines in breadth. Three or four applications will generally suffice.

But, gentlemen, I must tell you, that more difficult cases are met with, arising from an alteration in the shape of the cartilage of the eyelid. For these the common plans will not answer, and you must try others. One consists in making two perpendicular incisions in the broad margin of the tarsus, at the sides of the inverted part, and then making a transverse cut through the lining of the eye-lid, from the extremity of one of the first wounds to that of the other. The inverted portion of cartilage, thus comprised within the incisions, is then to be put into its right position, and retained in it with sticking plaster.

When the vicious shape of the tarsal cartilage makes the adaptation of it to the eye impracticable, its total excision has been occasionally performed.

Sometimes it seems as if the entropium depended upon the cartilage being too short; for if you make a cut through the outer commissure, it no longer presses against the eye. Another kind of operation is that adopted by Jaeger, of Vienna, and which consists in paring away the edge of the inverted tarsus.

In the next place, gentlemen, I may speak of *trichiasis*, which properly signifies the growth of the eyelashes in such a direction, that they rub against and irritate the eyeball.

You seldom find all the eyelashes turned toward the eyeball, except when trichiasis is really accompanied by an inversion of the eyelid. The inconveniencies of the complaint are severe, for the friction of the eyelashes against the eye brings on inflammation of that organ, and, in time and under neglect, opacity of the cornea and blindness. The wrong direction of one or more of the eyelashes is often overlooked, and the effect, the inflammation, only attended to; now here, as in every other part of surgery, I advise you to search the cause of the disease, and not to disregard it in the treatment. Its removal will alone frequently suffice.

One plan of treatment consists in removing, one after the other, all the inverted cilia by means of forceps. Each eyelash is to be laid hold of, as close as possible to the skin, and pulled out quickly in a straight direction; but, in general, the result is only a temporary relief, as the hairs grow again. Hence, I believe, the best way is to pare off as much of the ciliary margin of the eyelid as will include the bulbs of the inverted eyelashes.

When trichiasis is merely an effect of entropium, the eyelashes need not be extracted, as the cure is brought about by the measures applicable to the entropium.

Distichiasis, gentlemen, strictly means a

double row of eyelashes; but, in fact, the supernumerary cilia are never arranged in this regular order, nor do they usually extend the whole length of the eyelid, but are scattered at different points, between the natural place of the eyelashes and the orifices of the Meibomian glands.

Cases also sometimes present themselves, in which strong hairs grow from the inner concave surface of the eyelids.

The only effectual mode of treatment is to extract the hairs and their bulbs.

Next I may bring under your notice *ptosis*, a term signifying an inability to raise the upper eyelid, which hangs loose and pendulous over the globe of the eye. In some examples this depends upon excessive distention and inflammation, but what is more commonly understood by ptosis is that form of it, which is accompanied by paralysis of the levator palpebræ superioris.

If the eyelid be lifted from the eye it gradually sinks down again by its own gravity, being often slightly œdematous, the eye looking dull, the iris being less irritable than natural, the pupil dilated, and the eye frequently amaurotic.

Ptosis is generally symptomatic of disease of the brain, and the treatment must be regulated accordingly. With due attention to the cause, however, there is no objection to rubbing the eyelid with camphorated mercurial ointment, or with liniments containing ammonia or camphor, or to blistering the neighbouring part of the forehead.

Paralysis of the Orbicularis Muscle sometimes follows operations performed near the lower extremity of the parotid gland, and producing injury of the branches of the portio dura of the seventh pair of nerves. As far as the eye is concerned, the consequences are not usually serious, and the inconvenience is that of not being able completely to shut the eye; a state to which the term *logophthalmos* is applied, whether arising from palsy of the orbicularis muscle, or a shortening or retraction of the upper eyelid itself. However, logophthalmos, when it exists in a considerable degree, may bring on inflammation of the conjunctiva, opacity of the cornea, and even staphyloma.

The *Granular Conjunctiva*, gentlemen, is mostly an effect of severe purulent ophthalmy, and consists of a rough, hard, granulated state of the lining of the eyelid, attended with a thin or puriform discharge, a varicose affection of the vessels of the sclerotic conjunctiva, an opaque appearance of the cornea, great tenderness of the eye, and an incessant epiphora, or copious effusion of tears. In recent cases leeches are to be applied near the eye, and the granular surface of the eyelid smeared with the melted ung. hydr. nitratis by means of a camel-hair pencil, or rubbed with the sulphate of copper or nitrate of silver. For this purpose the eyelid should always be completely everted, as there is sometimes a semilunar fringed excrescence at the angle where the conjunctiva passes from the globe to the eyelid, which might otherwise escape attention. After caustic has been used, the eyelid must be bathed with tepid water before it is returned into its natural position again.

Sometimes when the granular productions are remarkably hard, callous, and pendulous, excision is to be preferred.

Concretion of the Eyelids.—Two varieties are met with: in one, the inside of one or both eyelids is adherent to the eyeball (symblepharon); in the other, the edges of the two eyelids are connected together (anchylobepharon). This last case is sometimes, though rarely, a congenital malformation; and when it occurs, it is mostly as the result of violent inflammation or burns. The treatment consists in dividing the adhesions with a knife, guided along a director, so as not to injure the eye itself, and keeping the edges of the wound asunder. If the cornea be known to be opaque, such an operation is useless.

As for adhesions of the eyelids to the eyeball, it is only when they are loose and of limited extent, and not situated over the cornea, that the division of them can be of any service.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XVI.

Diagnosis of the Rupture of Hepatic Abscess —Pulmonary Openings—Case of Double Opening—Puncture of Gall Bladder—Gangrene of Liver—Connexion with Hepatic Apoplexy—Diagnosis of Distended Gall-Bladder — Its Causes—Inflammation of the Parietes over the Liver—Sympathy of the Integuments.

Gentlemen,—I broke off at my last lecture while engaged in considering the phenomena of hepatic abscess, and you will recollect I spoke of the various modes in which these abscesses may open internally, and stated that the diagnosis in all cases was founded on the same principle, which is this,—that during the prevalence of symptoms indicating the existence of suppuration of the liver, some new organ becomes *suddenly affected*, the nature of the affection being what would be produced by the sudden rupture of an hepatic abscess and a discharge of pus into some of the neighbouring viscera, and this coinciding with the disappearance, more or less, of the original tumour. Now, when we consider the various internal openings of an hepatic abscess, we find that they admit of being divided into two classes, first, those in which the matter is effused into cavities having a communication with the exterior of the body, as the lung,

digestive tube, and kidney. Here, in addition to the symptoms already alluded to, we have a sudden discharge of pus from the stomach or bowels, from the lungs, or by the urinary passages. But we may also have the matter discharged into shut cavities having no external communication, as where the contents of the abscess open into the peritoneum, pleura, or pericardium. You will readily perceive, that of these two classes of openings, those in which the matter escapes into cavities having no communication with the exterior are the most unfavourable. The confined pus excites violent and generally fatal inflammation, and we have a dangerous empyema, a rapid peritoneal inflammation, or intense pericarditis.

I stated, that of the internal openings of an hepatic abscess, one of the most favourable is that in which the matter is discharged into the right lung, and I described briefly the mechanism of this curious process. We are warranted, I think, in declaring this to be a fortunate termination, because there are many instances on record of persons having recovered under such circumstances. A very near relative of mine presented an example of this. He was attacked with symptoms of acute hepatitis, for which he was attended by some of the most eminent physicians in Dublin. His treatment was bold and vigorous; he had free bleeding, both general and local, mercury, and every other means calculated to remove inflammation, but all proved ineffectual. His pulse became rapid; he began to sweat; the hepatic tumour increased in size, and presented a distinct sense of fluctuation; there could be no doubt of the existence of suppuration in the substance of the liver. One morning he was suddenly seized with a violent fit of coughing, and during the course of the day expectorated more than a large tea-cupful of pus; towards evening this increased, and on examination it was found that the tumour was remarkably diminished. The expectoration continued during the whole night, and in the morning it was observed that there was scarcely any appearance of the hepatic swelling. It was singular, and tends to confirm the idea that the matter had been discharged into the lung, that in the erect position, this gentleman had scarcely any expectoration, but in the horizontal, it was always extremely copious; a circumstance which you can easily understand by considering that in the recumbent posture the purulent matter would find a more easy passage into the lung. In this case, it would appear that the communication between the liver and lung was very free, for I remember that on one occasion by making pressure over the liver, he said I was forcing the matter into his chest, and the pressure was followed by an instantaneous and copious expectoration. This frequently occurred. A medical friend of mine, residing in Dublin, mentioned to me some time since the case of a large robust drayman, addicted to whiskey drinking, whom he attended for an attack of acute hepatitis. At a time when the liver was very much increased in size, and well-marked symptoms of suppuration present, he observed that sudden expectoration of pus took place, which continued for several days, with manifest subsidence of the hepatic tumour and complete recovery. Three cases of this kind came under my notice in the Meath Hospital. One of the patients had symptoms such as I have before described as exhibiting a striking similarity to yellow fever, from which he recovered, and was discharged, with no other remarkable symptom but quick pulse. Shortly afterwards he returned, complaining of pain in the right hypochondrium, with rapid pulse, profuse night sweats, and a slight cough. At first his appearance struck me as being characteristic of phthisis, and under this impression I repeatedly examined the chest by the stethoscope and percussion, but could not detect any lesion. The man had only a slight cough, and this was totally insufficient to account for his symptoms. The nature of the case was soon manifest: one morning the patient stated that he felt as if something had given way in his chest during the night, and he was from that time expectorating *large quantities* of purulent matter. On examining the lower portion of the left side, I found that it sounded completely dull on percussion, and that the physical signs of an accumulation of fluid in the bronchial tubes were extremely distinct. That this dulness was the result of the effusion in question is proved by the previously healthy state of the lung. The very day before I had carefully examined this part of the chest, and found it quite healthy. There was not the slightest resonance of voice in this portion after the accident, because the tubes were so completely filled; so that in this case the return to health was accompanied by *increase of broncophonia*, a fact that sets the question of the nature of the accident at rest. It may appear strange that in this case the puriform matter entered the left lung instead of the right; but this is sometimes the case, particularly when the abscess forms in the left lobe of the liver.

I shall now draw your attention to the particulars of a case, which I look upon as almost unique, and which derives additional interest from the accuracy of the diagnosis. It is of great importance that you should have clear ideas on the subject of hepatic abscess, for, though the disease is not of common occurrence in this country, still, if called on to pronounce an opinion on a case of this kind, the least difference in the quantity of your information may be of consequence. The patient, who was the subject of this disease, was admitted into the wards of the Meath Hospital in August, 1828. The history of his case was, that he had been labouring, some time previously, under obscure symptoms of an hepatic affection, accompanied by slight fever and jaundice, which had gradually subsided.

Three weeks before admission he stated that he had irregular fits of shivering, followed by sweating, and when he came to the hospital he complained of sickness of stomach, but particularly of cough and difficulty of breathing, which were extremely harassing, and said that he came in chiefly to be cured of his cough. He was considerably emaciated, and looked pale and low, but his stools had a natural appearance. On considering the history of his case and the symptoms then present, it struck me that it was either hepatitis with suppuration, or empyema of the right side with irritation of the liver. At that time I had not made my researches on the diagnosis of empyema, and I must confess that I experienced a great deal of difficulty in determining the nature of the case. I found the right side considerably dilated, with dulness on percussion over its inferior half, but the intercostal spaces were not distended, and preserved their natural appearance. The case went on in this way for some time. Permit me to draw your attention for a moment to this point. Dilatation of the right side may result from the pressure exercised upon it by a solid or by a fluid mass. If the mass be solid it will push the ribs outwards, but the intercostal spaces will still preserve their natural appearance. But if the protrusion of the side be the result of pressure by a fluid mass, the intercostal spaces will be acted on even more than the ribs, and the sulci, which mark their situation, will be effaced. Now, in this case the intercostal spaces were evident, and from this circumstance I determined that it was a liver disease. The patient continued for a fortnight without exhibiting signs of any material change, and then the tumour increased very much in size, but there was no appearance of pointing. At this time the patient was visited and examined by a number of medical men, and all agreed that it was a case of deep-seated suppuration of the liver. Under these circumstances it was thought advisable to make an incision through the integuments down to the peritonæum, as recommended by Dr. Graves, and to keep the wound open by filling it with lint. This operation was performed, and the wound kept open for several days, but no matter came. On the sixth day the patient began to sink, his face became hippocratic, his extremities cold, and every one thought he was dying. During the course of the day it was observed that there was a circumscribed tumour, with a distinct sense of fluctuation, situated close to the wound, and towards the right side of the mesial line. Here is an important stage of the case;—a man presenting evidence of suppuration in the liver has an operation performed on him to favour the exit of pus externally, and some time after this we find a circumscribed fluctuating tumour, nearly in the situation of the wound. We concluded that the hepatic abscess was pointing in that situation, and it was determined to pass a lancet cautiously into the tumour. This was done, but to our astonishment, instead of pus pure bile escaped through the incision. It was clear that we had mistaken a distended gall-bladder for an abscess, and this I need not tell you was a serious error. It is singular, however, that the accident was not followed by any bad consequences. About two hours after the operation the patient went to stool, and passed two large evacuations, consisting chiefly of a vast quantity of purulent matter. Next morning he was surprisingly well, *and the hepatic tumour had considerably diminished.* His countenance recovered its natural expression, his spirits were quite elated, his pulse had become tranquil, and the liver was manifestly returning to its ordinary dimensions. He began to sit up, was put upon generous diet, could walk about the ward, and was talking of leaving the hospital. From the period, however, at which the discharge of pus took place he had an obstinate diarrhœa, and though he took a great deal of nourishment he was still pale and emaciated. Twenty-two days after the subsidence of the tumour, another swelling began to make its appearance in the epigastrium, which increased daily, and it was obvious that another abscess was forming in the left lobe. About a fortnight after this he was suddenly seized with excruciating pain in the epigastrium, followed by symptoms of peritonitis. The tumour in the epigastrium subsided, but the patient sank in a few days of the peritoneal inflammation. Let me recal the circumstances of this case. First, we have obscure signs of the existence of abscess, then the sudden escape of matter from the bowels, accompanied with subsidence of the hepatic tumour; in the next place a persistence of diarrhœa and emaciation, and lastly, we have a new tumour in the epigastric region, disappearing on the supervention of symptoms of acute peritonitis. From a consideration of all these circumstances I stated to the class that I should expect to find evidences of the abscess in the right lobe, which was the first affection, and I ventured to say, that the opening between it and the intestinal tube was still pervious. I was led to form this opinion from observing the persistence of the diarrhœa, to check which all the ordinary remedial means had failed. This was the first part of the diagnosis. In the next place I stated my belief, that the gall-bladder had been punctured, but could not explain why the bile had not escaped into the peritonæum. Thirdly, I said, that an abscess had formed in the left lobe, which had discharged its contents into the peritoneal cavity. All this was stated publicly, and on consideration you will find that there was no great difficulty in making the diagnosis. On dissection, we found a cavity in the right lobe, with a small quantity of matter in it, and having a free communication with the duodenum. The fundus of the gall-bladder was found adhering to the parietal layer of the peritonæum, and the mark of a lancet wound in it was evident

A recent abscess was discovered in the substance of the left lobe of the liver, from which the matter had escaped into the peritonæum by a passage capable of admitting a small quill. Every part, therefore, of the diagnosis of this case was perfect, and borne out by the necroscopic appearances. You will see the details of this very interesting case in a paper published by Dr. Graves and myself, in the 5th vol. of the Dublin Hospital Reports.

This case is exceedingly interesting, because it illustrates two remarkable terminations of hepatic abscess: in one instance, by opening into a cavity which had an external communication, in the other, into a shut sac. The patient recovered from the first abscess, and would have done so effectually if the fistula had closed (no uncommon event); but he could scarcely have recovered from the second, because where the matter escapes into the peritonæum or pleura, the patient almost invariably dies of acute inflammation of these cavities. This case derives additional interest from the circumstance of the gall-bladder having been opened. I believe this is the only case on record in which an opening made into the gall-bladder has not been followed by fatal consequences. I might detail many other cases of hepatic abscess, but I must at present refer you to the paper already alluded to, in which we have published the results of our experience on the subject.

Some authors have mentioned gangrene, or mortification of the liver, as one of the modes in which acute hepatic inflammation may terminate. It is now, however, agreed, that this is one of the rarest terminations we can meet with; in fact, that there is hardly any organic disease which so seldom occurs. Mr. Annesley states, that in all his dissections (and these were very numerous) he never met with a case of gangrene of the liver. Andral, who has examined some thousands of bodies, has only met with a single case: this, with another which was under the care of Dr. Graves, and appears to have been a genuine example of mortification of the liver, are almost the only cases of which I have any distinct recollection. The case under Dr. Graves was that of a patient in Sir Patrick Dun's Hospital, who laboured under chronic inflammation of the liver, with ascites, jaundice, swelling of the lower extremities, and an incapability of lying on the left side. After this man had been about eleven days in the hospital he began to complain of tenderness and pain of the belly; he was next seized with vomiting, and threw up a large quantity of fetid matter. Soon after this he sank, and on dissection, numerous marks of chronic disease were found in various parts of the substance of the liver; but in the left lobe there was a cavity which was distinctly gangrenous, and had in the centre of it a large mass of slough. I think that there can be no doubt that in this case the disease was actual gangrene of the liver. I think, too, it may be very fairly doubted, whether gangrene of the liver is the result of inflammation, properly so called, in any case; and I believe it would be a very interesting subject for inquiry, to consider how far this disease may be the result of hepatic apoplexy, or effusion of blood into the substance of the liver. This is an accident to which the liver, as well as every other parenchymatous organ, is subject; and though effusions of blood into its substance are by no means so common as similar occurrences in the brain and lungs, still it does not enjoy any thing like immunity from such lesions. We have good reason to believe, that in many cases, blood effused into the substance of parenchymatous organs may, under certain circumstances, either undergo putrefactive decomposition and form a gangrenous abscess, or that, although no longer circulating in its vessels and effused into the parenchyma of an organ, it may still retain its vitality to a certain extent, and, being modified by the powers of life, may give rise to the formation of various morbid products. In this way it is thought that various tumours — cancerous, steatomatous, melanotic, and encephaloid — may originate. I am inclined to think that this sometimes occurs in the brain and lungs, and it is probable that it may happen in the case of the liver also. Further researches, however, are necessary, with respect to the elucidation of this matter, before our opinions on it can possess a higher character than that of verisimilitude.

While on the subject of hepatic abscess, it will be necessary to allude to one of its occasional complications—distended gall-bladder, because this may be mistaken for the pointing of an abscess, and an operation be performed, and that this has happened more than once is a positive fact. A distended gall-bladder has been mistaken for the tumour formed by the pointing of an hepatic abscess, an opening has been made into it under this supposition, bile has escaped instead of pus, and this getting into the cavity of the peritonæum, has given rise to rapid and fatal peritonitis. A remarkable case of this kind has been detailed with great candour by the late Mr. Todd, in one of the early numbers of the Dublin Hospital Reports. He was called suddenly to visit a girl, whom on his arrival he found to be in a dying state, labouring under great distention of the belly, almost insensible, moaning constantly with her jaw fixed, and presenting a distinct tumour in the hypochondriac region, which from the history of her case, he was led to consider as an hepatic abscess pointing externally. He divided the integuments and muscles down to the peritonæum, and having introduced a trochar, drew off nearly three pints of *bile* with apparent relief. Shortly afterwards, violent peritonitis came on, and the patient sank rapidly. After death the liver was found to be healthy, and the tumour to have been formed by a distended gall-bladder of enormous size. From this, after the operation, the bile had escaped into the peritonæum,

causing intense and universal peritonitis. In making a diagnosis in such a case as this, every thing will depend upon your knowledge of the history and previous symptoms. The circumstances which produce distention of the gall-bladder, you will find upon examination do not bear any distinct resemblance to those which precede or accompany inflammation of the substance of the liver. We may have it from the obstruction caused by biliary calculi, and here you can make a tolerably sure diagnosis. We may have it from disease of the duodenum, or of the head of the pancreas, or from the pressure of aneurysmal tumours in the vicinity. Abscess of the liver is generally accompanied by symptoms of inflammation of that organ, but distention of the gall-bladder does not present any corresponding train of phenomena. There may be some exceptions to this rule, but in making the diagnosis, we must strike a balance of probabilities. The first part of our diagnosis then is this—the occurrence of a tumour in the hypochondriac region, not preceded or accompanied by any of the symptoms which characterise hepatic inflammation. Another important diagnostic, and which I think will apply in several cases, is this. In a case where abscess has formed in the liver, the fluctuation, which is a sign of the existence of fluid, is often preceded by a condition of the part in which there is no sign of the presence of fluid; we have first induration and swelling, and *then the signs of fluctuation;* but this is not the order of succession in the phenomena which characterise distention of the gall-bladder. In abscess we have a hard tumour which gradually softens; in case of distended gall-bladder we have the tumour soft and fluctuating from the commencement. If then we have a tumour in the hypochondriac region, not preceded or accompanied by symptoms of hepatic inflammation, accompanied by jaundice, with a sense of fluctuation from the beginning, and unattended by hectic, the chances are indeed very great that it is not an hepatic abscess, but a distended gall-bladder.

You will perhaps be surprised, that in treating of the diagnosis of distended gall-bladder, I do not lay any particular stress upon position. The reason of this is that the situations in which a distended gall-bladder may be felt are extremely various. First, we may have it appearing in different parts of the hypochondrium, under the cartilages of the ribs. In the next place, we may have it between the cartilages of the ribs and the spine of the ilium. It has been observed by Andral in the iliac fossa, and he has seen it in the epigastric region. In a case which occurred in the Meath Hospital, it presented itself in the epigastrium, a little to the right of the mesial line. Again, in severe cases you may have the whole of the liver filled with bile, *and having a distinct fluctuating feel, not produced by the existence of pus in that organ, but from the enlargement of its ducts, which are gorged with bile.* In one case mentioned in the Medico-Chirurgical Transactions, this curious circumstance occurred. So far, then, as diagnosis is concerned, position appears to be of very little consequence; but when we have this, in addition to the other circumstances mentioned, it will tend to give additional certainty to our diagnosis. In all cases on record where there was distended gall-bladder, the patient laboured under jaundice, except in that which I have detailed in the early part of this lecture, but perhaps if our patient had lived longer, he would also have jaundice.

There is one disease more which may, and has, I believe, been confounded with acute hepatitis and abscess of the liver. This affection, which has not been sufficiently noticed by authors, is inflammation and abscess of the abdominal parietes over the hepatic region; and this is a very singular disease. It is sometimes trifling, but I have seen a patient die of it. With the original nature of this disease I confess that I am not at all well acquainted; nor can I say whether the inflammation first attacks merely external parts, or whether it is a primary affection of the liver, and that the external parts take on diseased action from sympathetic irritation. In such cases, we frequently observe many of the symptoms of inflammation of the liver, as pain, tenderness, biliary derangement, foul tongue, and morbid stools, with a tumefied state of the integuments. After these symptoms have continued for some time, the tumour increases in size, becomes softer, and matter forms. You give exit to the pus by opening the abscess with a lancet, and the patient gets well. This occurrence I have frequently witnessed. From a consideration of all the circumstances, it strikes me that in this disease the first morbid action in all probability commences in the liver itself, and that the external inflammation is an example of the strong sympathy which subsists between disease of deep-seated parts and the integuments which cover them. Of this fact you have several illustrative instances. In pleuritis we frequently find the integuments of the chest remarkably tender on pressure; and in cases of inflammation of the brain the integuments of the scalp have their sensibility much increased. The same thing occurs in hepatitis; and in this disease one of the first distinct symptoms is this tenderness of the superincumbent skin. Now, you can conceive that if this morbid sensibility of the investing parts should increase, that in place of having some pain and tenderness accompanied by swelling, we may have suppurative inflammation set up in these parts; and that, under such circumstances, the inflammation may leave the internal organ where it first existed, and be thrown upon the external parts in its vicinity. It strikes me that this is not unfrequently the case in this curious affection. In the case of this disease which I have seen

prove fatal, the following circumstances were observed:—evident symptoms of inflammatory fever; pain and tenderness in the region of the liver, followed by the appearance of a tumour, which became fluctuating, was opened, and a quantity of matter discharged with considerable relief to the patient. She left the hospital, but returned again in about a fortnight or three weeks, with an enormous tumour in the same place, which was again opened, and a vast quantity of purulent matter evacuated. Though the matter continued to flow out freely, she did not recover strength; and on inquiry it was found that, before her second admission, she had spit up some blood. One day, while dressing the abscess, the gentleman who attended her observed that when she coughed, air passed out through the wound, proving the existence of a fistulous communication with the lung. On examination after death we found an abscess, the base of which rested upon the peritoneal surface of the liver, without engaging its substance. From this the matter had made for itself a double passage, one externally, the other through the diaphragm and pleura into the substance of the lung. This was the only case in which I have seen this disease prove fatal; and in it death appears to have been caused by the extent of the disease, and by the abscess opening into the pleura and lung.

CLINICAL LECTURES

DELIVERED BY

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LECTURE XIII.

On the Division of Strictures.

GENTLEMEN,—A stricture is said to be impassable when an instrument cannot be passed through it, although there is still a sufficient channel open for the evacuation of urine, which trickles through in an insufficient and incomplete manner, giving rise to those symptoms of inconvenience and distress which have been already enumerated. It is said to be accompanied by retention or suppression of urine when the stricture is so complete that nothing or only an occasional drop of water can be forced out. Under these circumstances different methods of treatment may be had recourse to, the selection or choice depending principally on the degree of difficulty experienced in the transmission of the urine.

The terms *suppression* and *retention* of urine are commonly and indifferently used to express an incapability of making water, although technically they imply two very different states, suppression being that in which no urine is secreted by the kidneys, retention denoting only the impossibility of evacuating it from the bladder, in which it is retained in a compulsory manner. The degree of danger is not less different, although it is urgent in both; but it can be always removed in retention by a surgical operation, whilst it is often impossible in suppression to give relief by any hitherto known means.

It is not my intention to notice those suppressions of the secretion of urine which have been related by various authors to have occurred, as it were, spontaneously in individuals of peculiar constitutions, and in which some compensatory discharge took place from one or other of the various surfaces of the body, but merely those which are directly connected with the present subject. A great operation performed on any part of the body, such as an amputation, will often give rise to a suppression of urine for twenty-four or more hours, but this is usually obviated by opiates and diuretics with antispasmodics, in moderated but repeated doses; although when the patient has died from exhaustion, or the superadded shock of the operation, it has never been removed. It may occur from more trifling causes. I once laid open two fistulæ in perinæo of small extent, and without much difficulty, or almost any hæmorrhage. The patient had made water just before the operation, and was seized, four hours after, with a cold fit attended with shivering, of which he thought nothing. It lasted twelve hours, and was followed by a hot fit, in which he died, in less than twenty hours after the little operation was performed. I examined the head, chest, and abdomen, but could find nothing to account for his death. There was no water in the bladder, nor had he passed any after the operation.

When the urethra is pervious, the fact of the suppression is of course easily ascertained by the catheter, and the nature of the case is so far understood; and, as the bladder may, from paralysis or from over distention, have become incapable of discharging its contents, the instrument should in all cases be passed, in order to verify the fact of there being no urine in the bladder. The cause of the suppression must be then strictly investigated. If dependent on alarm, it must be removed by the means indicated; if attributable to inflammation of the kidney, bleeding and proper antiphlogistic means must be resorted to; and if it should depend on obstruction, the nature of it must, if possible, be ascertained, or relief cannot be expected. As one kidney is sufficient for the purpose of secretion, a suppression of the secretion in one kidney, or an obstruction in one ureter, will not be a positive cause of death, regarding it only as an obstruction; and I am not aware of any means of cure applicable to suppression from disease on both sides, unless such as nature may herself adopt. I have mentioned an instance in which disease of the uterus, extending to and surrounding both ureters, led to a suppression of

the secretion, and death; but these causes are rare; and the particular ones to which your attention is especially required are those connected with the bladder. I have said, that when the bladder is forcibly dilated by the obstruction of the urethra, on the one hand, and the secreting power of the kidney on the other, the peculiar mechanism at the orifice of the ureters is brought into action to prevent mischief, by compressing the neck of their orifices, and thus preventing, or nearly preventing the flow of urine into it. A suppression of the secretion is the consequence, and thus, if a person could survive long enough, he would die of the suppression of urine in all such cases, giving rise to low fever, coma, and death, or to paralysis, or sudden death by apoplexy. The urethra always, however, yields, and the retention as well as the suppression are relieved; but, as the urethra does not yield for many hours, and in some cases in which it is not diseased and is capable of undergoing a high degree of irritation for two or even three days, time is allowed for surgery to give relief, if its art and science are properly applied.

The question of time depends on the previous as well as on the present state of disease, and requires decision in execution as well as judgment in consideration. When the patient has suffered long from disease of the urethra with obstruction, and the bladder is very much thickened, it cannot dilate so as to hold any considerable quantity, and all the most violent and distressing symptoms may arise from ten or twelve ounces of water as readily as from two or three pints, and in twelve or eighteen hours as well as in six-and-thirty, or in three days. The size of the bladder being but little augmented in this case, offers no assistance to the judgment: it can scarcely in fact be felt either above the pubes or through the rectum; and it is on the agony of pain experienced by the patient, and the state of constitution as expressed by his appearance, and the general symptoms, that the practitioner must depend as his guide. In such a case the patient will rapidly be exhausted, and irreparable mischief will be done to the parts or the constitution, unless relief is early obtained by a surgical operation. Judgment in discrimination and decision in action are here two most valuable qualities in the surgeon; and as soon as he sees that the patient is not likely to be relieved by more simple remedies, he ought not to wait until the danger is so far augmented that he has not a moment to lose, or until great mischief is done, but proceed whilst there is still time, and the system is but little impaired by the attack, to do that which must perhaps be done at a later period, when it may be useless. Fifteen and eighteen years ago I was in the habit of seeing much more serious cases of this nature than at present. The surgery of these parts has been much improved, and relief is sought for and given so much sooner than formerly, that the same number of bad cases are not now met with. No operation that can be performed or attempted can do half the mischief that will inevitably follow a rupture of the urethra, and an extravasation of the urine into the surrounding parts, whilst it also saves the constitution at the moment, and may also be the means of effecting a permanent cure, or at least a great alleviation of the evil. The question of time, then, must be one founded on many observations made by the bedside of the patient. I shall say to you, as a guide, as I have said to you in strangulated hernia, the operation had better be done a little before it is absolutely necessary than a little afterwards; and I beg of you to remember, that these cases only, and very rarely occur, except in persons who have had strictures for a series of years, and which have long been to them a source of great misery and danger. In all other instances I may confidently state to you, as a general rule, that operations are never necessary, they being relievable by more simple means.

In the management of common cases of retention of urine, a difference of opinion exists among the best surgeons of the present day; some making a marked distinction in their local treatment of those which appear to have occurred from the supervention of inflammation, and others not. This relates principally to the use of the catheter; the phlogistic surgeons deprecating its use until the inflammatory symptoms have subsided, when it no longer appears to be necessary. The other party, of which I profess myself to be a great supporter, use the catheter as a means of reducing inflammation, as an antiphlogistic measure.

If a young man who has been long suffering from gonorrhœa, the inflammation of which has extended to the back part of the urethra, goes out, and exposes himself to cold after drinking a quantity of champagne, iced punch, &c. &c., he often finds himself unable to make more than a few drops of water, or even to make a single drop, although the desire to do so is most urgent. That the inflammatory affection of the urethra has been augmented no one disputes, but many recommend that in such cases the patient should be bled, put into the hot bath, that an enema should be administered, with calomel and opium, &c. &c., before the catheter is used. I hear this continually said by men of great experience in the profession, and, however much I may respect their opinions generally, I cannot but think they are in error. Relief is at last obtained by these means, it is true, but not until after much suffering; whilst the catheter, when used at once, takes off the irritation of the bladder, and removes the spasm, or irregular action of the muscles surrounding the urethra. When the bladder is quieted by the evacuation of its contents, the other remedies may be more advantageously employed, and will require to be carried to a much less extent. The catheter in such a

case need not be of the very smallest size; and although a gum elastic one is the best, a silver one will often answer very well; and if one is not at hand, a common bougie may be passed gently through the urethra, and allowed to remain for a few minutes, when the patient should be desired to make an effort as it is withdrawing, when the water will be found to flow.

A tradesman came to me yesterday evening, suffering from great irritation in his urethra, with an incapability of passing his urine, except by drops; he had been taking cubebs in large doses, and had exposed himself to cold. I advised him to be cupped on the perinæum, to take a dose of physic, a hot hip-bath, and to go to bed. He returned to me this morning, saying that he could not pass a drop of water, and that he was suffering great pain, with a sensation of bursting. I immediately passed a No. 4 silver catheter; it went into the bladder without the slightest hesitation, and drew off two-thirds of a chamber-potful of water. What would bleeding have done?

Suppose, now, that the patient has a stricture, the nature of which you are acquainted with; say that it will admit a No. 4 bougie, that it has been irritated by attempts to pass a larger one, or from any other cause, and the patient cannot make a drop of water. This is a case in which inflammation has supervened from violence, and the person will be in great distress, which will remain undiminished for hours under any other treatment than the passage of the catheter, which will at once give him relief, and a No. 2 or 3 will often pass with ease in this kind of case, although scarcely a drop of water can be made.

When you are unacquainted with the state of the urethra, and know nothing further than that the urine has been evacuated with difficulty, or in a very small stream, you will often be foiled in your attempts to get into the bladder, and you must then have recourse to general means, in which case it is said you have added to the mischief which already existed; but I am not satisfied that you have done so if you have proceeded with that caution and gentleness which are necessary, and which I have so strenuously enforced throughout my observations. The patient is also better satisfied, and he submits with more patience to the delay and misery he must endure before he can obtain relief, whilst if you succeed he at once says he is in heaven. If the obstruction is in the first five inches, or from that to five inches and a half, take a very small straight gum elastic catheter, and try it with and afterwards without a stillet, bringing the urethra well forward as you introduce it, until it is quite upon the stretch. By varying the motion of the two hands the point of the bougie may be applied to every part as nearly in succession as possible, with the hope that it may find the opening. If it should do so, it passes on to the bladder, and the patient is relieved; but do not withdraw the catheter; the smaller it is, the greater the necessity for leaving it there. The general symptoms will not be increased by it, or if they are, they may be subdued by general means. The eyes of the catheter should be introduced so far into the bladder that they may not irritate its neck; and if the bladder itself should be so irritable as to render its presence very distressing, it may be withdrawn from the bladder, and yet retained in the urethra just beyond the stricture, ready to be passed onwards if required. This is, however, rarely necessary, for the urine flows readily by the side of it if the catheter be kept through the stricture. In two or three days the size of the catheter may be increased, and so on until the cure be completed, or the urethra restored at least to its natural dimensions. I once, some years ago, introduced a small catheter into the bladder of a gentleman in a case of this kind, and gave him instantaneous relief, but unfortunately withdrew it. The retention of urine did not return, but he made his water with great difficulty, and it was three months before I could again hit the opening and commence the cure. The passage of a bougie or catheter often, however, causes all this mischief, as I have already stated, and it may then be its own cure by being retained in the part. A medical friend of mine has had stricture for some years, for which he has been treated by caustic in Paris, and by other means in other places, without effecting a cure: latterly the stricture has become very narrow, and every touch or application to it of any kind whatsoever was sure to bring on a paroxysm of fever or a fit of retention of urine, which lasted several hours, so that at last he dreaded its being touched in the gentlest manner. I assured him that all this evil arose from the urine passing over the irritable surface of the stricture, and that he must keep the catheter in so as to prevent its occurrence. This he did, and as the instrument was of the smallest size, the urine soon flowed by the side of it; a larger one was introduced, and in this gradual manner the irritability, both of the stricture and of the bladder, have been overcome, and he can now pass a No. 8 and his water at all times with ease. When the catheter appeared to irritate the bladder, he partly withdrew it, and after the first two increases of size, he used only a hollow gum bougie, which went just beyond the stricture, in a manner I shall hereafter notice.

When the obstruction is beyond five inches and a half, or is at the curve of the urethra, the small gum catheter should be also made to take a proper curvature; and as it is so small that it can have but little stability, I usually try it with the wire in it, which even then only gives it a moderate degree of firmness. When a larger one is used, and by having been retained on a wire for a long time it keeps its curvature, it may be used

without; but it does not appear to me to be so manageable an instrument, as its point cannot be retained so readily against the upper surface of the urethra, or directed so easily to any particular part. It may, however, gain, on the other hand, from its flexibility, and the surgeon should have both kinds ready for use. If, after several careful and steady attempts, the gum catheter fails, a small catgut bougie may be tried; if it can be made to stick in the stricture, it will soon soften and swell, and dilate the anterior part of it; and as the whole of a stricture relaxes on the dilatation of a part, the urine may, and often will, flow on the bougie being withdrawn, particularly if it be done during an effort to evacuate it, by which act it is forced against the back part of the obstacle.

If the catgut bougie fails, a common plaster one may be used in a similar manner; if a catgut is not to be obtained, recourse must be had to the silver catheter, and the surgeon should be provided with them of two or three different curvatures, from that I have described to one much less bent, for one will often proceed when the other will not; they should have a pure tin stillet, and a wooden handle with eyes, and be about ten inches long. This instrument is to be passed slowly and steadily down to the stricture, the patient either standing or lying on his back, as may be consonant to the usual practice of the surgeon. The catheter must not be too large, or it cannot go through, and if too small at the point it will easily take a wrong direction, and make a false passage, if undue force be applied. The point of the instrument, when it reaches the stricture, should be pressed against it, in order to ascertain the distance; it should then be directed against the lower part of the urethra, and then against the upper, with the view of obtaining a sufficient estimate of its situation. It should then be withdrawn an inch, when the parts being put fully on the stretch, it should once more be passed onwards, the point being borne against the upper surface of the urethra until it reaches the obstacle, into which it may perhaps, by gentle pressure, be insinuated. The French surgeons have been in the habit of using a sharp-pointed conical catheter, which they forced through the stricture, or something else, and frequently got into the bladder in this way; but this plan should never be resorted to. It cannot be doubted that some force is necessary, because pressure is force, however gently it may be applied, and men have different ideas of what is or is not gentleness; but a very little practice soon teaches a surgeon what is the extent of it, in the shape of pressure, which he may use without the risk of tearing the urethra, and the sooner he acquires this knowledge the better, because beyond that he must not go. This gentle degree of pressure must be continued for several minutes, until the instrument passes on, or the incapability of overcoming the resistance by fair means is obvious. If the urethra is torn the mischief is increased, for the instrument will always take that course; but a little bleeding is not a sign of laceration, for the stricture is very vascular as well as sensible, and blood readily flows from a very moderate examination, even without pressure. A surgeon cannot tell what another has done who has preceded him; but he must know when the urethra has yielded from laceration effected by his own hand. The best directed efforts having failed, the patient, if a vigorous man, should be bled from the arm; he should invariably be cupped on the perinæum to the utmost quantity that can be got, and which rarely exceeds twelve ounces, or a dozen or twenty leeches may be applied in relays, so as to keep up a constant drain from it, and which bleeding may be encouraged at intervals by the hot hip-bath, or, if the patient wishes rest, by an evaporating bread and water poultice. The bowels should be evacuated by a large enema of salts, gruel, and castor or other oil, repeated from time to time, if necessary, until the rectum becomes perfectly clear. Opium is now to be administered, sixty minims or a drachm of tincture of opium are to be put into two, but never more than three ounces of gruel, or warm water, and injected into the rectum. The quantity is small that it may be retained, which would not otherwise be done, if it were larger. Batley's solution of opium or laudanum are also to be given internally, twenty minims for the first dose, and ten for the succeeding ones, every hour or two hours, as may appear most proper to effect the object of bringing the patient quickly under its influence. It is contended by some that opium introduced into the rectum acts more powerfully than when taken into the stomach, but it has not been the case under my observation, and I always calculate that double the quantity is the proper dose, whether it be used in the fluid or solid state. When the patient is fairly under its influence, and the cure is to terminate favourably, the irritability of the bladder diminishes, the urgency of the calls to make water are neither so severe nor are they so frequent, the patient slumbers for a few minutes between them, a state of general relaxation takes place, and a few drops of urine follow each other more rapidly than formerly, soon to be succeeded by a small but uninterrupted stream, after which the patient dozes or falls asleep, and is only awakened to obtain perfect relief by emptying, or nearly emptying the bladder.

The effect of the first or large purgative enema is sometimes great; it brings on the due consent between the parts, and often gives rise to complete relief. If it does not quite do it at once, the opiate injection generally completes it. Purgatives, therefore, are valuable aids, and many persons liable to slight attacks of retention, have recourse as soon as they begin to feel a difficulty in passing their water, to a good stiff dose of salts and senna and manna, and a hot-bath, which usually

give the required relief. The hot-bath is a very great assistance in many cases, and is useful in all. I always, however, recommend it much hotter than is commonly done, at 100 to 104, or as hot as the patient can bear it, and he should remain in it until he is quite faint.

These various means must be continued and repeated, although in vain, until it is obvious that they are inefficient, and that relief must be obtained by some other and more strictly surgical proceedings. The urine may perhaps drop from the urethra, the patient may be able to collect and show half or even a whole wine-glass full, the bed-clothes may be wet from it; but this will not do; it is not that sort of evacuation which is absolutely necessary to give relief. The kidneys secrete more than is discharged, and are willing to secrete still more, if the pressure on them which prevents it were taken off. The bladder is distending in spite of this stillicidium, and the rupture of the urethra is at hand. The agony which the patient endures is great, the anxiety of countenance is strongly marked, the general distress, the great sympathy of the whole system are too fearfully expressed to be mistaken. The bladder may be felt, rising high above the pubes, and descending into the rectum, if it has been capable of dilatation, and the surgeon has only the choice of his operation left. Four are recommended by different modern authors:—1st. To puncture the bladder above the pubes; 2nd, through the rectum; 3rd, to open the urethra from without; 4th, to divide the stricture by an instrument passed along the urethra.

The operation above the pubes is dangerous, inasmuch as an extravasation of urine may readily take place after it, and lead to the formation of matter and other evils of serious magnitude; it should never, therefore, be had recourse to in cases of retention of urine from stricture. The operation through the rectum is easily done, and is not liable to the same objections, except in the case which cannot be foreseen, of the peritonæum descending between the bladder and rectum lower than is usual; I may say, except in some particularly rare instances which scarcely form exceptions to the general rule. It is, therefore, the operation which is to be preferred by those who are unacquainted with the anatomy of the parts in the perinæum. The best mode of doing it is to cause the patient to lean over the side of the bed, when the fore-finger can more readily be introduced into the rectum until it touches the prostate through it. The posterior boundary of this being distinguished, the curved trocar and cannula are to be introduced, the point of the trocar being withdrawn under cover of the tube until the end of it rests by the side or under the fore-finger a little beyond this part, and about or rather short of the middle of that which is called the triangular space. The trocar is now to be advanced, and it and the canula carried steadily into the bladder, when the trocar is to be withdrawn, and the canula pushed in so as to secure a free evacuation of the urine. The canula may now in turn be withdrawn, as its remaining would only cause irritation, and be of no use, for the opening from the rectum into the bladder will always remain open until the canal of the urethra becomes pervious. There is more danger that it may never close, but become a fistulous opening, than of its closing too soon; and this is another and the principal objection to the operation. It is also urged against it, that the disease in the urethra is not removed; but it must be clearly understood, that the disease in the urethra is much more manageable when the pressure upon it of the bladder is taken off, and may in my opinion be almost, if not always, successfully treated, and the canal cleared or rendered pervious in a short time afterwards, by permanently placing an elastic hollow bougie in it in the manner I shall presently indicate. This is therefore the operation, I repeat, which is always to be selected by surgeons who are not conversant with the anatomy of the perinæum; but I do not say it is the best for those to select who have a greater degree of knowledge.

The operation of opening the urethra from the perinæum in cases of retention of urine may be a simple one or otherwise, depending principally on the situation of the evil. If the stricture be anterior to or at the commencement of the bulbous part of the urethra, nothing can be more easy for any one to do; and the facility with which it can be done in this situation has led to some misconception with regard to the operation generally. Sir Astley Cooper, who claims the introduction of it into the practice of surgery, directs a sound to be passed down to the stricture; the point of it is then to be turned downwards, and an incision made upon it and beyond it. If the stricture is a narrow one, the dilated urethra behind it will be brought into view; or, if otherwise, it is to be sought for and opened, when the urine will be evacuated, the patient immediately relieved, and time given to treat the stricture itself, which, as I have said, after the puncture through the rectum, is much more manageable, in consequence of the forcing of the bladder against it being removed. In the first case in which he did it, in the year 1793, he merely made an incision through the common integuments, when the dilated urethra came into view; this he opened with a lancet, allowed the urine to escape, and the patient was soon cured of his disease. If things were always as simple as this, a very few minutes' consideration would suffice. But this is not the case: and it is admitted by the ablest surgeons that when the disease is situated at the termination of the bulbous portion of the urethra, or in the commencement of the membranous part,—and it is not easy to say what a long-continued disease may not do by extension to the neighbouring parts,—the operation is often exceedingly difficult: it is

more particularly so when it is attempted by making an incision on the left side of the raphè of the perinæum, nearly in the same manner, as in the operation for the stone. From the stricture preventing the passage of the catheter, the information to be gained from its presence in the urethra is wanting; the hardness and derangement of the soft parts, which in these cases has often taken place, adds to the difficulty, and the urethra behind may not be sufficiently dilated to make it very tangible, so that it is not so easily found, rendering, in many instances, the operation one of great difficulty, and deterring, therefore, many persons from doing it or any other. In most cases the urethra behind the stricture only is divided; and where the operator is determined to carry his catheter on into the bladder, it is probable that he does not always divide the strictured part of the urethra, but carries it on by the side of it, establishing, perhaps, a false passage at the part, which will for the time, take the place of the original one, and which will also, it is probable, lead subsequently to a recurrence of the evil.

The improvements which have been of late years made in the practice of surgery render this operation less necessary than formerly; cutting out, or cutting into, portions of the urethra, which I have seen attempted, are, like cutting out testes, comparatively obsolete operations; but still, an opening into the urethra may occasionally be required; and when the disease is situated at the termination of the bulbous portion of the urethra, or even further back, I recommend the operation to be done in the following manner, as much the most simple and certain:—The patient being placed and secured, as in the operation for the stone, a catheter or sound is to be passed down to the stricture, and held steadily against it, the concavity being as usual upwards, the point directly applied to it. The rectum having been previously cleared by an enema, the fore-finger of the left hand, duly oiled, is to be introduced into it, and the membranous part of the urethra and the prostate are to be examined, as well as the bladder, the state of which will, in all probability, have been previously investigated. If the membranous portion of the urethra is dilated by the urine, so much the better; but the object of introducing the fore-finger is to ascertain the relative situation of the upper part of the rectum and the urethra, which latter part only touches, or is nearly in direct application to, the rectum, at the termination of its membranous part and the commencement of its prostatic portion. There is a certain distance, which is greater or less in different individuals, between the last inch of the rectum and the urethra placed above it. The two parts form two sides of a triangle, the apex of which is the prostate, the base the external skin. It is within the two lines of the triangle that the operation is to be done. The surgeon, taking the catheter in his right hand, whilst the fore-finger of the left is applied to the upper surface of the rectum, moves the point upwards and downwards, so as to communicate with the fore-finger of the left hand, and to convey to it a knowledge of the situation of the extremity of the instrument, and particularly of the distance between them, and which the motions given to the catheter by the right hand will clearly indicate. The thickness of the parts between the obstruction and the rectum can be estimated with sufficient accuracy, both at the point where the left fore-finger is applied, and at the surface of the skin; for, although the membranous part of the urethra cannot be easily felt from an incision made on the left side of the perinæum, it can always be distinguished from the rectum. The next step of the operation is to divide the skin, cellular membrane, fascia, muscular and tendinous fibres, which may intervene between the upper surface of the rectum and the under surface of the anterior and middle portions of the membranous part of the urethra. This is to be done by a straight, blunt-backed, narrow, sharp-pointed bistoury, fixed in its handle; and there are two ways of commencing the operation: the first, when the obstacle is behind the bulb and the external parts are not diseased, may be done by a straight incision, in a perpendicular direction;—indeed the operation may always be done so, if the surgeon is well acquainted with the anatomy of the parts; but if he is not, or they are very much hardened, and consequently unyielding, a transverse, curved, or crescentic incision should be made across the perinæum, the centre of which corresponds with the raphè, and is one quarter of an inch above the verge of the anus, or as near that distance as may be, with due respect to the rectum. This gives room, and allows the parts to be separated as much as they will admit. If the transverse incision is not had recourse to, the point of the straight bistoury is to be placed on the skin a little above the verge of the anus, the cutting edge being above, the blunt back towards the rectum, the handle being a little depressed, the point a little inclined upwards. The degree of inclination necessary to carry the knife inwards for the distance of an inch, and clear of the rectum, will be indicated by the finger in that part, and the eye of the operator will correspond with the point of the fore-finger, so that the bistoury may be steadily pressed in to that extent, and then be carried upwards, and brought out in the exact median line, making an external incision of at least an inch and a quarter to an inch and a half, as regards the external parts, and which may be then extended as space is wanted for the prosecution of the operation. The part being sponged, the surgeon again introduces the bistoury in the median line, the point being directed upwards and backwards towards the urethra, and he may then deepen the cut. The fore-finger

in the rectum will always tell him where the back, and consequently where the point of the bistoury is. The opening will now be sufficiently large to allow the operator to lay aside the knife, and to feel for the urethra with the point of the fore-finger of the right hand, an assistant keeping the catheter steady against the stricture, the end of which will now be readily felt. If the point of the fore-finger of the right hand does not go beyond it and touch the sound part of the urethra, which is dilated by the urine in the generality of cases, the knife is to be resumed, and the fore-finger being withdrawn from the inside of the rectum, is to be placed in the wound, on the outside of it, and it is to be thus depressed as far back as possible; the back of the knife is then turned to it, whilst the point exposes and opens the urethra, and which it can do very easily at the apex of the prostate, at its transverse portion, at the very back of the membranous part of the urethra; but it is not necessary to go so far back, and the membranous portion may be opened at its middle with every advantage, and with perfect safety to the gut. A good anatomist and surgeon will open the urethra in this way sooner than the mode of doing it can be described, the urine will make its escape and the patient will be at once relieved. Whether the stricture shall be now divided or not, is a question presently to be considered; the cure can be completed either with or without it.

The young surgeon (and I never speak or write for old ones), in order to understand the method of doing this operation, should dissect the perinæum, first in the usual manner, and make himself well acquainted with the central tendinous point, as it is called, to which the transversi perinæi, the acceleratores urinæ, the sphincter ani, and the compressor urethræ muscles are attached. This being divided, and the acceleratores muscles being separated in their median line, they ought to be turned aside, when their deeper structure can be examined as well as the bulb of the urethra which they cover. The sphincter ani muscle, both in its superficial and deep part, should now be carefully investigated, in connexion with the bulb of the urethra and its attachments to the deep perinæal fascia. A side view of the pelvis should then be obtained, and the relative situation of the parts duly estimated, and which a dissection from within the pelvis outwards will confirm and establish in the mind. The most important dissection is yet, however, to be made, and it is to be done by placing the body on the face and raising the pelvis, so that the parts are elevated and made more tense. The sacrum is to be exposed with the edges of the glutæi muscles, the coccyx is to be cleaned, all the loose fat taken away, and the sphincter and levator ani muscles fully exposed from behind. The manner in which the levatores ani cross from side to side to make the funnel-like process usually described, is then well seen, but they make principally the body of the funnel, leaving a tube extending from it of an inch and a half in extent and sometimes two inches, entirely cut off by it from the cavity of the pelvis; and a student can have no idea of the possibility of cutting away an inch of the extremity of the rectum, or of the safety with which he may divide an inch and a half of it, unless he makes this dissection. It is true that the tube of the funnel, or the gut, is also covered by the fibres of the levator, intermingling with those of the sphincter, but these do not interfere with the view of the subject I have given, as the inside of the levator is lined by a fascia, which is reflected upwards on the side of the rectum, prostate, bladder, &c., which separates these parts from all beyond or below them. The sacrum should be now sawed through and removed, the levatores ani carefully examined and divided in a median line on the rectum. The sphincter ani should be treated in a similar manner, and the whole of the lower part of the rectum exposed. This gut should now be turned backwards, the recto-vesical fascia being divided in a similar manner; this being done, there are still muscular fibres, fasciæ, and cellular membrane to be dissected and divided before the membranous part of the urethra, the prostate, the vesiculæ seminales, the back of the triangular space of the bladder are brought into view, and this dissection is most important and difficult. If the perinæum has not been in part dissected it should be done, and the connexion of the superficial fascia with the deep-seated should be demonstrated. The first and last dissection of the perinæum will demonstrate all the points I have alluded to in the operation, and will also enable the student to prepare himself for dividing the neck of the bladder in continuation, if such an operation should be found necessary.

This is the operation in the perinæum I have performed and recommended for years, but it sometimes happens that the surgeon prefers cutting on the face of the stricture with the view of dividing it, supposing he will have less to do, but in this he will be frequently disappointed. If the stricture is at the posterior part of the bulb he must divide that part to get at it, a thing I believe of no sort of consequence, and leading to no inconvenient result, although the contrary has been asserted. On opening the urethra he finds he is probably half an inch from the stricture, having cut on the point of the catheter turned downwards, this half inch must be divided, and, in fact, a nearly similar operation to that I have recommended must be done, only in a dissimilar manner. When the stricture is exposed a small lachrymal probe may be passed into the canal, I should say in all cases, and the stricture must be divided upon it; but as the urethra at this part descends under the pubes, the surgeon, if not well informed, fears injuring the rectum, within one inch of which he is not, and he begins to hesitate, and to divide, scratch by scratch, or to try and intro-

duce a director by force, and which may and will more easily pass in any direction by the side of the urethra than through it. If he has a very small director he may with a little force pass it over the lachrymal probe, directing it downwards, and thus reach the membranous part of the urethra; the sharp-pointed bistoury may then be run along the director, and be made to cut transversely to each side, then downwards, and lastly upwards if necessary, until a straight or female catheter passes easily into the bladder. If the surgeon has unhappily begun his operation in this way, and cannot get a director into the stricture, he should now introduce the fore-finger of the left hand into the rectum, and having ascertained the relative situation of the line of the rectum and of the urethra, and the incision he has made, the difficulty will be removed by his steadily pressing on the straight blunt-backed bistoury through the stricture, the edge being turned either upwards or sideways, until the urine begins to flow, and his large director can be passed, care being taken to preserve as much as possible the course or line of the canal. In fact he must do at last, after half an hour has been lost, nearly the same operation which I have advised to be done at first.

ESSAY ON THE STRUCTURE AND FUNCTIONS OF THE SKIN.

BY MM. BRESCHET ET ROUSSEL DE VAUZEME.

Read by the former to the Académie Royale des Sciences, on their sitting, 27th of Jan., 1834.

Rerum natura sacra sua non simul tradit aliud hæc ætas aliud quæ non subibit, adspiciet.—*Senæger Nat. Quest.* lib. viii. c. cxxxv, xxxi.

(*Continued from page* 306.)

These sudoriferous canals are not the termination of the general capillary system, and do not bear any resemblance to that which Bichat has denominated *exhalant.*

Previous to the lecture of the present essay they were never described or observed by any individual, with the exception of Eichhorn, who has spoken of the *sudatory* canals indicating more especially the external orifices of the *hydropherous.* This author states, that they are straight and uncontorted, and asserts the fact of having introduced a horse-hair into their cavity, a circumstance which would appear to prove that he had mistaken a bulb of hair for a sudoriferous canal, or that he had made an artificial one. M. Eichhorn was well acquainted with the functions of these canals, but could only follow these tubes as far as the papillæ, without indicating their ulterior distribution. He assigned to them the twofold use of exhalation and absorption, which office appears, at least to us, highly incompatible.

In 1777, Leeuwenhock announced the discovery of the pores of the skin by the aid of a microscope, but the number which he admitted appeared to prove that he saw anything but the external orifices of the hydropherous canals.

In fact, the most conciliating imagination can scarcely grant the existence of 14,400 apertures for each square line of cutaneous tissue. We coincide with Blumenbach in the opinion, that Leeuwenhock has committed an error in his calculations. Shaw perceived filaments proceeding from the epidermis to the corpus mucosum, which are easily rendered visible in a state of incipient putrefaction, or on detaching the epidermis with precaution. Dr. W. Hunter has described and delineated these delicate, transparent, elastic, colourless filaments, and considers them as the transpirating canals. Chaussier and Bichat regard them as exhalant and absorbent vessels; Monro, perceiving filaments spirally disposed beneath the epidermis, believed them to be composed of nerves; Hontana speaks of tortuous vessels, without indicating their nature; M. De Humboldt denies the vascular properties of these vessels, and imagines that they depend on the simple duplicatures of the skin.

Gaultier caused the protrusion of the exhalant vessels which proceed from the sanguineous emmineces to open externally after traversing the epidermis. He had correctly observed the situation of these orifices between the little excavations which exist on the dorsal aspect of the ridges, where he had remarked the presence of minute drops of limpid fluid. According to his estimation, there exist from four to six of these little excavations on each square line, which is far from the number designated by Leeuwenhock; and he moreover considers that each orifice corresponds to a vascular eminence. Gaultier has, without doubt, considered the nervous papillæ as vascular eminences; and it was in vain that he excited the protrusion of the exhalant vessels from their summit.

G. Prochaska endeavoured to establish the existence of diverse orders of vessels in the

skin; he refers to his third class those which are directed towards the papillæ, some of which terminate in a cul-de-sac, whilst others return to and anastomose together in the net-work. These vessels appear to resemble the exhalants already described, and another class of vessels seems to be formed by the sudoriferous canals; but the expressions of this author induce the belief that he entertained only a superficial acquaintance with these canals *.

The observations of Albinus, Meckel, Cruikshank, and those which Humboldt performed with a microscope magnifying 312,400 times the object exposed to its focus, have not advanced the discovery of the cutaneous pores. Seiler and Béclard have not been more fortunate in their attempts, although the former removed the epidermis by means of a razor, during the time that an animal was exposed to perspiration, whilst the latter infiltrated a portion of integument with a column of quicksilver, nearly equal to an atmosphere. The majority of modern anatomists, not only unwilling to admit the existence of sudoriferous canals possessing external orifices, pretend even that the presence of these canals is not necessary: this, at least, is the opinion of Blumenbach, T. H. Meckel, Rudolphi, Hensinger, &c. Hildenbrandt, however, taking into consideration the existence of exhalation, believed in the presence of these pores upon the surface of the skin, without giving any description of these canals. Scroeter, a common engraver at Leipsic, has given a sufficiently correct delineation of the external orifices of these hydropherous canals; but the explanations that accompany this engraving prove its author did not possess the slightest idea on the subject. According to the opinion of the celebrated zootomist, Delle Chiaje, the epidermis is formed by the conglomeration of sanguineous globules deprived of their fibrin, this membrane being also completely devoid of apertures †.

It is necessary to peruse the recent publications, in order to obtain a satisfactory notion as regards the perforation of the epidermis and sudoriferous canals. The experiments of Eichhorn relative to this subject, however replete with interest, prove that this distinguished physiologist was mistaken as to the exact distribution of these hydropherous tubes, for since he does not mention their spiral arrangement, but believes them to be conical, and to possess an aperture sufficiently capacious to admit a horse-hair, it is evident that he has confounded them with the sebaceous follicles.

4thly. Of the organs of inhalation situated in the cutaneous tissue. These canals are placed under the most superficial lamellæ of the rete mucosum of Malpigi, or horny layer, and present the form of isolated radicles dispersed amidst this epidermic horny substance; after frequent anastomoses they penetrate the cutis at the intervals which separate the papillæ, and in the vicinity of the sudoriferous canals. All these little tubes symmetrically arranged, terminate in canals still more deeply seated, and disposed in the form of a plexus. The canals appear to differ from the ordinary lymphatic vessels, since they possess an extreme tenuity; they ramify in a resisting, solid, and elastic substance; they are ruptured with great facility, and hence we are in general obliged to study their anatomical characters from separate fragments observed through a microscope; their colour is white and silvery, and the existence of valve-like folds being perceptible through their parietes, appear to indicate a kind of analogy to the lymphatic vessels or veins. Sometimes they are interwoven, forming a series of loops, and in general they are but slightly elastic.

On examining with a microscope these canals, which we consider as the organs of inhalation, and on comparing them with the sudoriferous tubes, the difference between these two orders of vessels is instantly perceived. The sudoriferous canal is larger, softer, more winding, elastic, and spiral. The inhalant is smooth, shining, straight, or slightly oblique, and its central cavity is intersected from distance to distance by horizontal membranes, or a kind of little diaphragms. On exercising tractions on the horny epidermic layer, these canals tear, and the sudoriferous tubes alone remain, which are capable of undergoing considerable elongation. Another circumstance which might aid in the distinction of these two orders of vessels, arises from the fact that these

* Disquisitio anato. physiolog. organini. corpore humani, p. 98.

† Observazioni sobra la struthera della epidermide umana. Napoli, 1827.

transparent tubes, comparable, as regards their functions, to the lymphatic vessels, or to the veins, present anastomotic ramifications, which are occasionally in the form of a plexus. The sudoriferous canals never offer these characters.

We have constantly noticed these tubes in the skin of man, both in the white and black race, in the whale, dolphin, porpoise, various ophidren and chelonian reptiles, and in the integuments of numerous fishes.

Whatever may be the colours of the horny tissue, the absorbent canals, the nerves constituting the papillæ, and the sudoriferous vessels are constantly white.

If the existence of these canals cannot be disputed, will the nature of their functions be any longer doubted? From what circumstances do we suppose that they aid in the process of absorption?

If these tubes do not absorb, of what use are they? We do not consider that the differences in structure from the lymphatic vessels can be a sufficient reason to deny them the power of inhalation. The medium which they traverse might explain the difference in the structure of these organs, since we can affirm that every thing which is situated immediately above the cutis, presents a peculiar aspect.

The researches which we have made, on demonstrating thus the true structure of the papillæ, have learnt us the manner in which the sense of feeling is produced. We have been enabled to ascertain that the vascular system, properly so called, does not extend beyond the secretory and papillary organs. We have also learnt that the perspirable matter is excreted by the sudoriferous tubes, and we shall shortly explain the manner in which the horny substance is secreted. In proceeding thus by means of abstraction, we arrive at the conclusion, that the canals which traverse the horny substance, or rete mucosum, can only be adapted to inhalation. We can add to this induction that the radicles, or little anastomotic arches of these canals extend as far as the most superficial layer of the epidermis; and since absorption is one of the properties belonging to the skin, we cannot detect in this envelope any other organ capable of fulfilling this function.

But here a difficulty presents itself, and if we could resolve it, we should terminate all incertitude as to the manner in which absorption is effected. It is important to know the mode in which the canals originated. Are they in the form of a cul-de-sac? Do they present open orifices? If we were enabled to follow the sudoriferous canals to the superficies, and to discover their external orifices, we were not capable of tracing in like manner the vessels of which we speak.

These vessels studied for a long time with patient attention, permitted us to discover only that, towards the cutis, they were continuous with an inextricable plexus formed by similar vessels, and that they prolonged into the horny tissue numerous anastomotic twigs forming terminal loops, and occasionally isolated branches; but as regards their origin, towards the most superficial region of the skin, we could never ascertain if there existed cul-de-sacs or open orifices. We can, however, affirm, that we were not able to distinguish open orifices, and thus they resemble, in this respect, the lymphatic and sanguineous vessels of other tissues considered by a great number of modern anatomists in the mamiferæ, birds, fishes, and reptiles*.

If it be really and constantly true, as we have seen on the intestinal villosities of man and numerous animals, that these canals are deprived of orifices at their commencement, that which is called absorption is neither a true absorption nor a phenomenon caused by capillary tubes; it is therefore necessary to attribute the performance of this function either to imbibation, or to an endosmosis, as two members of this Academy have already imagined.

5thly. Of the organs productive of the horny substance, or heratogenous apparatus. Little reddish glands are perceptible at the base of the cutis, which examined by the microscope, or common magnifying glass, appear uneven, being wrinkled by sanguineous vessels. They are enveloped by a loose cellular membrane, and situated in the centre of little adipose, transparent, superimposed vesiculi, resembling pearls. From the summit of these glands a canal or tube is given off, which traverses the whole thickness to open itself in the bottom of the furrows which are

* Voyey les ouvrages de Hohmann, de Panigga, &c., &c.

observed in this situation. This canal is enveloped by a diaphanous cellular membrane which proceeds from the circumference of the gland itself. Capillary filaments are seen to adhere to the tube, and glandular organ, in which we remarked that a rather considerable vessel entered by the base. These canals in general represent a series of regularly disposed columns. Nevertheless, these glands are placed at unequal heights, and communicate together by means of intermediate canals. These ranks of excretory tubes correspond to the length of the furrows; that is to say, that they are perpendicular to the plain formed by the organ which secretes the colouring matter, or pigmentum.

The products of the gland that we have just indicated are a fluid resembling mucus, which rapidly condenses, and constitutes the horny layer, or *rete mucosum* of Malpigi, and the epidermis itself is only superficial lamellæ of this stratified body.

(*To be continued.*)

Foreign Medicine.

Medical Reform in Belgium.

An address, signed by many of the medical men in Belgium, and particularly by those residing in Ghent, has been presented to the Belgian Chamber of Deputies. In this address complaint is made of the abuse resulting from the law of the 12th of March, and of the decree passed on the 31st of May, 1818, by virtue of which a medical man, after having passed the numerous examinations which the ordinances of the university direct, and having been declared by competent judges worthy to practice, nevertheless remains all his life subject to the superintendence of a commission composed of seven or eight of his professional brethren, often his equals, sometimes his inferiors in talent, who have the power of subjecting him to the most humiliating control.

The following propositions are submitted as the basis of the law which they require.

1. That all the clauses of the law of the 12th of March, 1818, and of the decree of the 31st of May, of the same and of succeeding years, in so far as they refer to the mode of nomination and the number of members composing the provincial medical commissions as now constituted, be reported upon.

2. That consequently these nominations be dissolved and replaced by provincial medical councils.

3. That these councils be composed of twelve or fifteen members chosen by secret scrutiny, and by a majority of votes, from all the individuals legally exercising throughout the province any branch of the healing art.

4. That the choice of the president, vice-president, and the secretary, be made by the King, upon the presentation of the list of all the members chosen.

5. That the functions of the president, and of the members of the council, be gratuitous, save and except the expenses of travelling. The secretary alone to be indemnified.

6. Half the members of the council to be chosen afresh every three years.

7. That until a new law shall have determined the privileges of the councils, those which have been conferred upon the medical commissions by the law and decree above referred to, be preserved, with the exception of the examinations, which shall remain provisionally.—*Gazette Medicale.*

Medicinal Properties of the Anthelmia Spigelia.

(*Herbe a la Brinvilliers.*)

This perennial plant, which is a native of the southerly parts of America, although well known to possess powerful anthelmintic properties, is seldom or ever employed in France or in other parts of Europe. Its medicinal qualities are, however, so highly estimated in the Antilles and in Martinico, that nearly all the natives administer it, and the physicians there prescribe it with the greatest confidence. It is probably in some measure attributable to the great difficulty met with in obtaining the fresh plant, and to the improper mode of preparing the syrup, that it has been so long neglected as a therapeutical agent in this part of the world; for, according to M. Noverre, when properly prepared, it possesses over many of the other vermifuge medicines the following marked advantages:—its action is always efficacious; it is agreeable to the taste, and is taken by infants without repugnance; acting as a sedative, it calms the nervous symptoms, which are frequently complicated during infancy

with worm affections; it does not cause those inflammations which so often accrue from the use of other anthelmintics. One singular effect of this medicine is occasionally to produce an amaurosis, or dimness of vision, which is, however, transient.

The manner of preparing the syrup in Martinico is to boil ten pounds of the plant in six pints of common water for one hour; then, after allowing the plants to remain in the decoction for eighteen hours, to strain, and to add ten pounds of white sugar. The dose is three spoonfuls for an adult, and one for an infant of about three years, each day.

M. Noverre assures us that, although he has been in the constant practice of using this medicine for more than thirty years, yet he has never witnessed any bad effects result from its employment; and he therefore concludes that, although it is a poison, yet its injurious properties have been much exaggerated.

Solanine.

This substance, already found by some French chemists in the solanum nigrum, in the solanum dulcamara, in the solanum mammosum, and in the solanum verbacifolium, has lately been extracted from the buds of the potatoe by M. Otto, of Brunswick. He has obtained this alkali by treating the buds with water, mixed with sulphuric acid, separating the sulphuric and phosphoric acid, and the extracted matter, with acetate of lead, saturating the liquid with a preparation of lime, boiling the precipitate in alcohol, and purifying the product by many solutions in alcohol. Experiments made by M. Otto upon two rabbits to prove the action of *solanine* on the animal economy, have apprised him that this substance ought to be arranged amongst the acrid narcotic poisons. One grain alone of the sulphate of solanine destroyed one of the two rabbits in six hours; the other died at the end of nine hours after taking three grains.

The paralytic action which it exercises upon the posterior extremities of animals is very remarkable; for, if horned beasts be fed with the washings accruing from the buds of the potatoe, this kind of paralysis will be produced.

The substance under consideration is white, pulverulent, and restores to a blue colour turnsole paper reddened by acid. Most of the salts obtained from it take, on desiccation, the appearance of a mass-like gum. The sulphate alone does not.

Improvements in the Parisian Hospitals.

March 22, 1834.—A meeting of the physicians and surgeons of the hospitals of Paris took place yesterday for the purpose of appointing a commission of seven members to draw up a report upon the improvements which can be effected in these institutions. Amongst the members of the commission are MM. Baron, Gueneau de Mussy, Louis, Roux, &c.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, April 5th, 1834.

Mr. Burnett in the Chair.

Inaccuracy of the Minutes—Stormy Debate—Monstrosities—Torsion—Injection of Air into the Veins—Wounds of the Intestines.

The minutes of the preceding evening having been read,

Mr. Hunt rose to express his dissatisfaction that the observations on the falsehoods of the Medical Gazette, which formed a great portion of the last evening's discussion, should have been so entirely omitted by the Secretary in his report, it being only stated, that no conclusion had been arrived at; such was not the fact, and he therefore thought it would be wrong to allow such errors to pass by without some notice being taken of them, and begged to move, therefore, "That the report of the Secretary of last week be omitted."

This motion was seconded by Mr. Dewhurst.

Mr. Costello thought that the object of Mr Hunt would be obtained by requesting the Secretary to state his reasons for altogether omitting the account of what took place.

Mr. Burnett said it was free for any gentleman, who considered the report as inaccurate, to raise objections to what was incorrect, or omitted, but he did not think that the Secretary was necessarily called upon to answer, or explain, his motives.

Dr. Ferguson wished to ask if the Secretary

had any notes of those proceedings; he did not think that the blame rested upon the Secretary, but that there was a controlling power behind the scenes (*loud cries of hear*), and if such was the case their officers no longer belonged to the Society but to some particular party.

Mr. Dewhurst wished to know if the Secretary was or was not ex-officio an officer of the committee?

Mr. Greenwood expressed his opinion, that the committee had more than once shown a disposition to act rather wide of the question (*loud cries of chair, chair*).

Mr. Quain proposed, as an amendment to Mr. Hunt's resolution, "that so much of the minutes as referred to the attack on the honour of the Society be referred to a committee."

Dr. Epps said the Secretary had certainly shown a want of duty in omitting the report; but that gentleman was a man of peace, and he felt convinced that such omission had been made entirely through amiable motives.

Many and angry were the speeches which succeeded, and loud were the calls for explanation, when

Mr. Turnham, no longer able to keep silence, rose from his seat and exculpated himself by stating that, on previous evenings, when matters, unconnected with science, had formed the subject of discussion, he had been requested by the committee to "curtail of their fair proportions" all speeches thereunto relating; it was from this suggestion that he had, in the present instance, made such omission.

Mr. Quain called upon Dr. Ferguson for an explanation of his remarks upon the hidden cause of the omission in the minutes.

Dr. Ferguson acknowledged that, in saying some party behind the scenes, he meant the committee: in supposing this, however, he had not attributed any improper motive to them, and he trusted that he should be exonerated from any such intention.

Mr. Costello bore a willing testimony to the accuracy which had in general characterised the reports of the Secretary; he was glad to hear that he had not acted in this instance from any suggestion of the Committee, and he trusted that the matter would now terminate.

Some farther angry discussion ensued, but suffice it to say, a resolution to the following effect was finally proposed by Mr. Salmon, and carried:—

"That the attack upon the honour of the Society, which was under discussion last evening, be considered unworthy of notice."

This resolution was unanimously carried.

Mr. King related a rare case of deficiency in the muscular parietes of the abdomen.

Mr. Hunt said he had heard a lecture some years since given upon a monstrosity of this kind, but upon viewing the child the alleged deficiency proved to be an enormous umbilical hernia.

Mr. Costello was well aware that the absence of this part of the abdomen was one of the characteristic signs of a certain period of fœtal life; it was one of the stages through which the fœtus must pass, and these cases could only be explained by supposing that the development of this part of the body had from some cause or other been arrested.

Mr. Quain said the state of the abdominal parietes, mentioned by Mr. Costello, was not so uncommon, and was very different from that mentioned by Mr. King, there being in the latter no deficiency of integuments.

Mr. Dewhurst said a similar instance had been mentioned in the Lancet some years since.

Dr. Jewel wished to ask Mr. Costello or Mr. Quain, if they had ever met with any instance of total deficiency of the eyes.

Mr. Johnson referred Dr. Jewel to a work on monstrosities, published in Germany, wherein mention was made of such occurrences.

Mr. Costello then exhibited a pair of forceps for performing the operation of torsion, which he had just had made.

Mr. Simpson wished to know the fate of the patient who had been operated on by Mr. Costello, some weeks ago for torsion, before the Society.

Mr. Quain stated that the animal had fallen a sacrifice to the cause of science, but not from the operation then performed; some gentleman, more chemically than surgically inclined, had administered a dose of poison to the animal, and had succeeded most cleverly in terminating its sufferings.

Some farther interesting remarks on torsion, and injection of air into the veins of animals, having been made,

Dr. White related a case of rapid recovery from a large wound of the intestines and walls of the stomach.

After which the meeting separated.

ROYAL INSTITUTION.

It is with great pleasure we state that Mr. Fuller has bequeathed the sum of 10,000*l.* to the Royal Institution. Alas, how different is it with medical science! For this there is no patronage or encouragement,—no prizes offered, except the paltry one of 10*l.* by the Royal College of Surgeons, with its 10,000*l.* a-year. The College of Physicians, from bad policy and selfish by-laws, is so poor that it is scarcely in a position to maintain an establishment; while the Apothecaries' Company, with an immense income from the sale of licenses, between 5,000*l.* and 10,000*l.* annually, does not offer a prize of 5*l.* for an essay on pharmacy, though this branch is one hundred years behind its actual condition in other European nations.

THE LONDON UNIVERSITY HOSPITAL.

At the late dinner of the friends of this Institution, the sum of 500*l.* was subscribed, and a donation of 1,000*l.* from an anonymous individual was acknowledged. It is to be hoped that a charity, so much wanted in a populous district, will no longer remain closed for the want of funds.

UNIVERSITY OF DUBLIN.

Medical Degrees.

The following regulations have been made by the University of Dublin, in imitation of those of Oxford, we presume:—

A bachelor of arts shall be entitled to examination for the degree of bachelor of medicine, on producing certificates of having attended one course of lectures, and not more than three in each of the four medical sessions, on the subjects required in Edinburgh, midwifery included. The effect of these regulations is, that more lectures are required, and the time for attending them lessened from six to four years. The degree of doctor is conferred, as in Oxford and Cambridge, without any examination! classical lore being substituted in a great measure for medical knowledge. The three universities just named possess the monopoly of conferring medical degrees without the means of teaching medicine, as well observed on a late occasion in the House of Lords by the Lord Chancellor.

THE

London Medical & Surgical Journal

Saturday, April 12, 1834.

GRADES OF PRACTITIONERS.—PROFESSOR GREEN.

Professor Green's pamphlet, of which we gave a rather full analysis a fortnight ago, has since occupied a good deal of attention, and been the subject of much criticism. On the whole, the liberality of the learned Professor has been duly appreciated, and even the organ of monopoly and conservatism has found something to admire in the various orders of architecture admitted in his scheme, for re-constructing the ruined edifice of professional education and rank. The strictures of the Medical Gazette upon the advantage of the subdivision of labour in the practice of medicine, as in every thing else of human application, are quite beside the question at issue, on which it labours to enlist the learned Professor into its service. It is notorious, that no man could live by surgery alone. It would be a curious inquiry to ascertain how many purely medical cases are daily treated by the most eminent operative surgeons in the metropolis; and among the mass of persons, practising as surgeons, it is beyond all doubt their practice is wholly medical. The present distinction between physicians and surgeons is utterly disregarded in practice by the latter; can it then admit of question, whether there should be any inquiry into the competency of every person entering into the profession to practise medicine as well as

surgery? With the parties who hold the opinions we are confuting, it were waste of time to insist upon the indivisibility of the art of healing as a scientific study. To persons properly impressed with that idea, it is as clear as noonday that no distinction ought to be allowed in the preliminary education of any member of the profession. Distinctions will nevertheless subsist as long as the demands of society call forth and reward the exercise of superior talents; and, from the unwillingness of the world to admit the superiority of any individual in a variety of branches, from the varieties of taste and natural qualifications, there will be ever found in the profession men particularly distinguished or celebrated for their knowledge of some one branch of medical science in preference to others—the Abernethies and the Baillies of the day—though the absurd distinctions of preliminary education were abolished for ever.

We have inserted, in our last number, a letter from an excellent correspondent*, which we consider particularly worthy of attention for the valuable comments it contains upon Professor Green's plan of retaining the present subdivisions of the profession, under altered names. There is, indeed, great room for doubting whether any adequate advantage would arise from the institution of a second class of medical practitioners, of a more extensive and longer education, while the first class had the right of universal practice, upon an education more limited, and occupying less time in its acquisition. It seems better to lay down at once and amalgamate the minimum and the maximum; for, however theoretically and practically correct it may be to say a certain limited knowledge is sufficient for the treatment of certain affections, yet who can say ignorance will not be presumptuous, should opportunity of superior assistance be even at hand? And with reference to the supply of students at an increased probationary period and study, we are warranted, by what takes place in other professions not understocked, in believing there would be a sufficient supply of medical practitioners, though the whole course of the Colleges of Physicians and of Surgeons were required of every member. It would be desirable, notwithstanding, that the recognised teachers should undergo the ordeal of an express public examination for so important an office.

On one point our correspondent is in perfect accordance with Professor Green; and we estimate his invaluable testimony the more highly, because those who entertain the same opinion with him have been sometimes maliciously represented as adverse to the interests of the large class of general practitioners. Need we say we allude to the sale of medicines where the advice is gratuitous? We trust the Parliamentary Committee will examine some gentlemen like our correspondent, who are acquainted with the practical results of the system, and who have had the courage, as they saw the necessity, to separate such incompatible elements as a trade and a profession.

To counterbalance any censure Professor Green may incur by reason of his graduated scale, we extract the following excellent passage, in which a flagrant defect in medical law, as at present constituted, is pointed out, and an adequate remedy provided. We are sure our correspondent will agree with us in approving of this extract.

"Further, the Council should have the power of expelling all those from the profession who, by dishonourable practices,

* Mr. Cooke, Trinity-square.

have rendered themselves unworthy of the character of members of a liberal profession, whether it be by the use of secret remedies, by advertising, by partnerships in trading concerns, by calumnious reports of their professional brethren, breaches of professional confidence, or whatever else may be considered derogatory to a professional character *."

There are some other points on which the Professor's opinions are in complete accordance with our own; we shall hereafter dwell upon some of them; at present we shall allude to but two, on which we must reserve some comments for a future occasion,—the *parish tenders* for medical assistance and the *Dispensaries*, subjects deserving of separate chapters.

THE WESTMINSTER MEDICAL SOCIETY.

Under which of Polonius's classification of plays—

"Tragedy, comedy, history, pastoral, pastoral-comical, historical-pastoral, tragical-historical, tragical-comical-historical-pastorical,"

it may please the Polonius of the Medical Gazette to describe the proceedings at the Westminster Medical Society on last Saturday evening, our readers may amuse themselves in divining, till to-morrow reveals the secret. For our part we consider the matter which has lately so much occupied the attention of the Society, utterly unworthy of any further notice; and we earnestly hope no provocation will induce the Society to resume the disagreeable topics which, on the two last occasions, interrupted its usual business. With Dr. Gregory's private opinions, no doubt candidly adopted, upon the proper reconstruction of the medical profession, the Society has nothing to do, however it may regret to find its general sentiments at variance with those of the gentleman elected to be its President. It is quite possible, too, that the learned Doctor may, upon further consideration, have found reason to dissent from a resolution originally penned by himself—(if we are not going too far in assuming the penmanship as undisputed). The words may have been unintentionally ambiguous. In fact, there is no reproach of necessity implied in the unfortunate estrangement of the Society from the President.—There is a difference of opinion, and that is all.

With regard to the strictures upon the conduct of one of the first Medical Societies of the kingdom by some unknown correspondent, or unknown editor, if that is to ruffle its temper, it is in the power of any discontented and malicious person to disturb its harmony, and force the recipient journal into notoriety. It must not play the game of its enemies; it must not suffer their random shafts to irritate it from the course at once becoming its dignity and its cause,—the promotion of knowledge and the respectability of the profession. We were glad to find that these sentiments generally prevailed at the last meeting, and that the proper business of the Society was resumed with much spirit after a little agitation. So much for the Medical Gazette.

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* Page 44.

Reviews.

Medical Bibliography: A and B. By James Atkinson, Senior Surgeon to the York County Hospital and York Dispensary, &c. Royal Octavo, pp. 382. London, 1834. Churchill.

This is one of the most extraordinary productions we have ever perused. It abounds with sarcasm, wit, and humour. It is dedicated to "all Idle Medical Students in Great Britain."

It displays the most laborious research, as appears by the catalogue of each author's writings, together with the various editions of them in chronological order. It contains a vast deal of information, interspersed with humourous comments, such as are sufficient to cure any Esculapian hypochondriac. A specimen of the work will be sufficient to establish our decision :—

"Asclepiades was, by report, a wild erratic vagabond son of physic, but a talented man. He died and lived without physic,—I mean without taking it,—to the age of 80.—Wonderful!"

Speaking of Alexander Trallianus and Alexander Iatros, our facetious bibliographer observes :—

"But of these Alexanders I am of opinion, that Alexander the Great Physician, or Alexander the Great Conjuror, were of ten times more value to the world than Alexander the Great Conqueror."

Haller edited the whole of Alexander's works, and, after the highest eulogium on the latter, our author adds—

"There was, however, one year in the typographical life of Haller for which, for some time, I was unable to account. It was betwixt the years 1730 and 1732, wherein not any thing of typography, as I conjectured, issued from his press. But pause; for that year he was in reality employed in (tut, tut, pshaw, pshaw,) making love; preparing in sheets, and typifying by the press, a new edition of himself. In the persons of his lovely children we had, after proof impressions, all hot-pressed and perfect, ut typus typo similis."

After a reference to the works of the illustrious Haller, our humorous author alludes to a passage, and adds a comment :—

"Incerta omnibus spes est vitæ, senibus non incerta solum sed omnino vix ulla superest. Nor little can I expect to live so long as to enable me, in possibility, to proceed in my alphabet to letter H. And is not vita brevis, and tempus arctum? Are not libri multi, and nummi parci? And have I not well surveyed the mouth of that molaris fellow, old edax rerum? He is to me, reader, of frightful aspect. For teeth beset his mouth and palate in all directions—the most cruel and diversified. He is carniverous, nay omniverous, with most formidable crotophite muscles, which befit him to destroy, not only poor me, but any thing."

Our readers must suppose that the author has not executed his task in the best manner; but we inform them that he has occupied eight royal octavo pages with the works of Aristotle and his editors,—all their doubts must vanish. The work reminds us of Burton's Anatomy of Melancholy: it evinces greatle arning, much wit, and some satire. We sincerely wish that Mr. Edax Rerum may condescend to allow the author to complete it.

An Investigation into the Medical Effects resulting from the External Application of Veratria. By Alexander Turnbull, M.D., 8vo. pp. 96. 1834. Longman and Co.

The substance named veratria is obtained from veratrium sabadella, veratrium album, and colchicum autumnale. It is a compound of veratrine sabadelline and mono-hydrate of sabadelline. It cannot be administered internally with safety, as a quarter of a grain has produced violent purging in old subjects, such as would lead to the conclusion that a few grains would cause death. It is used externally in the form of an ointment, composed of 10 or 20 grains of the alcoloid to an ounce of lard, of which the size of a nut is rubbed on the sound skin night and morning. It is unsafe to apply it to an abraded surface, in consequence of the irritation which it would produce. It is remarkable that taken internally it excites great irritation, but used externally it allays irritation, removes pain, elevates the spirits, and improves the appetite and general health. Again, it acts as a diuretic in dropsies, but not under ordinary circumstances. Dr. Turnbull advises it in the shape of an ointment in functional disorders of the heart (his symptomatology of which is that of organic lesions), in angina pectoris, in facial neuralgia, in rheumatism and paralysis.

The experience of others must, however, determine the efficacy of this remedy. The high price demanded for it will cause it to be adulterated largely. An ounce of the ointment costs fourteen shillings, so that we would advise our readers to try cheaper medicines before they commence with veratria. The impression on our minds, after a careful pe-

rusal of the work before us, is, that the remedy of which it treats is rather overrated.

An Oration delivered before the Medical Society of London, at their Anniversary Meeting, March 8, 1834. By WILLIAM SHEARMAN, M.D., Senior Physician to the Charing-Cross Hospital.

This oration is well written, and reflects great credit on its author. It contains some sentiments peculiarly apposite at this time, of *Reform*, which no doubt will be placed before Mr. Warburton, as Chairman of the Parliamentary Committee. Dr. Shearman observes:

"If we advert to the state of the medical profession, at the period of the commencement of our Society, we shall perceive it to have been very materially different from that which it exhibits at the present moment. The different branches of practice were then separated by broad and distinct lines, both in public institutions, and in the private walks of life. The physician, the surgeon, and the apothecary, interfered very little, or scarcely at all with each other. The last, indeed, was qualified in some degree by the nature of his education and pursuits, to supersede the attendance of the physician, but he seldom did so, until an advanced period of his life, when a long course of practice had deservedly procured him the confidence of his patients; for it must be admitted, I think, that the genuine apothecary of the last century, occupied in the appropriate business of his own department, superintending the administration of the medicines prescribed, observing their beneficial or prejudicial effects, and watching in his frequent visits to the patient's bedside, the progress of the disease, and change of symptoms, preparatory to his periodical consultations with the physician, possessed within himself, so to speak, the elements necessary to the formation of a successful practitioner, in a far superior degree, to whatever will be found to exist in the mere pathological anatomist, however expert in his science he may be. The physician and the surgeon were totally distinct; and almost every family, even of the middle classes, had its separate physician, surgeon, and apothecary; the latter alone managed cases of illness of little importance; were the case more serious, the physician was joined with him, and only in cases of accidental violence, or external disease, were the services of the surgeon put in requisition. In the public hospitals, at that period, a surgeon scarcely ventured farther into the walk of medicine, than to order a dose of opium, a few grains of calomel, or an ounce of salts. Every surgical patient was consigned also to the care of a physician, and the surgeon seldom knew what internal medicines were prescribed by the doctor, when his assistance in the case was demanded.

Whether such an arrangement was judicious or not, or whether it was preferable to the present confused and anomalous condition of the profession, is not now the question; the circumstance is noticed to show, that there existed not those causes of jealousy, and that constant clashing of interests, which we now witness to so great a degree, and that, therefore, the period was propitious to the cordial union of all the various branches of the profession. Causes, which have in late days exerted so baneful an influence in sowing discord among the members of our profession, and in disturbing that harmony which it is essential for the promotion of its interests and for extending the sphere of its utility should always subsist, had not then existence. No attempts had then been made to advance the prosperity of one branch on the ruins of another; each pursued its own proper course, without interruption from the rest.

"If the axiom, that the division of labour is conducive to improvement, be as applicable to science as it is to the arts, it might be expected that the exclusive attention of an individual to a distinct branch of medical science would perfect him in the knowledge of that branch, and that so the curative art, taken as a whole, would attain a degree of perfection commensurate to the labour employed. But there is so natural and inseparable a connection between medicine and surgery, that perfection can never be attained in the one to the total exclusion of the other; and experience has demonstrated, that the improvement of both has advanced at a greater rate since the preliminary education for each has been more closely assimilated: it is possible, however, to run into the opposite extreme, and by endeavouring to attain perfection in such multifarious pursuits, to fail of becoming

a proficient in any. It is most conducive to the improvement of medical science as a whole, that after a certain course of education, one branch of practice should alone be cultivated, rather than the whole of them indiscriminately."

Clinical Observations on the Constitutional Origin of the various forms of Porrigo; commonly known by the names of Scald Head, Tinea, Ringworm, &c., with Directions for the more Scientific and Successful Management of this usually obstinate class of Diseases, &c. By GEORGE MACILWAIN, Surgeon to the Finsbury Dispensary, &c. 8vo. Pp. 83.

The author of this work is favourably known to the profession as a writer, and the volume before us shows him to be a judicious and scientific practitioner. He discusses at some length the pathology of porrigo; and argues strongly in favour of attending to the constitution in cutaneous diseases unattended by fever. Our opinions in favour of this remark are upon record, and we fully agree to his conclusion. He expatiates on Mr. Abernethy's views on the constitutional origin of local diseases, and reviews nearly all that has been written on porrigo. We find little new in the volume, in fact nothing that M. Alibert and Mr. Plumbe have not said before. The great and prominent maxim is, to improve the general health, observe the strictest cleanliness, and employ the ung. hyd. nit. diluted with seven parts of lard. The head should be shaved twice a week, and the ointment applied night and morning.

The experienced reader will find little novelty in this essay, for the recommendation of attending to the general health in cutaneous diseases is not new.

French Hospital Reports.

HÔTEL DIEU D'AIX.

(*Bouches du Rhone.*)

Encysted Tumours near the Outer Malleolus —Introduction of a Seton—Cure.

HENRIETTE M—, a countrywoman, ætat 27, applied for admission into the hospital under Dr. Goyrand, in consequence of two tumours, one of which was as large as a moderately sized apple, and was placed on the outer side of the leg, rather below the external malleolus, the other being rather larger, and placed above this process of the fibula. Fluctuation was very distinct in both tumours, and on pressing them, a communication with each other, and with the sheaths of the peronei muscles was discovered. From the peculiar sensation conveyed to the hand by pressure, it was supposed that these formations were similar to the hydatid cysts mentioned by Dupuytren.

It appeared from the statement of the patient that, about five years since, she sprained the ancle of the same side; for some time afterwards there was much pain, but at length this subsided, and then she perceived two small tumours. From this period for some months, no pain was felt, but at length, as they increased in bulk, they became troublesome, and impeded her in walking.

As the woman was very desirous that an operation should be performed for her relief, Dr. Goyrand, on the 20th of July, made an oblique incision over the inferior cyst, which gave issue to a great number of small, opaque, white, isolated bodies; an incision of similar extent was made over the superior tumour, and a seton was then passed from one to the other. Violent inflammatory symptoms came on some hours after, and rendered the removal of the seton necessary, and on the following day the secretion of pus was so profuse, that the enlargement of the incision for its free exit was found necessary. On the 30th all the inflammatory symptoms had nearly disappeared, the suppuration was diminished in quantity, and the tumefaction of the surrounding parts was almost entirely gone. By the 18th of August no traces of the tumours remained; the wound was almost entirely closed; and shortly afterwards the woman left the hospital quite well. The white bodies which had escaped from the wound were of various shapes and sizes, some being ovoidal, or elongated, and as large as a grain of barley, whilst others were either angular, or spherical, and as small as a pin's head.

HÔPITAL DE LA CHARITE.

Paralysis of the Upper Limbs—Aphonia—Stammering cured by the internal and external use of Strychnine.

Gavel, ætat. 40, employed in a lead manufactory, has suffered for some time from

attacks of colic pictonum, of which the last was cured by the croton tiglium oil. Latterly he has complained of slight pains in the arms, pricking sensations on the soles of the feet, especially during the night; these trifling symptoms have now become much more severe; the pains being very violent, and the power over his upper limbs failing him; he is attacked also with vertigo, sudden fits of terror, watchfulness, loss of memory, and affection of the sensorium.

At his entry into the hospital on the 25th of January, the arms were completely paralysed; by great effort he was able to bring the pectoral muscles into action, and thus to direct the backs of the hands to each other; his power over these limbs extended no farther, for the muscles of the shoulder, arm, forearm, and hand were completely motionless. These limbs were in a state of atrophy, the integuments being of a yellow colour. There is no pain along the vertebral column. Blisters powdered with one-fourth of a grain of strychnine, to the palmar surface of each fore-arm, and baths of sulphur were prescribed. The latter were afterwards omitted, and one-fourth of a grain of strychnine was given internally. At the end of eight days the pains had disappeared, and there was some slight return of motion in the shoulders; the strychnine was then increased to two-thirds of a grain. After some days recourse was again had to the blisters containing strychnine. The improvement in the man's state now becomes very evident; the paralysis diminishes; the appetite is returning; and he is becoming more sensible to the smallest dose of the medicine. Towards the end of April, shower baths of ordinary water were used in addition to the strychnine and sulphur-baths, which had again been had recourse to. On the 28th of last May he left the hospital perfectly well; at this time, his voice had quite returned, and the stammering had left him.

Tetanus—Softening of the Spinal Cord.

A young man, ætat. 18, a jeweller, admitted March 1st with tetanus. From his infancy both he and four of his brothers have been subject to convulsions. For the last four months he has often had involuntary and painful contractions of the fingers, which came on suddenly, and caused him to drop his tools. On the 19th Feb., after slight indisposition, he was seized with stiffness in his arms, and lost his senses for a short time. A week after this he was attacked with a violent paroxysm of suffocation, and his present symptoms came on. His face is red and animated, eyes fixed, and pupils dilated; respiration loud and laborious, pulse 110, pulsations of the heart tumultuous, strong, and clear. Extremely painful cramps of the extremities, which come on in paroxysms; the fingers, hands, and forearm rigidly flexed; calves of the legs hard and contracted; thirst; deglutition easy, notwithstanding the contraction of the masseter muscles. No pain in the head, spine, or region of the heart. Bowels confined; intellect unimpaired. General and local bleeding to the spine, cold effusion, purgative injections containing musk, and opium every two hours were prescribed, from which, at first, he appeared to be relieved: the paroxysms of suffocation and tetanic symptoms returned, however, with greater violence, and he died on the sixth in a fit of suffocation.

Examination of the Body twenty-four hours after Death.—Membranes of the spinal cord very vascular: effusion of serum into the canal. In the upper part of the cord there was a spot about eight or ten lines long, and two or three broad, which was vascular, grayish, and in consistence like cream; slight effusion in the membranes of the brain and the ventricles; velum interpositum very much injected; tuber annulare and commencement of the medulla oblongata extremely firm; the pericardium contained about ℥ ij. of pus mixed with serum; heart of normal size.

In this case the tetanus was evidently the result of lesion in the medulla spinalis and its envelopes. Without pretending that in all cases of tetanus, analogous lesions have been observed, there yet exists an imposing mass of cases in which it has arisen from alteration in the cord or its membranes. The observations of M. F. Pescay, Lepelletier, Mans, Carron, Ollivier, Bragne, &c., are conclusive on this point.

Paralysis from Lead—Exhibition of Strychnine—Cure.

Fiault, æt. 48, has had colica pictonum six times since 1826. In January, 1833, he came under the care of M. Rayer with an attack of

colic, which was relieved by croton-oil and purgative injections, but left him affected with paralysis of the superior extremities, and complete loss of sensation in the arm and hand: the sterno-cleido-mastoideus of the left side was also paralysed, and the head consequently turned to the right side. The sulphur bath was ordered daily, and blisters applied to the fore-arm, and the surface sprinkled with one quarter of a grain of strychnine. In a few days he took strychnine internally, commencing with one-eighth of a grain, and gradually increasing it to one grain. This dose was followed by violent spasms, opisthotonos, entire loss of sense, and imminent asphyxia. In two or three hours he became calm, and the internal use of the medicine was for a short time omitted, but afterwards resumed in smaller doses, and the sulphur baths continued. When he left the hospital the fingers were slightly contracted, but otherwise the paralysis was quite relieved.

HÔPITAL DES ENFANS MALADES.

Cephalalgia attended with Vomiting—Cough—Death—Alteration and unnatural Firmness of the Cerebral Substance—Tubercles in the Lungs.

A boy, æt. 12, was admitted into the hospital on the 2nd of February, for cough and paroxysms of intense pain in the head, attended with vomitings, from which he had suffered for twelve months. These symptoms persisted until the commencement of March, when he was seized with delirium and died.

Autopsy.—Head—The dura mater tense; cerebral substance pale, but unnaturally firm; convolutions flattened, and so pressed against each other, that scarcely any traces of sulci remain. *Chest*—The right lung entirely adherent to the pleura costalis; the superior lobe on this side filled with tubercles at the upper part, but in a state of ramollisement below. *Abdomen*—Tubercles in the spleen.

HÔPITAL DE LA PITIE.

Fallopian Pregnancy—Internal Hæmorrhage—Death.

Guerin Elisabeth, sempstress, æt. 30, was admitted into La Pitié, in the evening of the 19th February, and died in the night. The following symptoms were observed during the time she was in the hospital:—shiverings; pain and tension of the abdomen, excessively increased by the slightest motion or pressure; nausea; hiccup; anxiety; quick and laborious respiration; cold sweats; syncope; general pallor; restlessness; small, hard, and quick pulse; cold extremities; loss of intellect; death. Previous to her admission she had enjoyed good health; and the above symptoms had only come on three hours previously.

Examination of the Body twenty-seven hours after Death.—General paleness of the surface: no trace of any wound or violence. On opening the abdomen, at least three quarts of pure blood flowed out, and the pelvis was filled with an enormous coagulum of black blood. After having removed the blood cautiously, the hæmorrhage was found to have proceeded from the rupture of a tumour in the left fallopian tube, about an inch and half from the uterus: it was the size of a small hen's egg, of a brown-red colour, and presented in its most prominent part an irregular circular rent, about two lines in diameter. The structure of the tube at this part very much resembled placenta. At the depth of about three lines a diaphonous sac was seen, containing an almost colourless liquid, in which was distinctly seen a fœtus, apparently at the sixth or seventh week. The head, trunk, and tubercles for the extremities were very visible. The uterus was double its natural size, and its walls thick, soft, and red; its cavity, increased in size, contained a dense structure, which resembled, both in texture and colour, torn pieces of placenta. This state of the uterus is described by Chaussier as constantly accompanying fallopian pregnancy. The ovaries were well developed, and natural in structure. Other organs healthy.

A somewhat analogous case was given to the Anatomical Society last year by M. Pelletier. A tumour was found adhering to the uterus, near the left fallopian tube: it was about the size of a fist, with thick and almost fibro-cartilaginous walls, and contained an adipocerous matter mixed with hair, and a portion of the upper jaw with two teeth in it. This was covered with periosteum, and adhered to the cyst by a pedicle, in which were vessels for its nutrition.

HÔPITAL SAINT LOUIS.

Wound of the Head from a Fall—Caries; Fistulous Opening — Application of the Trephine.

Alphonse Crozet, æt. 21, was thrown from his horse on the 23rd of February, 1833. He fell on the back part of his head, and was stunned by the blow, but soon recovered his senses, and was enabled to follow his occupation (that of a soldier) for two months. At the end of this time he presented himself to the surgeon of the regiment with a large tumour, situated at the superior and posterior part of the head. An incision into the wound gave exit to a large quantity of sanguineous and purulent fluid. From this time he suffered from acute pains in the head, but still continued with his regiment, until the 4th of December, when he was admitted into St. Louis. A careful examination of the part was made by M. Jobert, who stated that, although the blow had not been sufficiently violent to fracture the bone, it had caused depression of the laminæ, had bruised the diploe, and had given rise to fistulous openings in the pericranium and dura mater. The state of the head imperiously demanded an operation; and accordingly, on the 4th of February, 1834, M. Jobert proceeded to trephine over the part, which was in a carious state. The diseased portions of bone were removed, and the wound was then lightly dressed.

March 2nd. The patient has not suffered from any severe symptoms since the operation; the wound has been dressed each day, and today (48 days after the operation) he is in the most satisfactory state, approaching rapidly to convalescence.

HÔTEL DIEU.

Epilepsy.—Fibrous Tumours of the Dura Mater.

Maria Chassin, æt. 56, about a year since was seized with symptoms of epilepsy, followed by slight delirium. A fortnight ago the disease returned; the delirium continued; the limbs were contracted and rigid; there was epileptic trembling. She appeared to hear and see, but did not speak. The diagnosis was—epilepsy developed at an advanced age; inflammation of the left side of the brain, implicating the optic thalami and corpora striata; disease of the membranes. Bleeding, cold to the head, purgatives, and blisters, were employed, but the symptoms increased, and she died Jan. 13th.

Necropsy.—The dura mater on the left side was studded, for a space the size of a five franc piece, with numerous fibrous tumours, which penetrated into the substance of the brain; they were hard, and varied in size from a hempseed to that of the little finger. The membranes round this part were very vascular. The cerebral substance of the left hemisphere was in a state of extreme ramollisement.

British Hospital Reports.

WESTMINSTER HOSPITAL.

Fracture of the Patella.

A STRONG athletic man, ætat. 33, was admitted with a transverse fracture of the patella, caused by the violent action of the muscles in bending his body backwards. The accident was immediately succeeded by complete inability to walk, in consequence of the extensor muscles not being able to perform their office. The separation between the two portions of the fractured bone was considerable; this, however, could with the greatest difficulty be discovered, in consequence of the great swelling which existed all over the knee. Leeches and cold applications were applied, which succeeded in bringing down the swelling. The position of the patient was as follows: he was placed on a fracture bed, his leg being extended in a gradual ascent from the tuberosity of the ischium to the foot. No straps were applied for some time after his admission. They were then used for a day or two, when they were removed in order to try the plan advised by Sir William Blizzard, of applying nothing whatever to a fractured patella. The separation between the fractured portions has considerably diminished, and the case is proceeding favourably.

Large Tumour in the Throat attached to the Lower Jaw.

A short time since a man came into the operating theatre in order to get advice with respect to a large tumour in his throat, which he stated to be of the greatest inconvenience to him, as it prevented him from swallowing any solid food: it also rendered his enunciation exceedingly indistinct, and almost unintelligible. It has been many years progressing, but lately it has increased in size very much. The surgeons of the hospital examined the patient's throat, introducing the fingers into the fauces with the view of ascertaining the size, attachments, &c. of the tumour. It was discovered to be of considerable dimen-

sions, and attached to the lower jaw. All the surgeons, with the exception of Mr. Guthrie, declined operating, on the grounds that the parts which would necessarily be involved in an operation were so important as to render such a procedure very precarious and dangerous; also that the patient might live many years with the use of a tube, by which he might swallow his food. Mr. Guthrie said that he did not think the patient would live long if an operation were not performed; he would most willingly undertake the operation if any other surgeon would say he was justified in so doing; and as to the importance of the parts, if the carotid artery was in the way it could be easily tied. The case was postponed for further consideration.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON FOR THE ENSUING WEEK.

Sat. ...	Westminster Med. Society	8	P.M.
Mon....	Medical Society of London	8	P.M.
Tues.	Linnean Society . . .	8	P.M.
	Horticultural Society . .	1	P.M.
	Institution of Civil Engineers	8	P.M.
Wed...	Society of Arts	½7	P.M.
Thur.	Royal Society	½8	P.M.
	Society of Antiquaries . .	8	P.M.
Fri. ...	Royal Institution . . .	½8	P.M.

APOTHECARIES' HALL.

Names of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, April 3rd.

Isaac Baker Brown . . London.
William Kirkness . . . Falmouth.

BOOKS.

The Monthly Archives of the Medical Sciences, April, 1834. Edited by Dr. Hunter Lane. London: Churchill.

Outlines of the Anatomy and Physiology of the Teeth, &c.; their Diseases and Treatment: with Practical Observations on Artificial Teeth. By David W. Jobson, M.R.C.S., Dentist in Ordinary to his Majesty. 8vo. pp. 270, plates. Edinburgh, 1834. Tait.

A concise yet comprehensive manual of dental surgery.

On the Motions of the Earth and Heavenly Bodies, as explainable by Electro-Magnetic Attraction and Repulsion; and on the Conception, Growth, and Decay of Man, and the Cause and Treatment of his Diseases as referable to Galvanic Action. By P. Cunningham, Surgeon, R.N. 12mo. London, 1834. Cochran and M'Crone.

This work will be perused with pleasure by the general and medical reader.

Letter to Henry Warburton, Esq., Chairman of a Committee of the House of Commons, appointed to Inquire into the State of the Medical Profession. Edinburgh, 1834.

CORRESPONDENTS.

Several unpaid letters have been refused.

Dr. Hake will hear from us.

Mr. Atkinson.—It is under notice.

Medicus.—It is a breach of privilege to publish the evidence before the Parliamentary Committee.

A Student.—The complaint is frivolous.

Censor.—It can not be possible that a hospital surgeon charged 100*l.* for six weeks' attendance on a case of white swelling of the knee-joint, and afterwards sent in a bill for splints to the amount of 6*s.* 8*d.* The thing is impossible—we dont believe it.

A Surgeon.—The names of quacks are in the list of the College of Surgeons. This is supporting the dignity of the profession, we suppose.

METEOROLOGICAL JOURNAL.

MONTH. April, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
3		54	59	47	30·07	30·22	75	68	N.W.	N.N.E.	Cloudy	Fine	Fine
4		51	55	42	30·21	30·13	65	67	W.N.W.	N.W.	Fine	—	—
5		49	54	43	30·04	30·09	67	66	N.W.	N.W.	—	—	—
6		47	56	45	30.16	30·12	66	68	N.E.	E.	Cloudy	—	Foggy
7		52	56	44	30·10	30.04	68	67	S.E.	N.E.	Fine	—	Fine
8		49	52	40	30·11	30·11	65	64	E.N.E.	E.N.E.	—	—	—
9	☽	45	47	34	30·09	30·07	64	63	N.E.	N.N.E.	—	—	—

50, *High Holborn.* William Harris and Co.

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THE

London Medical and Surgical Journal.

No. 116. SATURDAY, APRIL 19, 1834. Vol. V.

LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXXV., DELIVERED APRIL 10, 1833.

Gentlemen,—I now proceed to consider *diseases of the eye itself;* and first, *inflammation of it,* termed *ophthalmia,* the most frequent of all its disorders, and that, indeed, which may likewise be connected with any other complaint of the eye, either as a cause or an effect.

I may say, gentlemen, that it is only of late years that the various inflammatory affections of the eye have been well discriminated; for ophthalmia used to be a term applied to every inflammation of the eye, or parts appertaining to it, whether the eyelids, the conjunctiva, the sclerotica, the iris, or the retina, were the structure chiefly concerned; and although the epithets *mild* and *severe, dry* and *humid, external* and *internal* were frequently used, the more valuable distinctions, deducible from the structure principally affected in different examples, the characteristic symptoms of each variety, and its most appropriate treatment, were altogether overlooked. In whatever parts inflammation occurs, you know, gentlemen, that its effects are always modified by the structure affected. Now the eye, small as it is, contains a great variety of textures, each possessing both physical and vital properties peculiar to itself, and consequently exhibiting, under the process of inflammation, phenomena which are peculiar to it.

I may say, gentlemen, that modifications of inflammation, arising from differences of texture in the parts affected, are often beautifully displayed in the eye, and this in so distinct a manner, that its appearances and changes under inflammation are commonly cited by all pathologists of every school, in illustration of various points relative to the nature of this interesting process.

One thing which I conceive it is very useful to understand is, that inflammation of the eye generally commences in one structure, to which it is at first restricted, and beyond which, if it be rightly treated, it may not materially extend. But, gentlemen, if it be neglected, or wrongly treated, it soon exceeds its original limits, and perhaps ultimately invades every part of the organ. The conjunctiva, the sclerotica, the cornea, the iris, the crystalline capsule, and the retina, all severally exhibit a series of the modifications of inflammation, dependent upon peculiarity of texture. The mucous tissue of the conjunctiva secreting a profuse quantity of purulent matter, as in the ophthalmia of new-born infants; the *fibrous sclerotica,* affected for months with rheumatic inflammation; the *transparent fibro-cartilaginous cornea,* becoming opaque, or being destroyed, layer after layer, by ulceration; the *erectile iris* losing all power of executing its motions of expansion and contraction; the *crystalline capsule* pouring out coagulable lymph from its serous surface, and this lymph forming the medium of morbid adhesions; the *nervous retina,* too deeply seated to be immediately observed, but, in a few hours, losing its inconceivably delicate and specific sensibility, which is adapted only to vision, and not to common feeling, as the researches of Sir Charles Bell make evident, are all so many circumstances illustrating the modifications of inflammatory action, and the various consequences of it in different textures of the eye.

Gentlemen, you will likewise find, that inflammations of the eye, besides being modified by differences of texture, are much influenced by peculiarities of constitution, constitutional diseases, and certain artificial states of the constitution; and they are subject to innumerable variations from the influence of those inscrutable connexions called sympathies. Scrofula, syphilis, gout, disorder of the digestive organs, and that deranged state of the system which is sometimes termed *mercurialism,* are each of them either capable of exciting inflammation in different parts of the eye, or, at least, of communicating to an inflammation, excited by other causes, such differences in character as shall often render the

recognition of a disease difficult, though we may be perfectly familiar with it in its more simple form.

With respect to the treatment of inflammation of the eye in general, I may observe to you that, if the disorder be not speedily checked by efficient and active means, it will soon extend from the texture originally attacked to others, and that its continuance beyond a certain period will permanently impair the delicate structures of the organ, or even cause total annihilation of its functions.

Hence, gentlemen, the necessity of adopting very active treatment, and this, not on account of any danger to life, or any extraordinary suffering, great as this may be, but to prevent those changes of structure which would weaken or destroy the eyesight. Hence you are frequently called upon to take away as much blood from the system for an inflammation of the eye, as for an inflammation of the pleura, or lung, stomach, or brain, or any other important internal organ.

If prompt and vigorous treatment be not adopted in the early stage of inflammatory affections of the eye, you will frequently find lymph effused, or opaque matter deposited in the transparent parts of the eye; or the retina will be more or less impaired in texture and sensibility, the pupil be rendered irregular, the motions of the iris prevented by adhesions; or the complaint will degenerate into a chronic form, sometimes difficult of cure, and always lessening the chance of such a recovery as leaves behind it no defect or weakness whatsoever of the eye, either with reference to its movable, its transparent, or its nervous textures.

External inflammation of the eye may be seated in the conjunctiva only, or in the sclerotica and cornea. Simple inflammation of the conjunctiva, you will generally find, is a much less serious complaint than that of the sclerotica. Yet, specific inflammations of the conjunctiva are exceedingly urgent cases, as, for instance, violent purulent and gonorrhœal ophthalmies, which, if unsuccessfully treated, soon involve the organ in incurable mischief. In sclerotic inflammation, however, the implication of the cornea, and the ready transition of the inflammation to the iris, always expose the organ to considerable danger.

From these preliminary remarks, I proceed to the consideration of the chief varieties of ophthalmy, beginning with *Inflammation of the Conjunctiva*, divided into the following kinds:—

1. Simple or catarrhal.
2. Purulent contagious, or Egyptian.
3. Leucorrhœal, or the ophthalmy of newborn infants.
4. Gonorrhœal.
5. Scrofulous.

1. *Simple Inflammation of the Conjunctiva.—Catarrhal Ophthalmy*, as it is often called, generally commences with stiffness and smarting of the eyelids, or a sensation, as if sand had got under them, an increased secretion from the lachrymal glands, giving a watery appearance to the eye, with some degree of redness and uneasiness upon exposure of the organ to the light. When fully developed, the disease is characterised by considerable redness, and the increased lachrymal discharge is exchanged for one of a thin, whitish mucus, but the pain is generally slight, and now there is no intolerance of light. The redness is superficial, and the tint, a bright scarlet, forming a striking contrast to the rose or pink colour which belongs to inflammation seated in the sclerotica. The distended vessels form a network, and the redness is in patches; though in the fullest development of the affection, the whole surface of the conjunctiva becomes of a bright red; the redness first showing itself at the circumference of the eyeball, and gradually advancing towards the cornea. In severe cases, small ecchymoses, or effusions of blood, may be noticed in the conjunctiva; and sometimes little vesicles, filled with a serous fluid, arise upon it, near the margin of the cornea.

Gentlemen, the conjunctiva is seldom considerably swollen, and never in the degree exemplified in what is termed *chemosis*, or that remarkable elevation of the conjunctiva which is sometimes caused in other ophthalmies by effusion of lymph underneath it. There is, however, a certain quantity of serum poured out under it, whereby it is somewhat raised up from the sclerotica.

As soon as the lachrymal discharge, observed in the very commencement, stops, its place is supplied by an increased secretion of mucus, which is at first thin, but becomes thicker, as the inflamed conjunctiva goes through certain stages, assuming a whitish or yellowish appearance, and even that of pus. It is this altered secretion, which drying on the eyelashes in the night-time, makes the eyelids adhere together, so that the patient has a difficulty in opening them in the morning.

In every well-marked case of catarrhal ophthalmy, the eyelids participate in the affection; and whenever the attack is severe, other mucous membranes suffer. Hence pain and sense of weight about the frontal sinuses and antrum, disordered stomach, foul tongue, chills, succeeded by heat, and other febrile complaints.

Simple inflammation of the conjunctiva is distinguished from common inflammation of the external tunics by its catarrhal origin; the diurnal remission and nocturnal exacerbation of the symptoms; the absence of pain and of intolerance of light, even when there is great general redness; the bright scarlet colour of the membrane, the distended state, and areolar arrangement of its vessels, and the altered mucous secretion from the lining of the eyelids. From purulent ophthalmy, it is distinguished by its milder nature; its indisposition to do mischief to the cornea or the deeper textures of the eye; its not being in-

fectious or contagious; its having no tendency to cause chemosis; and its freedom from all the severe sufferings which attend bad forms of purulent ophthalmia.

The origin of this complaint is generally ascribed to atmospheric causes—exposure to drafts of air or cold winds—sudden changes from heat to cold. Frequently it prevails as an epidemic in certain towns and districts, owing to particular states of the air, not precisely ascertained. We know that an ophthalmia of this kind prevailed at Newbury to a great extent about fifty years ago, and that it sometimes shows itself extensively in schools. For its relief mild antiphlogistic treatment will generally suffice; and it is not necessary to reduce the patient so much as in some other inflammatory affections of the eye. Unless the patient be of a full habit, or both eyes be severely attacked, you need not therefore always have recourse to venesection. In ordinary cases, cupping and leeches will answer the purpose. The bowels, however, should be freely opened; and if the tongue be foul, an emetic ought to follow the loss of blood. Saline and sudorific medicines, as a solution of the sulphate of magnesia, with a proportion of tartarised antimony in it, may then be given repeatedly, and the feet put into warm water at night. In a case of severity you might, after depletion, put your patient, in the evening, into the warm bath, and directly he is taken out of it, give him a full dose of the pulv. ipecac. comp.

As local applications, you may first bathe the eye with the decoction of poppy-heads, or foment it; but afterwards, when the inflammation is on the wane, do not be afraid of using astringent lotions, containing three or four grains of the nitrate of silver or sulphate of copper, in ℥iv. of distilled water. These, with blisters on the nape of the neck, or behind the ear, will generally soon complete the cure; if not, the remains of the disorder may be got rid of by introducing into the eye once a-day a drop of the vinum opii, or of the liq. plumbi acetatis. To prevent the agglutination of the eyelids in the night, their edges may be smeared at bedtime with spermaceti ointment.

2. *The Egyptian ophthalmy*, reputed to be *contagious*, is one of the most violent forms of purulent ophthalmia. We had no correct description of it until after the return of the British forces from Egypt, about thirty-three years ago, when it was supposed they either brought the disease to this country, or, at all events, made it more common than it had been previously to that epoch. The first stage, that in which no pus is secreted, never surpasses thirty-six hours, and is often of shorter duration. At the end of this time, purulent matter is always formed on some portion of the conjunctiva. Frequently the patient makes no complaint till he finds that his eyelids adhere together in the morning, or till the sensation of some extraneous substance in the eye becomes distressing. In some cases, a sudden attack of darting pain in the eyeball or forehead, is the first thing experienced; while, on other occasions, the increased vascularity of the conjunctiva first excites notice.

The right eye is more frequently attacked than the left. It is also in general more severely affected, and the sight of it more frequently lost. In some instances only one eye suffers, but more commonly both, although there is often an interval of several days before the second becomes inflamed. A considerable itching is first felt in the evening, or a sensation as if there were dust in the eye, which becomes watery. This is succeeded by a sticking together and stiffness of the eyelids in the morning, which parts appear more swelled than natural. Their internal surface is inflamed, tumid, and highly vascular; and the caruncula lachrymalis enlarged and reddened.

Generally in about twenty-four or thirty-six hours, the discharge from each eyelid is already considerable. It is at first thin, but soon becomes viscid and opaque, and lodges particularly about the internal angle. There is also a frequent gush of tears, an *epiphora*, especially when the eye is exposed to a current of air. The patient complains of a sensation as if the eye were full of sand, but seems to experience, comparatively speaking, little uneasiness from the light. In the second stage, the discharge becomes truly purulent, and, in many cases, so abundant, that, on the patient opening his eyes, the matter instantly flows over the cheek, irritating and excoriating it. The quantity of the discharge sometimes amounts to several ounces in the day.

The whole texture of the conjunctiva may be seen to be swollen and thickened; its vascularity is increased; and its colour an intensely bright red. Its mucous surface is rendered villous, pulpy, and granular, like the villous surface of the fœtal stomach, and from the secreting surface thus produced, the puriform discharge flows.

When not checked by effectual treatment, this species of ophthalmy soon attacks the layer of the conjunctiva, extended over the cornea, thickening it, and rendering it more or less opaque. By these changes, vision is much diminished, and very frequently the opacity and consequent diminution of vision continue after all the acute symptoms have ceased. But, gentlemen, the change in the cornea is not confined to this affection of the delicate layer of the conjunctiva covering its surface; there is often an interstitial deposition between its layers, producing a still worse kind of opacity; and frequently its texture sloughs or ulcerates; the anterior chamber being opened, and a discharge of the humours, and a prolapsus of the iris, being the too frequent consequences. In this manner both the function and form of the eye may be destroyed.

In some cases, the inflammatory process is still more severe, extending even to the internal textures of the eye, accompanied by a deep throbbing pain in the eye, coming on in

paroxysms; but occasionally without any remission in its violence till the cornea gives way.

The duration of the paroxysms of pain, and their recurrence, are quite irregular. They come on, however, most frequently from ten to twelve at night, with an increased secretion from the lachrymal gland, and a diminution of purulent discharge.

Sometimes the swelling of the conjunctiva is such, that the upper eyelid cannot be raised, and projects so enormously, that the lower eyelid is entirely concealed by it, attended with a great deal of redness of the integuments, extending even to the cheeks and forehead.

In many instances, the conjunctiva forms a prominent red swelling all round the cornea, so as to give the appearance of a thick ridge of flesh encircling the latter membrane, which seems as if it were sunk in the eye, with only a very small portion of its centre discernible. This state is technically named *chemosis*. If the purulent matter be allowed to be some time upon the cornea, it may acquire a thick consistence, and so resemble sloughy membrane that an inexperienced surgeon may suppose the cornea has been destroyed.

Whether the infection can be propagated from one person to another, through miasmata in the air, arising from the diseased eye, is a contested point; but that it can be transmitted by direct application of the discharge from a diseased to a sound eye, is tolerably certain. In the military asylum, and some other public establishments, the matter of purulent ophthalmia has occasionally been applied inadvertently to the eye of another person, and the disease been excited. Yet it is curious, that the surgeons of the French army in Egypt never suspected its contagious nature.

In Egypt, and some other countries, in which it prevails to a great extent, the origin of it is usually ascribed to the combined effect of exposure of the eye to vivid light and heat reflected in the day-time from a sandy soil, followed by exposure of the organ to the damp, cold, nocturnal air.

The constitutional symptoms are, generally speaking, influenced by the degree of pain and inflammation, a frequent but soft pulse, not much heat of the skin, the tongue white, not much thirst, the appetite good, the bowels torpid. On the whole, the constitution suffers less than might be expected.

Gentlemen, the following are some of its differences from catarrhal ophthalmia:—1st. The peculiar change of structure in the lining of the eyelids; 2nd. The frequently long continuance of the complaint; 3rd. The disposition to relapses; 4th. The tendency to chemosis; 5th. The greater swelling of the eyelids; 6th. The great increased vascularity and redness of the conjunctiva, and the copious purulent discharge.

The *treatment* is strictly antiphlogistic, beginning with bleeding, which, in young, strong persons, may be carried at once to the extent of thirty or forty ounces. This is absolutely necessary if *chemosis* already exist; leeches should also be applied about two hours after venesection, which is to be repeated according to circumstances, the renewal of inflammatory action, and the state of the pulse. As long as there is a throbbing pain in the eyeball and orbit, the repetition of bleeding is generally proper.

Purgatives are to be given, as a dose of jalap and calomel, followed by a solution of sulphate of magnesia, containing in each dose one-fourth of a grain of tartrate of antimony.

When severe nocturnal pain is experienced in the orbit, much benefit has resulted from giving every night two grains of calomel and one of opium until the mouth is sore; but, under other circumstances, and I might say under every condition, the free use of mercury is of no service in purulent ophthalmia.

In the chronic stage, when the patient is much debilitated, and the discharge profuse, bark and other tonics are sometimes prescribed. When the cornea is threatened with sloughing, the same medicine is occasionally given. The local treatment seems to me to be fully as important as the constitutional.

The first point is completely and frequently, in the course of the twenty-four hours, to clean away the puriform discharge from the eyes. This is to be done partly with a bit of sponge, and partly with a small syringe, and a tepid solution of one grain of the oxymuriate of mercury in eight ounces of distilled water.

The best astringent application for checking the secretion is now generally allowed to be a solution of the nitrate of silver—four or six grains to an ounce of distilled water, and applied once, or at most twice, in the twenty-four hours. Dr. Ridgway, an army surgeon, even ventured upon twelve grains to an ounce of water, and has published a report in favour of this strength; while Mr. Guthrie gives the preference to an ointment containing ten grains of it to 3j of lard. Its use is to be preceded by washing away the discharge with a weak solution of oxymuriate of mercury, or of alum 3ss to half a pint. In the early stage, relief will also be derived from anodyne fomentations, Dover's powder at night, and a mild ointment to prevent adhesion of the eyelids.

Purulent ophthalmia of new-born infants is often believed to arise from the eyes coming in contact with leucorrhœal discharge in the birth. In a great proportion of cases, the mother has vaginal discharge; exceptions are met with, however, and then the influences of drafts of cold air, or of exposure of the young eye to vivid light usually fall under suspicion.

In general, the eyelids are first remarked to be glued together about the third day after birth, but sometimes much later. On opening them a drop of thick white matter is discharged, and their inner surface is found to be swollen and vascular. If the disease be not checked, the swelling of the conjunctiva rapidly increases, and the inflammation extends from

the conjunctiva of the eyelids to that of the eyeball. The purulent discharge becomes copious, and the skin of the eyelids assumes a dark red colour. Light is now exceedingly painful, the child turns its head from it, and resists every attempt to open the eye.

In this state the eyes may continue about a week, without any affection of their transparent parts, except a slight haziness of the cornea. About the twelfth day, however, suppuration generally takes place between the layers of the cornea, its texture becomes destroyed, it ulcerates, the humours are discharged, and the iris protrudes.

If the disease be seen before the cornea has suffered, the prognosis is favourable. If the cornea has sloughed or ulcerated, the loss of sight is inevitable.

In the third stage there is a gradual abatement of all the symptoms; the redness, swelling, and discharge are diminished; the light can be endured, and the eye is more easily examined.

Treatment.—One or two leeches may be put on the swollen upper eyelid. The bleeding from the bites will often reduce an infant very seriously, and perhaps, in ordinary cases, it is best to be content with a single leech; the discharge to be washed away with a tepid solution of alum, or oxymuriate of mercury. The lids are to be gently opened, and the discharge removed with a small bit of sponge. The upper lid has a tendency to remain everted, but it may usually be replaced, if the swollen conjunctiva be first pushed back with a probe into its right situation. For checking the discharge, use a solution of the sulphate of copper, or nitrate of silver, four grains of the latter or six grains of the former to an ounce of water, and let it be applied once or twice a day with a large camel hair brush to the whole surface of the inflamed conjunctiva.

Then, gentlemen, you will not forget to apply the ung. cetacei to keep the eyelids from sticking together in the night. If there be a tendency to chemosis, one or two leeches are never to be omitted; the bowels are to be opened with castor oil; and a blister put on behind the ear. In tedious cases I usually give small doses of calomel. The vinum opii is one of the best things for removing the relaxation of the conjunctiva, left after the cessation of the discharge. Sometimes the disease has been successfully attacked with the nitrate of silver ointment, ten grains to one ounce of lard. The granular state of the conjunctiva generally yields to astringents, and the nitrate of silver, or sulphate of copper.

Gonorrhœal ophthalmia in its acute forms is a violent inflammation of the mucous membrane of the eyeball and lids, attended with profuse discharge of matter, closely resembling in all its sensible properties, that which issues from the inflamed urethra in clap, and occurring in some kind of connexion with the latter complaint.

It is the most severe and rapidly destructive inflammation to which the eye is subject, but fortunately one of the most rare. It is not the consequence of the sudden suppression of gonorrhœa, for, in a great majority of examples, the gonorrhœal discharge is not stopped, though, when the affection of the eyes begins, the clap may be on the decline. As gonorrhœa is so common, and this species of ophthalmy so rare, doubts have often been raised about its connexion with gonorrhœa at all. Indeed the mode of infection has not often been unequivocally traced, but that the discharge from the urethra of one individual applied to the eye of another person will bring on the disease, seems well proved by facts collected by Mr. Lawrence, and even that the matter of clap, applied to the patient's own eye, will bring on this destructive ophthalmia, is exemplified in the consequence of the vulgar custom of attempting to cure sore eyes by washing them with the patient's own urine; for, if he happen to have gonorrhœa on him, the matter is then applied directly to the eye, and a destructive purulent ophthalmia is the result, as shown in Mr. Lawrence's work on the Venereal Diseases of the Eye. The symptoms are those of purulent ophthalmy in the severest form, intense redness, extensive swelling, chemosis, and profuse discharge of thick yellow fluid, quickly followed by ulceration, sloughing, or opacity of cornea.

Treatment is not essentially different from that of other severe purulent ophthalmies. The boldest antiphlogistic measures, copious venesection, cupping on the temples, numerous leeches, &c., followed by blisters, warm or cold collyria, according to the patient's feelings, the same as for other purulent cases.

A strong solution of nitrate of silver, ten grains to an ounce, or the strong ointment of the same, has been employed.

When the cornea sloughs and the patient is reduced, you may prescribe bark. It is alleged that, in gonorrhœal ophthalmy, the structure of the palpebral conjunctiva is not changed, does not become granular, and that one eye is often affected, and that the disease may begin on the sclerotic conjunctiva. These points are all different from those usually noticed in ordinary purulent ophthalmy of adults.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XVII.

Aneurism of the Hepatic Artery—Distention of the Liver, with Bile—Treatment of Acute Hepatitis—Employment of Mercury—Symptoms of Suppuration—Rarity of Adhesions—Dr. Graves's Operation—Rupture into the Peritonæum—Chronic Hepatitis—Complication with Disease of the Heart—Embryonary state of the Liver—Mistaken for Chronic Hepatitis.

GENTLEMEN,—You may remember, in one of

my past lectures, I alluded to a case of aneurism of the hepatic artery, of which I had procured a preparation: to-day I shall be able to exhibit to you the morbid appearances in this very remarkable case. It would appear that aneurism of the hepatic artery is an exceedingly rare circumstance. At a late meeting of the Academy of Medicine in Paris, a specimen of aneurism of the hepatic artery was presented to the Society; and that celebrated pathologist, Cruveilhier, stated, that it was the first of the kind he had ever seen. I wish to bring this preparation before you, not merely from the interest which its rarity excites, but also because the disease, in this instance, produced that distended condition of the gall-bladder to which I drew your attention on a former occasion, and which, in this case, was recognised before death. The gall-bladder formed a distinct pyriform tumour, situated a little above the iliac fossa, and the patient was deeply jaundiced. I shall state, from recollection, what I know of the details of this case. The patient was brought into the Meath Hospital labouring under jaundice, which he stated to be of some days' standing. He was thin and weak, and when questioned respecting his age, he said he was thirty-five, but he appeared to be upwards of fifty. His habits he described as being uniformly temperate and regular. Some years before he had suffered from an attack of apoplexy, but after this had enjoyed good health, until the occurrence of the present illness, which began with vomiting of blood, and which continued for some days and then yielded to medical treatment. He now experienced a loss of appetite, became quite dyspeptic and constipated; he also began to lose flesh, and under these circumstances applied at a dispensary, where he got various remedies without any benefit. Some time after this, he observed, on getting up one morning, that his arms and legs looked rather yellow; on the following day he had a decidedly bilious tinge with yellow vision, and in this state he entered the Meath Hospital. On admission he presented symptoms of general jaundice; the urinary secretion was deeply coloured; the skin, eyes, and nails yellow; the stools white and without any trace of bile. On examining the abdomen, the liver was apparently greatly increased in size; in the epigastric region there was a tumour of considerable dimensions; and in the iliac fossa we observed a separate pyriform tumour, which could be traced up to the edge of the enlarged liver. I mentioned, at that time, to the class, that there was something about the case which I could not understand. The disease was of inconsiderable standing; the patient had, a short time previously, been in a state of good health, and yet, reasoning from analogy, this hepatic tumour could only have occurred as the result of chronic disease. It must have been the consequence of disease more or less chronic, and yet the history of the case was at variance with the idea of its chronicity. After some time the patient got miliary eruption, then petechial spots; he continued in a low and weak state, and nothing did him any good. On the morning of the day of his death he did not appear worse than usual; he answered our inquiries respecting his health in his ordinary manner; in the evening he sat up in bed gasping for breath, with a look of extreme distress; he then leant back on his pillow and expired.

On opening the peritonæum we found a vast quantity of blood effused into its cavity, and my first impression was, that it was aneurism of the abdominal aorta. On closer inspection, the aorta proved healthy, and the aneurismal tumour was found to be connected with the hepatic artery; this had ruptured close to the gall-bladder, and its contents had been effused into the cavity of the peritonæum. We now found that the cause of the jaundice had been the pressure which this tumour had exercised on the biliary ducts. In consequence of the obstruction to the flow of bile, the ducts of the liver were dilated to an enormous extent; some of them were capable of admitting the largest sized finger. This dilatation affected not only the larger trunks, but even extended to their most minute ramifications, even up to the surface of the liver; and here we found that the biliary tubes were dilated into sacs, some of which were as large as a hazel-nut. When these pouches were punctured the bile gushed out freely. A similar condition of the ducts has been noticed by Mr. Lloyd as existing in connexion with obstruction of the biliary duct, from disease of the head of the pancreas, in his paper on Discharge of Fatty Matter from the Bowels. (See *Med. Chirurg. Trans.*) I have got the preparation of this singular disease before me, and I regret that in one respect it is defective, inasmuch as it does not show satisfactorily the condition of the biliary ducts. A portion of the preparation which exhibits this appearance I gave to Dr. Houston, the Curator of the Museum at the College of Surgeons, and I am sure that he will give admission to any gentleman who is anxious to examine it. This preparation, gentlemen, is too large to send round. It exhibits the hepatic artery with its aneurismal tumour, and the opening by which the artery communicates with the aneurismal sac. Here is the place in which the rupture took place, and here is the gall-bladder greatly distended and thickened in its coats.

Here, then, we have a new cause of jaundice, where the disease is the result of the pressure of an aneurismal tumour of the hepatic artery,—a cause which has hitherto been unnoticed by writers on jaundice. The great interest of this case consists in this, that dissection explained the difficulty which I felt in making the diagnosis at first, for it showed that the hepatic tumour was formed, not by an hypertrophied, but by a distended and displaced liver. It proved that it was formed, not by a process of chronic growth, but by the rapid formation of an aneurismal swelling and the consequent obstruction of the gall-bladder,

accompanied by distention of the liver itself. With recent symptoms, then, we had, in this case, *an enormously large liver, not the product of acute inflammation, but of distention of all the biliary ducts up to their most minute ramifications, and arising from mechanical obstruction.* As far as it goes, this case appears to me to be perfectly unique.

Let us turn now to the treatment of acute hepatitis. It is unnecessary for me to say, that in all cases of acute visceral inflammation in the healthy subject, the first consideration is blood-letting, either general or local. In the early period of acute hepatitis, all authors have agreed in strongly recommending the use of the lancet; and there can be no doubt that when the disease is in its early stage, and the patient robust, the practitioner who omits employing these measures, must be culpably negligent. It should always be borne in mind, that the liver is an organ of paramount importance to life. There are two circumstances, also, which are in favour of bleeding in the case of an acute hepatitis—there is less chance of its being complicated with typhus fever, and general bleeding exercises a powerful influence over the acute inflammations of parenchymatous organs. Hence we bleed with greater advantage in a case of acute hepatitis than in the inflammations of mucous membranes. Our first bleeding should be large, and such as will make a decided impression, and it will frequently be necessary to bleed a second and even a third time if the disease be very acute and the constitution strong, taking care to diminish the quantity at each successive bleeding, and to watch its effects. I have here to make one remark,—that general bleeding is not the same heroic remedy, nor has it the same decided influence in arresting acute hepatic inflammation, as in checking pneumonia. A copious detraction of blood has, under favourable circumstances, often succeeded in completely removing an attack of pneumonia, and the patient has recovered without the employment of any other remedial measure; but acute hepatitis is seldom or never cut short in this way. Still venesection is of the greatest importance; and if it were performed merely with the view of preparing the patient for leeching and other depletive measures, its advantages would be unquestionable. I would recommend you, therefore, when you meet with a case of hepatitis in the early period, first to bleed freely, or in such a manner as to make a decided impression on the symptoms; next, to empty the bowels by prescribing a purgative draught, assisted by an enema; and, lastly, to cover the region of the liver with leeches. You will find great advantage in employing your therapeutic means in this order; for if you begin with leeches before you have had recourse to venesection, or the use of purgatives, your practice will not be so scientific, nor will your success be so complete. Bleeding, purgation, leeches, and the application of cupping glasses over the leech-bites (if necessary) will give you breathing time; and, after the lapse of twelve or fourteen hours, you will find that all symptoms of urgent danger will have passed away. During the progress of the case, the remedy which I should principally rely upon is local bleeding, frequently repeated. If you apply thirty leeches to-day, I would not have you repeat them to the same amount to-morrow; but you might, perhaps, apply fifteen or eighteen, and the next day ten or twelve. By proceeding in this way, you will find a great abatement in your patient's symptoms; and I know of no circumstance which, taken singly, proves the value and benefit of your treatment so well as the diminution of the hepatic tumour, which you can accurately and satisfactorily ascertain by means of the pleximeter. When you find a gradual subsidence of swelling, I think you may be pretty sure that, even though the other symptoms exhibit little or no improvement, the hepatitis is on the decline, and will soon be removed entirely.

You have all, I am convinced, heard a great deal of the use of mercury in hepatitis; and there appears to be in the minds of most medical men a strong connexion between mercury and all diseases of the liver. So far has this impression gone abroad, that to some practitioners it would appear perfectly heterodoxical to think of attempting to cure an hepatic inflammation without this accredited panacea. I must, however, confess, that it is my belief that several cases of hepatic inflammation may be cured without it; and, if this be true, as I am convinced you will find by experience, it is so much the better for the patient. I do not mean to depreciate the value of this powerful remedy in making this assertion;—it is undoubtedly a useful adjuvant, but it is only an adjuvant. It is decidedly secondary and inferior to general and local antiphlogistics, followed by counter-irritation; and you should always bear in mind, that if you wish to bring about the full action of mercury on the system, you must precede its employment by means calculated to reduce the intensity of local inflammation. By premising general bleeding, leeching, and purgatives, you give the mercury an opportunity of exerting a decided influence on the salivary glands; and in such cases it is, that the most unequivocal advantage is derived from it; for, as I have observed in a former lecture, salivation appears often to be the *result* of the reduction of inflammation to a certain degree, and not its cause.

In all cases of hepatitis occurring in delicate females, but particularly in persons of low, scrofulous constitutions, endeavour to dispense with the use of mercury if possible. You will have considerable difficulty in divesting yourselves of early prejudices, and combating those of others; but when you have an opportunity of acting for yourselves, I would have you make trial, and you will find that many cases are curable without mercury. If, after having regularly and carefully employed the

means recommended, you perceive that two or three days pass without any improvement in your patient's symptoms, and that the hepatic tumour remains undiminished, then indeed you may have recourse to mercury. But if you have been so fortunate as to have struck a decided blow in the commencement, and that the case is going on well, I would ask, why should you expose your patient to the misery and danger of salivation? I am not by any means opposed to the employment of mercury in cases of liver disease; on the contrary, if we compare inflammation of the lungs, brain, and liver, with respect to the power which it has over each, I believe that it is much more applicable to cases of hepatic inflammation than it is to either pneumonia or cerebritis.

There is nothing more common than a complication of disease of the liver with disease of the upper part of the digestive tube; and here you will find that calomel will frequently cause great irritation of the bowels, vomiting, and increase of fever. Under such circumstances, you must omit the internal use of mercury, and have recourse to frictions, directing your patient to rub in a drachm of camphorated mercurial ointment every six or eight hours until the gums are affected. A very good auxiliary means is to place a drachm of the mercurial ointment in the patient's axilla, and leave it there; the action of the arm will, to a certain extent, answer all the purposes of friction. Dr. Graves is much attached to this mode. Where you have employed blisters, you may cut off the cuticle, and dress the raw surface with mercurial ointment. This also will contribute materially to produce the intended effect on the system. With respect to blisters, the same rules are to regulate their application as I have mentioned before, when speaking of the treatment of gastro-enteritis, namely,—that they are not to be used until active antiphlogistic treatment has been employed; for it is then, and then only, that the stimulus of a blister can be useful. I believe it is seldom necessary, or even safe, to apply a blister before the third or fourth day in cases of acute inflammation of the liver. The physician who purges to-day, and blisters to-morrow, and bleeds the next day, is a very injudicious practitioner indeed; he should bleed first, then purge; and, having by these means reduced the symptoms of active inflammation, he may proceed to the use of blisters with advantage.

It is unnecessary for me to remind you, that you must enjoin a strict antiphlogistic diet in all cases of acute hepatitis. Recollect the powerful influence which all dietetic stimulants exercise, not only over the digestive canal and general system, but also over the liver; bearing this in mind, you will, for the first few days, keep your patient on a water and slop diet, and then on mild farinaceous food and hicken-broth.

But suppose that after all this, after having employed all the resources of the science and art of medicine, your patient becomes gradually weaker, his face pale and expressive of much constitutional suffering, his skin flaccid and bedewed with perspiration, his pulse small, rapid, and compressible; that the hepatic tumour increases in size, and when you throw aside his bedclothes, the whole of the right side appears manifestly enlarged; and, if the bowels are empty, you see the hepatic tumour extending far downwards into the abdomen: in addition to these symptoms, suppose the patient has had shivering fits, not only once but repeatedly; that his perspirations are profuse, and have a sour smell; that his tongue is dry and glazed; that his cheeks are hollow, and sometimes present a circumscribed flush; and that he is low, weak, and restless. Under these circumstances, you may be sure that suppuration is commencing, or has been already established; and the question is,—what are you to do? You must change your hand, you must give up antiphlogistics, you must omit the employment of all measures which have a tendency to reduce strength, you must prescribe a light nutritious diet, and anodynes to relieve irritation. When suppuration is fully established, the next consideration is, in what direction the contents of the abscess may escape; and here I need not remind you that it is much better that the abscess should open externally, through the integuments of the abdomen, or into some cavity having an external communication, rather than into a shut sac, as in the latter case it is almost certain, and often immediate death. At this period of the case it will be proper to support your patient's strength by allowing him wine, increasing the quantity if the hectic symptoms threaten to run him down, and taking care that his diet be nutritious and of easy digestion. You will also take care to relieve the sufferings and irritation attendant on the disease by the judicious employment of opiates.

When after some time the tumour becomes more elevated and distinct, the pain concentrated in one particular part of the liver, and the abscess is evidently pointing towards the surface, the question then is, whether we shall open it and give exit to the matter, and how this may be best accomplished. That the contents of the abscess should be evacuated as speedily as possible, is true, but the consideration is, how far it can be done with safety. Now, I beg your attention to this point, as it has not been sufficiently attended to in works on the practice of medicine. Recollect what the anatomical condition of the parts is under such circumstances, and that in order to get at the matter, you have to pass through a serous cavity. It is obvious that if you make an incision into the tumour through the peritonæum, and if this be in a state of health, and without any adhesions between its layers in the situation of your incision, you run the risk of having the contents of the abscess effused into the peritoneal sac, and you know that this is

almost of necessity fatal. The condition then for success is, *the circumstance of adhesion taking place so as to prevent the matter from getting into the peritonæum.*

Well, it seems to be a very simple thing to give exit to the matter of an hepatic abscess which presents a distinct pointing. Persons will say, adhesion has formed long since, the integuments are swollen and painful, the matter has crossed the peritonæum and lies close under the skin. Here, however, is a curious fact; of all the serous membranes in the body the peritonæum is that which is least liable to general or partial adhesions, and it is well known with respect to hepatitis with suppuration, that you may often have abscess so large as to form a distinct tumour on the surface, which shall be fluctuating, discoloured, and painful, and with all these conditions, so favourable to the notion of matter being actually under the skin, the patient dies, and on dissection we find not the slightest trace of adhesion. If you plunged a trocar or abscess-lancet into this tumour, what would be the consequence?—death by peritonitis. Dr. Graves and I, in our report of the cases of hepatic abscess which occurred in the Meath Hospital, were the first who drew the attention of the profession to this interesting pathological fact, and subsequently to this, Mr. Annesly, who has vast experience in hepatic abscess, stated that in his practice he found that the existence of adhesion between the layers of the peritonæum in the vicinity of the abscess, even after swelling, tenderness, and discoloration of the integuments, is by no means a necessary consequence.

It appears then to be quite certain, that the opening of an hepatic abscess is a matter of considerable nicety, and requiring a great deal of caution. The best mode of proceeding which can be adopted is, in my opinion, that which has been recommended by Dr. Graves, and which is founded on the most accurate pathological views. He makes an incision through the integuments, over the most prominent part of the tumour, and carries it through the cellular substance, fat, and muscular tissue, until the peritonæum is nearly laid bare, and there he stops. The wound is then kept open by plugging it up with lint, and after some time the abscess bursts in this situation with perfect safety to the patient. This operation was performed under his direction, for the first time, in a case of abscess where there was no distinct pointing. It was the first operation of the kind, and every one who witnessed it waited with anxiety for the result. Five or six days passed away without any appearance of matter, but about this period the abscess began to point, shortly afterwards there was a large gush of matter through the wound, and the patient recovered perfectly in three weeks. Since that time the operation has been performed on two patients with success and safety. In the case of one patient it was performed twice at no very considerable interval.

Now, I believe you are all aware, that in cases of deep-seated collections of pus, it is of the greatest importance to remove the obstruction to its exit externally, and that matter will always point towards the place where there is the least resistance. The performance of this operation not only tends to remove the resistance, but also has this advantage, that the existence of irritation in the neighbourhood of the abscess, and immediately over the peritonæum, has a strong tendency to produce adhesion at this point, a circumstance which I was able to verify in a fatal case, in which the abscess had pointed, but never burst. In this case we found on dissection six or seven small tumours near the surface of the liver, without any traces of adhesive inflammation in the peritonæum over them, but over the situation of the tumour, in the direction of which the incision had been made, there was a considerable quantity of organised lymph, and the two layers of the peritonæum were closely adherent. That this effusion of lymph had not been accidental, is rendered probable by the rarity of its occurrence, from not being observed in other cases in which an operation had not been performed, and lastly from the success of the operation in those cases in which it had been employed. I would advise you, therefore, in all cases of hepatic abscess showing a tendency to point, but particularly if this pointing be distinctly towards the surface, to make an incision down to the peritonæum, fill up the wound with lint, and you will often succeed in causing the abscess to break externally, and without any danger to your patient.

With respect to the bursting of an hepatic abscess into the cavity of the peritonæum, I have stated to you before, that it is almost necessarily fatal. I say, almost, because I have seen two cases of this termination, of which one recovered completely from the peritonitis, and the other lived eight or nine days after the discharge of matter into the peritonæum, and on dissection it was found that a process of cure had been going on. The first of these cases was that of a young woman who had a vast chronic abscess. An attempt was made to make this open externally, by destroying the soft parts over it with caustic, but this not succeeding, a lancet was introduced through the eschar made by the caustic. The patient was immediately afterwards attacked with severe pain in the abdomen, and distinct symptoms of peritonitis. As she was very weak and emaciated, Dr. Graves, under whose care she was, gave her opium in full and repeated doses, allowed her the free use of wine and porter; no blood was drawn, no depleting measures of any kind used, but every thing done to support strength and relieve irritation. Under these circumstances (wonderful to relate), she recovered from the peritonitis. She afterwards sunk from the abscess, and on dissection we found that the peritoneal cavity was obliterated, just as the serous investment of the testicle has its opposed surfaces glued

together after an operation for the radical cure of hydrocele. In the other case, the patient lived eight or nine days after the occurrence of symptoms of peritoneal inflammation. On dissection we found a large quantity of transparent lymph effused on the surface of the peritonæum, in the substance of which several large blood-vessels had been developed.

The principles of treatment in a case of this dreadful accident is to support strength and remove irritation, laying aside all antiphlogistics. I am sure that, under such circumstances, the ordinary modes of treating peritonitis are inapplicable and useless. As I shall return to this subject when I come to speak of peritonitis, I shall here merely state, that the treatment of such a case as this is to be conducted upon the same principles as peritonitis, produced by rupture of the intestine, or a perforating ulcer.

Gentlemen, I shall occupy your time briefly in treating of chronic hepatitis. You will find a full description of the symptoms of this disease in almost every book on the practice of medicine, and it is unnecessary for me to detain you with details of this kind. If we are to judge from British practice, chronic hepatitis is a very common disease, and if we look to the practice, it is an affection under which half the community labour. I believe, indeed, that the chronic form of this disease is much more frequently observed in this country than the acute, but still I think it is any thing but a disease of universal prevalence.

I shall not, as I said before, take up your time in stating what you will find in any medical work; I shall merely mention, that in chronic hepatitis we have generally derangement of the bowels, chiefly affecting the stomach and upper part of the digestive tube, and in addition to this we have more or less pain, tenderness, and swelling in the region of the liver, and often dulness of sound over the lower part of the right side. When we meet with this train of phenomena, we say that the patient has the symptoms of chronic hepatitis. But no one under such circumstances could undertake to say whether the patient will die of hypertrophy or atrophy, of cancer or hydatids, of tubercles, or of fatty discharge, or of any peculiar disease of the liver. There is another point, too, of which I am anxious you should be aware. Chronic hepatitis is a disease which has been, and is, frequently confounded with various other affections;—with scirrhus of the pylorus, with chronic disease of the duodenum, with chronic disease of the pleura, and empyema of the right side. There is one circumstance which you should bear in mind when you are in doubt with respect to a chronic hepatitis, that one, two, or three of these affections may occur in connexion with chronic inflammation of the liver. For instance, a patient labouring under chronic hepatitis may have also at the same time empyema and disease of the duodenum. I believe the subject of disease produced, as it is said, by contiguity in separate organs, has not as yet been sufficiently investigated, and that our knowledge on this important point is extremely scanty.

There are two circumstances connected with this part of the subject, on which I shall say a few words. One common error is that of confounding affections of the heart with those of the liver, and this I regret to say is an error of very serious consequence, and one which is frequently observed in the consultations of medical practitioners. A patient complains of palpitations, a physician is called in, and pronounces the disease to be hypertrophy of the heart; another is called in, and gives it as his opinion that the liver is affected; a third is summoned, and says that both the liver and heart are diseased. In such cases you should always make a careful examination, and weigh well the circumstances of the case in your mind before you venture to pronounce an opinion. In the first place, you are to recollect that organic disease of the heart may produce disease of the liver. Secondly, that disease of the liver (though not so often) frequently brings on morbid affections of the heart and nervous palpitations. Thirdly, that these affections act to one another reciprocally as cause and effect. If a person has disease of the heart, the current of the circulation through that organ is obstructed, and you may have disease of the liver, not as the result of any original affection of that organ, but as the effect of chronic obstruction to the passage of blood through the heart. The consequent congestion and disease of the liver may, in such a case, be reflected on the digestive tube, and this in turn may re-act on the heart. The heart sympathises then with the irritation of the digestive tube; we have nervous palpitations, and if these continue for a length of time, we have the disease of the heart increased. Again, suppose a patient has chronic disease of the liver, causing more or less obstruction to the circulation; the heart begins to sympathise, palpitations commence, go on increasing, and finally terminate in hypertrophy of the heart. The mischief does not stop here; the effects of obstruction extend to the vena cava hepatica, this in turn re-acts on the liver, and we have in this way a curious train of phenomena; first liver disease, then heart disease, and lastly liver disease again. Let me once more impress upon you, that, under such circumstances, you cannot be too diligent in making an examination, or too cautious in pronouncing an opinion.

There is another thing connected with hepatic disease which you should be aware of. A patient, labouring under the following train of symptoms, comes to consult you;—he has pain in the right hypochondrium, loss of appetite, deranged bowels, morbid stools, a dirty bilious hue of countenance, and, in fact, all the symptoms of diseased liver. You examine the liver and find it very much tumefied, in fact its size is so much increased that you

would at once be inclined to say that it was extensively diseased. Now, there are some cases of great tumefaction of the liver accompanied with more or less of the symptoms of hepatic derangement, and yet, in such cases, you may have no disease of the liver at all, at least none of the ordinary forms of hepatitis: these are cases in which there exists, in adults, a persistence of the embryonary condition of the liver. If we compare the condition of this organ in the infant and in the adult, we find many essential points of difference. In the infant it is comparatively large, and as it were hypertrophied; it descends far below the margin of the ribs, and occupies a large portion of the abdominal cavity. On the other hand, if we examine its state in the adult, we find that it has shrunk beneath the short ribs, and that its size and dimensions are comparatively much reduced. Now this physiological atrophy of the liver is a natural and healthy process. There are *certain individuals, however, in whom this change does not take place, and who grow up with the liver bearing the same proportion to the other organs as it did in the fœtal condition.* This curious condition is one of the varieties of arrest of development, and is, in almost every instance, observed in those persons whose constitutions present that train of phenomena to which the term scrofula has been applied, and which (if I have time) I shall show you is explained, or at least great light is thrown upon it, by the theory of arrest of development. *In such subjects the tumefaction of the liver is by no means a measure of actually existing disease.* If you were to suppose this tumefaction of the liver to be the product of actual recent disease, and proceed to treat the patient in the same way as you would treat a case of hepatitis in the healthy subject, you would not only do no good but, in all probability, a great deal of mischief. I know the case of a gentleman, in the enjoyment of good health, who has this tumefaction of the liver to a very great degree. He is of a thin spare habit of body, with a full, round, and prominent belly; he is pursuing the avocations of an active profession, and yet you will hardly credit me when I say that his liver extends below the umbilicus, and close to the anterior superior spine of the ilium; yet he is very active, and to all appearance a healthy man. You will often meet with this condition of the liver in children who are attacked at an early age with symptoms of tabes mesenterica.

At my next lecture I hope I shall be able to finish diseases of the liver, and proceed to the consideration of other affections of the system.

CLINICAL LECTURES

DELIVERED

At the Meath Hospital, or County of Dublin Infirmary, Session 1833-34.

BY PHILIP CRAMPTON, M.D., F.R.S.,

Senior Surgeon to the Meath Hospital, Surgeon-General to the Forces in Ireland, &c., &c.

LECTURE VI.

Burns and Scalds.

GENTLEMEN,—This hospital, situated in the midst of a manufacturing district which is inhabited by the poorest and most profligate part of the population of this great town, is always abundantly supplied with cases of injuries of all kinds, but more particularly with cases of burns and scalds. Parents, obliged to leave their wretched habitations in quest of the means of existence, lock up their unfortunate little children, lest during their absence they should meet with some injury in the streets. The little creatures huddle round the fire on which a kettle (insecurely supported) is left to boil, that the water may be in readiness against the return of the mother, who is to prepare the tea which constitutes their chief repast; the result too frequently is, that the unfortunate children are either burnt by the taking fire of their greasy clothes, or scalded by the oversetting of the kettle. Then we have the consequences of drunkenness and of epilepsy. I am sure I do not exaggerate when I state that more than one-half of all the frightful injuries which we have to treat in this hospital, are the result of drunkenness; but burns, in particular, seem to be the most frequent, as well as the most terrible punishment of this besetting vice of the poor of this city. In the stupor, rather than the sleep, which succeeds to the excitement of intoxication, persons often remain insensible to the action of heat, until it has caused the complete disorganisation of the soft parts down to the bone. There is at this moment in the accident ward, a sweep who lay down so close to the fire, that the side of his face, chest, and arm are burnt to a coal; nothing can save this wretched man from an agonising death; and, lastly, we have the frightful burns and scalds to which persons are so much exposed who are employed in breweries, and other branches of manufacture which are carried on so extensively in the Liberties. It is not surprising, therefore, that this hospital should be a kind of depôt for burns, or that the management of this description of injuries should have engaged a good deal of my attention during the thirty years I have been connected with the institution.

Burns share the fate of all diseases and injuries which, in consequence of their complication with severe and frequently irreparable organic lesion, are least under the control of medical treatment. They are considered by the people in general as peculiarly the subjects for

popular remedies, and it is quite astonishing with what undoubting confidence many sensible persons continue to believe (or, at least, to assert) in opposition to the plainest dictates of reason and experience, that they possess an infallible remedy for burns. The utter absurdity of looking for a specific for burns, or of supposing that any one plan of treatment can be applicable to all injuries of this description, will appear from this single consideration, that under the head of burns is included every degree of lesion, from a slight superficial inflammatory action of the skin, to the total disorganisation of all the soft parts, accompanied by a peculiar affection of the nervous system, and of the digestive apparatus.

For the purpose of more conveniently treating a subject so vast, and embracing such a variety of details, it is necessary to adopt something like a classification founded on the *degree* as well as the *kind* of the injury. Such a classification must necessarily be imperfect, because in a great majority of cases, you will in each subject find every degree of lesion according as the parts were more or less exposed to the action of heat. Nevertheless, the classification, imperfect as it is, will be found useful in practice, and all systematic writers have accordingly divided burns into certain classes. Heister and Callisen have divided them into three, Dessault into four, and Baron Dupuytren into six. For all practical purposes it will be sufficient to divide them into five classes.

In the first class, the inflammation of the skin is slight and superficial, presenting an erysipelatous-like blush, unaccompanied by bullæ or blisters, and involving no apparent destruction of tissue. This is a very common form of burn, and is generally caused by a very transient application of heated air, or of water not above the temperature of 150°; but when water above that temperature is applied to the skin, even for a few seconds, it produces detachment of the cuticle more or less extensive. If its application be partial and momentary, you will have bullæ, or small vesications formed; if more extensive and longer continued, it is attended by detachment of the whole of the affected cuticle, so that if you attempt to pull off the stocking of a person who has received a scald of this description, the whole of the separated cuticle comes away with it. The first class of burns, then, consists of simple erysipelatous-like inflammation of the skin, produced either by water not above the temperature of 150°, or by a contact with heated air momentarily applied, and insufficient to give rise to vesications or bullæ.

The *second* class of burns comprises all injuries of this description, in which there is a detachment of the cuticle, in addition to the inflammation of the skin; this detachment you know is caused by the effusion of serum from the over-excited capillaries of the true skin. In the first class you will remember that we have no separation of cuticle; in the second it forms the most prominent feature of the lesion, and you will find this distinction useful, because the treatment which is applicable to one cannot be employed with advantage in the other.

In the *third* class, we place all those burns in which the cuticle is detached, and the superficies of the true skin disorganised, as well as the rete mucosum which lies on its surface. This disorganisation, or death of the skin, is necessarily succeeded by the detachment of a slough, the thickness of which corresponds with the depth to which the disorganisation has extended. This destruction of the surface of the true skin constitutes the essential character of this description of burn, and is the cause of a peculiar train of symptoms, both local and constitutional, which are wanting in the two former classes. The local symptoms are, the occurrence, on the third or fourth day, of a margin of inflammation round the disorganised portions of the skin, which is followed by suppuration, and the detachment of sloughs from the twelfth to the twentieth day, according to their thickness, and the structure of the parts they involve. The constitutional symptoms are the symptomatic fever invariably attendant on acute inflammation, when it affects an extensive surface, and terminates in suppuration; this is what the French pathologists call the "fiévre eliminatoire." With this is usually combined great nervous irritability, and a very disturbed condition of the digestive organs. The cicatrices which remain after a burn of this kind, are always white, thin, shining, and insensible; they do not give rise to contractions, and their whiteness and insensibility are owing to the destruction of the rete mucosum, and of the beautiful vascular and nervous tissue which lies on the upper surface of the true skin. This injury may be produced by boiling water, or by the transient application of flame, as when a light muslin dress takes fire, but is torn off before it has lain even for a moment on the skin.

In the *fourth* class of burns, there is disorganisation of the whole depth of the skin, including the cellular texture beneath. Here you have an exceedingly dangerous form of burn, in which the process of reparation is tedious, and often imperfectly performed, and where cicatrisation never takes place without considerable contraction of the affected tissues. These contractions, when the result of an extensive burn, frequently deprive the patient of the use of the injured limb, particularly when the burn happens to be near the elbow or knee-joints. In the one case the leg is sometimes drawn up and fastened as it were to the thigh; in the other, the fore-arm is bent on and for some extent united with the arm. Here the constitutional symptoms keep pace with the severity of the local injury; the nervous system in particular seems to suffer, and if a large surface of the skin be destroyed, the powers of life are rapidly exhausted, and death usually takes place within the first three or four days.

The *fifth* class of burns includes those in which the skin, cellular substance, and perhaps the muscles are reduced to the state of an eschar, their texture being wholly destroyed. This is one of the accidents which so often result from drunkenness; a man having drank to excess, sits or falls down by the fire in a state of utter helplessness, and is found in some time after, resting against the grate, with a portion of his arms or face burnt to a cinder. Burns of this description, however, are usually caused by the clothes taking fire, particularly if the person rushes through the air in quest of assistance. The skin, when examined, is found to be tense and dry, of a pale brown colour, inclining to yellow, and when it presents this appearance you may be quite sure that it is disorganised through its whole depth, and must separate from the subjacent muscles before an attempt can be made towards reparation; that this separation is always attended with suppurative fever of the most severe kind, and consequently, if the burn be extensive, it is invariably fatal, either immediately, from the impression made on the nervous system, or subsequently from the irritation attendant on the separation of the sloughs. In children such injuries are often succeeded by fatal convulsions.

In the generality of cases, injuries belonging to two or more of these divisions co-exist, the classification is therefore imperfect, but the rule is to take the greatest degree of the injury as the essential character of the affection. Now, the greatness of the injury, that is to say, the pain and danger attendant on it, depends to the full as much on the extent of the surface affected as upon the depth of the injury. The pain, which attends a slight detachment of the cuticle, is often as great as that which accompanies a more serious burn; and a burn or scald, with a slight detachment of the cuticle, when extensive, is more dangerous than an injury which destroys the texture of the soft parts to a considerable depth, but which is of comparatively limited extent. We used to have many instances of these superficial but extensive lesions of the skin among brewers' men in the Old Hospital on the Coombe; but whether it is that some means have been adopted to prevent the liability to such accidents, or whether it is that the men are more careful of themselves, we very seldom meet with them of late. I remember a case of this kind which happened some years since. A brewer's man, while employed about the mash tub, slipped and fell into a large quantity of mash at a high, but not the boiling, temperature. He was pulled out on the instant and brought to hospital in a state of great depression. The cuticle was scarcely detached from any part of the surface of his body, but the vital powers were very much depressed; his countenance was ghastly, like the little boy now in the accident ward, and he constantly cried out that "he was perishing with cold." His pulse was small and rapid, and he survived but a few hours. Many persons have died under such circumstances in this hospital, showing that irritation, affecting the surface extensively without causing sensible disorganisation, is to the full as dangerous as the total disorganisation of a part of limited extent, if it does not involve some organ, the healthy action of which is essential to life. Always give a guarded prognosis, therefore, in cases of extensive scalds, particularly in children, even though the cuticle should not be extensively detached, as such an injury usually proves fatal by causing convulsions.

The next thing which modifies the nature of a burn, or scald, is the place on which the injury is received. A burn on the upper or lower extremities is much less dangerous than one of the same extent and depth on the face, neck, chest, or abdomen. Burns on the chest are, *cæteris paribus*, more dangerous than on the belly.

With respect to the treatment of the first class of burns, where persons are exposed to the contact of water below the boiling point, or to steam, or to the momentary impression of flame, and where the injury done to the skin does not amount to actual separation of the cuticle, the best thing which can be done is to put the burned or scalded part *immediately* into a vessel filled with cold water, and to keep it there until the pain ceases. This is one of the simplest and most effectual modes of treating this form of burn, *except in cases where the surface is very extensive*, and the injury received has given a shock to the nervous system, as evinced by general shivering and a sinking pulse. In these instances it is inadmissible, but under all other circumstances it proves extremely useful, and I know of no better, or even equally powerful remedy.

I remember a case of this accident (attended with rather singular circumstances), which occurred while I was living in Dawson-street. I happened to be on the top of a ladder, which I had placed against the garden wall, while in pursuit of a monkey which had broken its chain, when I heard a piercing shriek proceeding from the kitchen of my neighbour, Mr. Hope's house. Concluding from the cries, that something dreadful must have happened, I dropped instantly from the garden wall, and in a moment was in the kitchen. Here a very alarming scene presented itself; the servant-maid had just filled a large washing tub, which lay on the floor, with hot water, and a little child, of about three years old, who had been running about the kitchen, had fallen head-foremost into it. Just as I entered, the servant had pulled the child, yelling and screeching with agony, out of the tub. Without waiting to make an examination of the scalded parts, I snatched the child up in my arms, and, running out into the area, plunged it over head and ears into the cistern, and continued to dip it from time to time, plunging the head and face under water each time. The child continued to scream, but it was obvious that the

pain of the scald was abated by the submersion. I then, without taking it out of the water, cut off its clothes, and had it removed to bed, where it was kept constantly covered with clothes dipped in cold water, until it began to complain of cold. Next day the child was running about as usual, and, with the exception of a few small blisters on the chest, neck, and arms, had not the slightest trace of the injury remaining. It was one of the most rapid cures I have ever witnessed, and I have no doubt that the rapid recovery is in a great measure to be attributed to the *instantaneous* submersion in cold water, and to the care that was afterwards taken to keep the surface cool. I must add, however, that the result would not have been so favourable if the water, into which the child had fallen, had happened to be at, or even near, the boiling point. This mode of treatment is applicable exclusively to cases in which it can be employed *instantaneously, and where there has not been time for the powers of life to be exhausted, or the cuticle to be extensively detached.* No man in his senses would think of plunging an unfortunate creature, deprived of a great portion of his cuticle and shivering with cold, into a vessel of cold water. I believe that, in such circumstances, all that can be done is to place the patient on a bed thickly covered with fine flour, to give him a cordial drink with a full dose of opium, and to await the setting in of re-action. This once established, bleeding, general or local, will afford the best chance of averting the tendency to inflammatory affections of internal organs (particularly of the stomach and intestines) which, in such cases, seem to be the immediate cause of death.

In the second class of burns your treatment must be regulated in a great measure by the constitutional symptoms, particularly where the surface of the burn is extensive. When a large quantity of hot water falls upon a person, as frequently happens in the case of children,—as for instance, when one of these little creatures puts its hand upon a table and overturns a cup of scalding hot tea upon its breast, the fluid runs down the neck, breast, and belly, and, confined by the clothes, the heat penetrates deeply, and thus causes an injury of the third class, that is to say, a scald in which the mischief extends to half, or a third, of the depth of the true skin. Now, when a lesion of this character happens to be very extensive the nervous system receives a severe shock; there is, from the excessive pain, a rapid exhaustion of the vital power, as evinced by shivering and an extremely rapid but weak and tremulous pulse. Under such circumstances no one would for a moment think of applying cold; such an application would probably extinguish life altogether. You first cut away the clothes, then place your patient on a bed covered with fine flour to the depth of an inch or two. Let every injured spot be covered with a thick layer, and place pillows or bolsters on each side of the child, so as to support the weight of the bed-clothes. Let the dusting with flour be repeated as often as the moisture from the scalded surface begins to appear, give warm drinks with a few drops of laudanum until re-action begins, and then (if necessary) have recourse to bleeding, but the necessity for bleeding seldom occurs before the evening of the third day.

I attended some time ago a child in Merrion-square, who met with a very severe accident of this kind. He was standing by the breakfast table, near the edge of which a bowl, containing a large quantity of boiling water, was placed; he put up his hand and pulled down the bowl, the water streamed all over his neck, breast belly, and thighs. To make the matter worse, his attendants, in attempting to strip off his clothes, tore away the whole of the cuticle covering his breast. I saw him a few minutes after the accident, and had a bed of flour made, in which he was placed, or rather immersed; and, having called up the cook, I desired her to bring her dredging box, and dust him over, just as she would dredge a fowl, until every scalded spot was covered with a thick layer of flour. In this way the child was kept for three weeks, care being taken to add fresh flour every day to absorb the pus; and whenever the flour became hard, and formed crusts, so as to give the child inconvenience, if they were not detached by the discharge, I removed them with my finger. About the fifth or sixth day, inflammation began to appear about the sloughs; and then I commenced with the application of leeches to the skin in their vicinity, a practice which I have for some years adopted, and to which I attach the utmost importance. The moment you see a red border formed round the sloughs, which is generally on the fourth or fifth day, apply a few leeches round that border; the constant oozing of blood will prevent any excess of inflammation, and the separation of the sloughs will go on favourably. I think I have seen many persons saved by this treatment.

I need scarcely warn you in this hospital against the antiquated practice of applying emollient poultices for the purpose of hastening the detachment of the eschars; the effect of such treatment is to increase the suppuration, already too profuse, to cause the eschars to putrefy, and produce the foulest and most irritable sores you can possibly conceive. Spirituous washes, with the addition of a small quantity of the chloride of lime, are infinitely preferable. Boerhaave, who was himself a sufferer from a severe and extensive scald, with sloughing of the skin, describes very graphically the miseries he endured from the use of emollient poultices. Exhausted by his sufferings, and annoyed by the stench, he at length determined to dry up the eschars, and with this view applied spirituous washes and drying powders. He states that the relief was instantaneous, that the new skin crept in under the dying eschars, and that these, sepa-

rating like chips, left the surface perfectly healed beneath.

I need not remind you here, that in all cases where the nervous system has received a severe shock, a good deal of attention must be paid to the constitutional treatment. Opium must be given in large and frequently repeated doses, until you have thrown your patient into such a state of narcotism, as will subdue the nervous irritability, relieve pain, and procure some tranquil sleep. Nothing tends so much to exhaust the powers of life as long-continued irritation, sleeplessness, and pain; and there is nothing, in such instances, of such unequivocal value as opium, which, by controlling or removing these causes of exhaustion, gives nature time to rally and bring forward all the conservative powers of the system.

The bowels also must be attended to; and we should be careful in ascertaining the state of the digestive tube, for many cases of this description are accompanied with more or less of a gastro-enteritis. It is certain, at least, that on dissecting the bodies of persons who have died from the effects of extensive burns, large and numerous patches of inflammation have been discovered in the mucous surface of the intestines; and this should make us cautious in administering purgatives, particularly of the drastic kind. If the bowels are constipated, employ enemata, or give some very mild laxative, such as the electuary of cassia, or a small quantity of castor-oil; and with the view of relieving the gastric irritation, and diminishing fever, you may prescribe barley-water with gum arabic, effervescing draughts, and gentle diaphoretics. This treatment is to be continued until suppuration commences, and then a different mode of treatment is to be adopted. You are then to support the strength by nutritious food, wine, infusion of bark with sulphuric acid, the sulphate of quinine, and other tonic remedies.

There is a mode of treating burns of the first, second, and third degrees, which has lately been recommended, and, as it would appear, practised with much success by MM. Velpeau and Brettonneau, of which I cannot speak from experience; but, as I do not wish to pass over any thing which promises to be of advantage in a practical point of view, it is my intention to try it on the first case of this form of injury that comes to the hospital. It consists in making pressure by means of a bandage, from the toes to the hip, for example, where one of the lower extremities is the seat of injury, which is to be kept moist by a weak solution of acetate of lead or cold water. But the chief thing in this mode of treatment is pressure, which, according to these authors, abates pain, prevents effusion of serum into the cellular substance of the limb, and limits inflammation. Even though sloughing of the parts may take place, they persevere in keeping on the bandage, merely taking the precaution of washing off the discharge, and cleaning the sloughs once or twice a-day.

When the sloughs have separated, you generally experience a great deal of difficulty in managing the sores which remain; they are covered with unhealthy, irritable granulations, endowed with such exquisite sensibility, that the weight of the lightest dressing, the application of any substance, even of the most decided anodynes, or the slightest exposure to the air, gives very severe pain. Under these circumstances, the best thing you can do is to brush the diseased surface lightly all over with a strong solution of nitrate of silver (say twenty grains to the ounce of distilled water), and then you may dress them with the lapis calaminaris ointment, or with the powder sprinkled through a hair or muslin sieve. This forms a good dressing: it absorbs the discharge, dries up the surface, and hastens the process of cicatrisation. It will be necessary to apply the nitrate of silver three or four times before the irritability of the sore is completely removed; and you will find, that though it gives considerable pain for the moment, the relief which follows its application is so decided, that the patients will frequently call for it.

In the fifth class of burns, very little can be done. Here you have complete disorganisation of the skin, cellular tissue and muscles down to the bone, and frequently the bone itself is involved in the same mischief. Under such circumstances, all that our art can effect is to keep the inflammation within bounds while the process of separation is taking place, and to support the strength by generous diet, wine, and tonics; and, lastly, to make such applications to the sores as circumstances may require. Sometimes you have to apply soothing and sometimes stimulant applications; at one time opiate ointments, at another nitrate of silver, but never poultices; they give great pain by their weight, and by the heat they keep up in the parts, confining the discharge, and giving rise to that peculiar odour which tells you at once that there is an ill-managed suppurating burn in the room. One of the best applications in these cases is camphorated spirit of wine, with a weak solution of the chloride of lime or soda, which have the effect of destroying the insufferable odour, and cleaning the surfaces of the sores.

I remember a very curious instance of this form of burn, which occurred in the old hospital on the Coombe. An old woman was admitted with a very deep and dangerous burn. It appeared from the history of the case, that she had fallen asleep by the fire in a state of intoxication, and did not wake until the whole hand and fore-arm were burned as black as a coal. We waited until the line of separation had taken place, and then proposed amputation, to which she would by no means consent, saying, that if she was to die, she would rather go to the grave with her arm as it was; and that she was neither young nor strong enough to undergo the operation. Finding it useless to attempt to convince her of its necessity, we

kept her in the hospital, and watched the case to see what would happen. At the end of the fourth month nature performed the operation,—the fore-arm was found lying by her side in the bed, detached from the rest of the body, and that without the loss of a drop of blood; for, long before the bone gave way, the skin had formed over the living surface of the stump down to the bone itself. She had been using all the time a lotion composed of the camphorated spirit of wine; and the affected part had become as dry and as sapless as a mummy.

I have said nothing of the treatment of burns by oil of turpentine externally, and stimulants internally, as proposed nearly thirty years ago by Mr. Kentish. The practice arose out of a theory which is altogether fanciful, and this furnishes a strong *primâ facie* objection to the practice. But the practice itself has fallen into disuse, a circumstance which would not have happened, had it been productive of any real advantage. We gave it a fair trial in this hospital several years ago, and at length rejected it as most painful and inefficient.

With respect to the use of raw cotton, you saw it fairly tried in the case of the child in the accident ward. One leg and thigh was dressed with flour and the other with cotton; the flour leg got so much better than the cotton leg, that we were glad, after a week's trial, to rest content with the use of flour only.

Among the worst consequences of burns are those contractions of the skin which frequently bind the fore-arm to the arm, the leg to the thigh, and the chin to the thorax. It depends, however, very much upon the care of the surgeon whether his patient experiences these calamities or not. When an extensive burn or scald involves the surface of the hand and fingers there is much need of care and attention during the process of healing; and if you attempt to prevent them from adhering by the interposition of pieces of lint, you will certainly be disappointed. The best plan in this case is, to take the requisite number of straps of leather cut into an hour-glass shape, and spread with adhesive plaster; put the narrow part of these straps between the fingers, draw the ends up and fix them to the arm. Besides these, you put pledgets of lint smeared with oil between each finger; lay the hand on a splint, and bind it down with a roller: by doing this you will prevent contraction. The same thing is to be done in the case of a burn involving the elbow joint; a broad piece of leather spread with plaster and placed over the joint, so that the fore-arm cannot touch the arm, and keeping the limb extended on a splint will prevent deformity. If this be not done you will have the fore-arm contracted, and united to the arm by a tense, white, organised cicatrix, which is thick and cord-like at the top and thinner in the middle. In order to remove the deformity, you must divide this cicatrix, extend the arm, and if you wish to prevent a recurrence of the mischief, you must dissect away this angular portion which forms the cicatrix, commencing where it begins at the fore-arm, and proceeding to where it terminates in the arm. This operation, however, requires a good deal of care; the contraction of the cicatrix draws up the blood-vessels, and you must carry on your dissection with caution, and look for the vessels, so as to avoid wounding them. When you have dissected out the cicatrix, bring the sound skin together with strips of adhesive plaster, and you will, in many instances, succeed in preventing the deformity. You will find a great many valuable observations on this subject in Mr. Earle's paper in the Med.-Chirurg. Transactions. In cases of burns of the neck, the chin is sometimes united to the sternum, the lower jaw is drawn down and fastened to the breast, and the mouth remains constantly open, constituting one of the most frightful deformities which it is possible to imagine.

After the lecture a patient was brought into the hospital under the following circumstances:—He stated that he was a hackney car driver, and aged about thirty-five years. Five days previously he was seized with severe pain in the back of the thigh, and on the following day he was unable to straighten his knee. Since the commencement of the pain he has felt "a great sickness over him," and has never enjoyed a single hour's sleep. He looks exceedingly ill; his pulse is small and frequent; there is a light erysipelatous blush over the integuments at the back of the thigh; the whole limb appears to be somewhat swelled; and Mr. Crampton pointed out to the class, that it was tense and hard at its posterior part, a little above the ham.

"This, gentlemen," said Mr. Crampton, "is a most important and instructive case. It is an instance of acute deep-seated abscess of the thigh, with its constant attendant—erysypelas of the skin. I shall give you a particular lecture on this case; but at this late hour all that I can do is to show you what is required for the safety of the patient. The matter, which has just been formed, is lying deep beneath the fascia, and even below the superficial muscles. If art were not to interpose, the suppuration would extend upwards and downwards among the muscles, producing intense pain; and if the man were (as he appears to be) of a bad constitution, the inflammation would assume the erysipelatous character, in which, you know, the adhesive process is deficient, and spread all through the limb. The cellular membrane, deprived of its vitality, would form sloughs immersed in a sanious suppuration; the skin, detached from the superficial fascia, would become pale, then purplish, and this would be the precursor of its sloughing; eschars would form on it from its partial mortification, and when these separated (if the patient survived the mischief) it

would be found that the openings led into an immense cavity filled with unhealthy pus, and traversed by muscles altogether deprived of their cellular texture, and appearing more clean than you have ever seen them on a dissecting table. Concurrently with all this terrible local mischief, we should have suppurative adynamic fever of the worst description, profuse perspirations, diarrhœa, and not unfrequently purulent depositions in the lungs and liver. I need scarcely say that few indeed have a constitution capable of holding out under such accumulated sufferings. Accordingly, phlegmonoid erysipelas of this kind is not only one of the most painful but one of the most fatal occurrences which we ever encounter; and here we have an illustration of the truth of the aphorism of Hippocrates respecting erysipelas:—"Ex erysipelate *putrido*, aut suppuratione malum." You will observe, that the word "putrido" is used to express the sloughing and putrefactive process which characterises the suppuration of erysipelas, as distinguished from that of phlegmon. Children escape oftener than adults; but I have very seldom indeed seen a man after fifty who has survived phlegmonoid erysipelas of a lower extremity, where the disease had got extensively into the intermuscular cellular membrane. The successful management of this disease I look upon to be the greatest triumph of modern surgery. You all know how much stress I have ever laid on the necessity of early and vigorous measures in the treatment of this affection; and I trust that the present case will add one more to the many successful cases which we have had of this disease since our session has commenced. Among others, the boy in the large clinical ward, with phlegmonoid erysipelas of the knee and thigh from a wound; the man with a similar affection of the fore-arm, from a wound on the elbow; the woman with erysipelas of the fore-arm and arm, from a slight contused wound of the elbow, on whom I operated last week, and whom you saw this morning among the externes nearly well, are all cases of the successful treatment of this disease.

It affords me great satisfaction in having an opportunity of rendering that justice to Mr. Copeland Hutchinson which some of his own countrymen have denied to him. To him we are *exclusively* indebted for this great improvement in the treatment of erysipelas. Like all great improvements, it was at first met by a denial of its utility, and then by attributing it to somebody else; but I have no hesitation in thus publicly offering my acknowledgments to him for one of the most valuable improvements which have been made in the practice of surgery within our times.

The case before us, you will observe, is not one of phlegmonoid erysipelas, properly so called: it is a case of *deep-seated intermuscular phlegmon*, accompanied with erysipelas of the skin and subjacent cellular tissue, in consequence of the inflamed and tense state of the fascia. But in a constitution like this man's, broken down as it is by intemperance, the true phlegmonoid erysipelas would in all probability arise, if the abscess were not opened, and the tension of the inflamed fascia relieved.

Mr. Crampton having laid the man on the table in a prone position, made an incision six inches long over the posterior aspect of the lower third of the thigh. The cellular substance, which was now exposed, was loaded with a reddish coloured serosity. Mr. C. then slit up the fascia to the same extent, and laying aside the knife, he slowly insinuated his fore-finger between the muscles, just above the popliteal space, until he reached the cavity of the abscess, and this did not occur until his finger was buried as deep as it could go.

"Now," said Mr. Crampton, "I have reached the matter;" and on withdrawing his finger, about eight ounces of thick cream-coloured pus gushed from the wound. A thin dossil of lint was interposed between the lips of the wound, and the man was carried to bed. He was ordered some purgative pills, and an effervescing mixture made in an infusion of cinchona.

Dec. 2nd.—The man is free from all complaint, and the wound is healing rapidly.

ESSAY ON THE STRUCTURE AND FUNCTIONS OF THE SKIN.

BY MM. BRESCHET ET ROUSSEL DE VAUZEME.

Read by the former to the Académie Royale des Sciences, on their sitting, 27th of Jan., 1834.

Rerum natura sacra sua non simul tradit aliud hæc ætas aliud quæ non subibit, adspiciet.—*Senæger Nat. Quest.* lib. viii. c. cxxxv, xxxi.

(*Concluded from page* 340.)

We designate by the name of epidermis the entire corneous substance which invests the cutis. This epidermic matter is applied on the cutis in the same manner as a mask of liquid plaster with which it is usual to cover the face of a person when modelled, and which becomes adapted to the inequalities of this surface. The totality of this layer has been already described under the name of *reticular membrane of Malpighi.*

We consider it as formed of two portions; the one occupies the folds of the cutis, and adheres to them by prolongations furnished by the excretory tubes belonging to the organs which elaborate the colouring and corneous matter, and it is from it that the horny substance is derived. On endeavouring to separate this

layer, a somewhat forcible resistance is experienced, since it adheres to the cutical furrows by radicles which appear to project into it. Nevertheless it occasionally separates freely, as if it were not applied to the bottom of these folds; it presents apertures for the transmission of lymphatic canals.

The second portion of this substance occupies the intervals between the papillæ, and is deeply prolonged around the sudoriferous and lymphatic canals in these interstices. This layer offers towards the apertures a species of sheath, into which the nervous papillæ obliquely penetrate.

Prominent, slightly concentric, and parallel lines, which separate the furrows, are marked on the external surface of the epidermis. On examining these lines by means of a magnifying-glass, they alternately present little papillary eminences, and slight depressions, which correspond to the orifices of the hydropherous canals. There are in general from four to six on each line. It is easily perceived that these prominent lines are formed of scales, which overlap each other in such a manner, that in the movements of contraction, for example, these scales advance upon each other, in the same way as those of a fish or reptile, whilst by the movement of extension they separate, and leave the bottom of the furrows exposed.

The skin presents this arrangement, especially at the points where folds are usually produced, as in the fore-arm, ham, groin, &c. The corneous substance in man is of a dull white colour, transparent, elastic, and essentially hygrometric. This layer being much thicker in the whale, can be studied with great facility. This epidermic tissue (and we thus name all the corneous matter which is situated above the cutis, which is ordinarily described as the epidermis mucous, or reticular substance of *Malpighi*) is shining, spongy, and of a more or less deep gray colour when regarded in its totality. Viewed with the naked eye, two layers are perceptible, the one formed by lamellæ parallel to the plain of the dermis, the other composed of straight fibres perpendicularly placed between the cutis and exterior layer. The white threads of the nervous papillæ, enveloped in their sheaths, appear through the thickness of this dark gray tissue, and the inferior surface of the horizontal layer seems pierced with apertures or depressions, according to the height at which this layer for the passage or reception of these little papillary cones may be considered.

In order to analyse the epidermis, it is necessary to select one of its perpendicular fibres, and place it in the focus of a lens upon a moistened glass. It is then distinguished that this fibre is composed of a succession of little lamellæ, which are scale-shaped, imbricated, and situated on a very delicate cellular network. These scales are detached with great facility, and it is them that stain the water black under the form of granulations. Each scale, separately considered, possesses the form of a racket or blunt spatula, and presents a narrow and whitish pedicle; the two surfaces are tinged with black. The point at which the horny substance commences is distinctly recognised in the cetaceæ, on account of the black tint of this matter cutting with the whiteness of the dermis.

The development of this tissue is effected from within to without, and is first visible under the appearance of a mucous and almost liquid matter, which gradually solidifies and thrusts before it the superior layers which are already distinctly disposed in scales. The most external layers are, therefore, the most ancient and compact.

Although we have admitted two layers in this epidermic body, one only in reality exists. The following is the cause of this illusion: the vertical fibres which arise from the surface of the cutis become inclined, shortly after having traversed a certain space, and finally become horizontal; the scales which they constitute naturally form what is in general called the epidermis, which organ is only, according to our idea, the most superficial layer of the corneous tissue. The sudoriferous canals curb themselves in the same way as the scaly fibres of the horny tissue, and as they open more or less obliquely beneath the last scale of the horny tissue, their orifices are only perceptible on elevating this scale. An attentive examination of all the shapes that the epidermis assumes, has taught us that its differential forms are merely owing to this mode of production, and that all are formed by the elementary fibre, which we have just described. This corneous layer, which comprehends the epidermis and rete mucosum of various authors, is constituted in man in the same manner as

in the cetacea. Two elements which are furnished by two different organs of secretion, enter into the composition of these parts; the one employed in the elaboration of the colouring matter, the other in the production of a substance apparently mucous. We have also detected the existence of twigs perpendicular to the cutis, which gradually incline, in order to become horizontal on approaching the superficies. The existence of scales was equally verified, and if our limits would enable us to make known a long series of researches, we could clearly demonstrate that the skin of all vertebrated animals which have been submitted to our inspection presents a similar organisation.

6th. Organs which secrete the colouring matter, or chromatogenous apparatus. This little apparatus is situated at the exterior part of the cutis, at the bottom of the furrows, and above the prominent lines of papillary bodies. Its superior portion is surmounted by a great number of short excretory tubes, which terminate at the bottom of the furrows, and pour their colouring matter into this situation. Its inferior surface is roughened by capillary vessels in connexion with the excretory canals of the glands which secrete the liquid matter, the condensation of which constitutes the horny substance, or corpus mucosum of Malpighi. The structure of this secretory organ appears to be areolar, spongy, and resistant; its own peculiar parenchyma and excretory canals are sometimes of a florid red colour, being essentially vascular. They form a limit which the arterial system cannot surpass, this system ceasing to exist at this point. On lacerating this tissue, an infinity of small filamentous tubes are discovered, from which scales or colouring granulations escape. This reservoir exists in no other parts of the cutis.

This parenchymatous tissue may therefore be considered as a glandular organ, formed of a substance peculiar to itself, which is penetrated by capillary vessels, and from which arise excretory ducts, terminating at the same point as those of the gland destined to secrete the horny matter. These little canals or ducts belonging to the organ which elaborates the colouring matter, pour this pigmentum into the substance which forms the horny layer, or corpus mucosum of Malpighi.

In the skin of the cetaceæ it is distinctly seen that the dark colouring matter is excreted a little before it appears on the exterior of the cutis; that is to say, that at about half a line before its exit it is found enclosed in a capsule, on whose surface are observed little whitish papillæ, which are closely embraced by this membrane: these are the excretory canals belonging to the glandular chromatogenous apparatus or organ which secretes the colouring matter.

Conclusions.

If this cursory recital has been correctly understood, it would appear to result, from our long and difficult labours, that we have discovered numerous conformations of the highest importance, which will produce greater precision and exactitude in the appreciation of the laws which govern inervation, perspiration, or cutaneous exhalation, colouration of the skin, production of epidermic tissue and their appendages.

Thus we have endeavoured to prove, first, that there exists in the skin an apparatus adapted to the secretion of perspirable matter, composed of a glandular parenchyma which elaborates this liquid, and of ducts by which it is exhaled. These excretory canals are arranged in a spiral manner, and open very obliquely beneath the scales of the epidermis. Secondly, that the organs of absorption differ in some respects from the lymphatic vessels or veins, with which they however appear to communicate. These organs present the form of transparent ducts, which possess an extreme fragility, and form ramifications or little communicating loops, in which we were unable to detect any terminal orifices adapted to absorption. This circumstance inclines us to believe that this function is incapable of being performed by suction, but results rather from imbibation, or from a mechanism analogous to that of endosmosis. Thirdly, that the medium in which these canals are distributed is a substance produced by true secretion, which being strongly hygrometrical, form a body, by means of which the phenomena of that which we still call absorption are capable of being effected. This absorption is more promptly and easily performed by the mucous surfaces, only because in these tissues the mucosity, which we compare in many respects to the epidermis, is less dense, and more readily mixed with the liquids which are required to

be absorbed. Fourthly, that the papillary bodies are essentially nervous, and that the filaments, which enter into the composition of each papilla, do not terminate in the formation of a bundle, in which each twig would be free and isolated, but the ramusculi appear to present terminal loops or arches. Fifthly, that the papillæ are enveloped by a distinct membrane, and by a layer furnished by the corneous substance of the epidermis. Sixthly, that sanguineous vessels, much less voluminous than the nervous filaments, penetrate this substance. Seventhly, that the different horny layers of the epidermis constitute a peculiar apparatus composed of an organ of secretion, and of a product arranged in fibres, which are ar first perpendicular to the cutis, but which afterwards become horizontal. These fibres or little twigs result from a superposition of small scales, and the epidermis, properly so called, is only the extremities of these fibres, which are the most distant from the cutis. Eighthly, that absorbent canals and nervous papillæ are expended in this epidermic substance formed by squamous prolongations. Ninthly and lastly, that, independent of the secretory apparatus situated in the epidermis, there exists in the skin, towards the external surface of the cutis, a small apparatus for the secretion of the colouring matter.

Foreign Medicine.

Incision of the Urethra for Fistulæ.

BY M. VIGUERIE.

A PATIENT affected with numerous urinary fistulæ having allowed a portion of a bougie to escape into the bladder, M. Viguerie, sen., surgeon in chief to the Hôtel Dieu de Toulouse, performed the perineal section. The urine flowed through the wound for forty days; but, after that time, it passed through the urethra; the fistulæ were cured spontaneously. This cure, effected by chance, led M. Viguerie to think that an incision upon the urethra might be had recourse to in some cases of obstinate fistulæ; and he has accordingly made trial of this operation in two cases. The subject of the first operation had long suffered from fistulæ, which had obstinately resisted the introduction of a sound. For three weeks after the incision was made the urine escaped by the wound, after which it returned to its proper channel: the fistulæ rapidly got well, but the wound was seven months cicatrising. The second patient is still under treatment in the hospital. New facts are necessary before any judgment can be formed on the merits of the operation; but the disease, for the cure of which it is recommended, is so obstinate and distressing, that any new suggestion for its treatment is deserving of favourable consideration.

Colchicine.

This alcali is stated by MM. Geiger and Hesse, who have succeeded in obtaining it, to crystallise in slender spires, and to possess an extremely bitter taste. Taken into the nostril it does not excite any irritation, whilst the least portion of veratrine causes violent sneezing: it is, however, equally poisonous with the latter, as the following experiment showeth. A tenth of a grain, dissolved in a small portion of weak alcohol, was given to a cat about six weeks old; in a short time froth appeared about the animal's mouth, and in the course of an hour it was violently purged; it then vomited, tottered in its walk, fell, rolled from side to side, uttered moaning sounds, and appeared agitated with convulsive movements. These symptoms increased in severity, and caused death at the end of twelve hours. The intestinal canal was found inflamed, and there was effusion of blood throughout its whole extent. For the purpose of comparing the effects of this substance with veratrine, the twentieth part of a grain of the latter was given to a cat a little younger than the former;—the animal was affected in the same way, but more rapidly, for it died in ten minutes. The superior part only of the œsophagus was found inflamed, an appearance which was not observed in the cat poisoned by colchicine.—*Journal de Pharmacie.*

Hyoscyamine.

It is from the seeds of the hyoscyamus niger that this substance, which is formed in transparent needle-shaped crystals, is extracted. Its savour is acrid and disagreeable, like that of tobacco, and its actions are equally poisonous with that of *atrophine*. The least portion placed on the eye causes a dilatation of the pupil, which remains for a considerable length of time. In a dry state it is not an alcali, but by the addition of water it soon becomes so.

Daturine.

The same chemists, MM. Geiger and Hesse, have extracted this alcali from the *datura stramonium*. It crystallises in the form of small, colourless, and brilliant prisms; it is free from odour; its taste is at first slightly bitter, but afterwards very acrid; it is very poisonous, one eighth of a grain sufficing to kill a sparrow in three hours. It possesses an action over the pupil of the eye similar to that of hyoscyamine.

Table of the number of Vaccinations in France, from 1828 *to Jan.* 1833.

Years.	Number of Vaccinations.	Number of Departments.
1828	349,143	53
1829	296,132	52
1830	253,972	44
1831	214,360	40
1832	362,834	55

The Influenza in Paris.

For the last ten or twelve days an epidemical complaint has attacked most of the patients in Salpetriere. From the striking resemblance it bears to the influenza which preceded the cholera in 1832, its intensity, the number of persons attacked, and its extension to some individuals in the town and in the department of Seine et Oise (Arpajon, Montlhéri, &c.), it merits the attention of practitioners.

It commenced in Salpetriere among some of the incurable patients in St. Leon Ward, the least healthy division of the establishment. Since that time it has extended through most of the wards, and has in many cases terminated fatally. It commences, in general, by pain in the throat, shivering, and cephalalgia; in slight cases the symptoms subside at the end of three or four days, but sometimes far different is the result; the disease becoming rapidly aggravated, attacking the head, chest, or abdomen, and frequently terminating fatally in twenty-four hours.

The principal appearances observed on making post-mortem examinations in this disease, have exhibited inflammation of the larynx and trachea, more or less acute, and extending in some instances down to the divisions of the bronchial tubes, engorgement of the lungs, red or grey hepatisation, &c. In other cases in which there has been vomiting and constipation, but no pain in the epigastric region, there was redness of the stomach and intestines, either in patches or along the whole extent of the intestinal tube. In a third class of cases, where the symptoms seemed principally referable to the head, and which were most quickly fatal, injection of the brain was found. The symptoms of affection of these different organs have been in many patients combined; and when such has been the case, the disease has invariably terminated fatally.—*Journal Hebdomadaire.*

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, April 12*th*, 1834.

Dr. Copland in the Chair.

Artichoke and Colchicum in Rheumatism—Ovarian Dropsy.

The minutes of the preceding evening having been confirmed,

Dr. Epps brought forward a motion on the inexpediency and injustice of granting exclusive privileges to any University not enjoying exclusive advantages.

After some discussion it was determined that the consideration of the question, originating in consequence of certain proceedings which had taken place, during the last week, in the city of London, should be deferred until next Saturday.

Dr. Epps asked if any gentlemen present had tried preparations of artichoke in rheumatism?

Mr. Chinnock had received a letter from the country extolling the anti-rheumatic effects of this medicine, and stating that used in this disease it was never known to fail.

Dr. Addison thought that much doubt was to be entertained of the virtue of any medicine which was stated to be universally successful. In giving colchicum he had lately found a peculiar condition of the heart brought on by its administration, but he had been assured by Dr. Jackson, of America, who was then accompanying him round the wards of the hospital, that such symptoms were always looked for by the American practitioners. If the artichoke possessed the same properties of arresting disease which colchicum did, he thought it would be an invaluable medicine.

Dr. Epps did not think that, in speaking of

the merits of colchicum, sufficient justice was done to Mr. Haydon, the first person who had used it in inflammatory diseases;—in the work on this subject, published by the above-mentioned gentleman, it was stated that this medicine should be given in powder with saline purgatives, and should be continued until stools were produced.

Some further observations on this topic having been made,

Dr. Addison related the following case:—A woman, æt. 40, had suffered for four or five years from ovarian dropsy, when the sac burst and induced peritoneal inflammation and great distress; the abdomen increased in size, but the swelling there was not partial but universal. The inflammatory symptoms were subdued, and after some time it was perceived that the abdomen gradually became less, and seemed to be undergoing the same process which surgeons expect to take place in hydrocele; the tumour can now be traced into the iliac fossa, but much diminished in size. In general, the contents of ovarian dropsy were not of a sufficiently irritating nature to cause inflammation, as in the case mentioned last week by Dr. White. Wounds of the stomach might be recovered from, but if the contents escaped into the abdominal cavity, the accident would in general terminate fatally.

A Member related a case, in which the fluid, to a considerable amount, had escaped into the peritoneal cavity, from an opening in the stomach, without causing any inflammation.

After which the meeting separated.

The following motion was moved, seconded, and carried by the Society, and the subject to which it relates is to be discussed at the next meeting:—

"That the bestowal of a charter upon any university, with power to the medical faculty thereof to confer medical degrees, will be a most injurious manifestation of the exclusive principle, which, by conferring on the lecturers (themselves constituting the medical faculty) an exclusive advantage,—an advantage quite independent of their skill as lecturers,—will prevent not only the exercise of a fair competition between these lecturers and those of other institutions not so favoured, but will also tend, as diminishing this competition, to injure the university itself, by inducing students to enter thereat, not so much from the excellence of the lectures delivered, but on account of the twofold circumstance that the lectures of such lecturers have adjoined to them the peculiar advantage of qualifying for an examination for a degree, and that the lecturers themselves constitute the medical faculty to examine their own pupils; thus removing so many motives to exertion from the minds of lecturers themselves."

MEDICAL SOCIETY OF LONDON.

Monday, April 14th, 1834.

W. Kingdon, Esq., President, in the Chair.

Production of Syphilitic Symptoms from the Use of Mercury.

In continuance of the discussion of last Monday Mr. Kingdon related two cases, tending to prove that mercury would produce in the system symptoms analogous to those caused by syphilitic poison.

Dr. Johnson did not think either of these cases at all conclusive; it was a well-established fact, that ulcerations of the throat, such as those which formed the principal feature in the second case, when once established in the system, would appear at intervals of a year, or even less, when no mercury had been given.

Dr. Whiting coincided with Dr. Johnson in his views upon this subject, and expressed his opinion, that the idea of mercury producing in the system symptoms analogous to the venereal disease, was totally erroneous.

Mr. Clifton thought that the exhibition of mercury might produce peculiar states of the constitution, favourable to the development of syphilis, but there was not sufficient evidence to prove that venereal symptoms were ever caused by mercury, for the occurrence of this disease, after the exhibition of mercury, did not prove that the disease arose from its use.

Mr. Dendy referred to two cases in the Medico-Chirurgical Transactions where tubercular eruptions appeared after mercury, and which were in his opinion caused by the mercury; he conceived that this medicine might produce dubious appearances by lying latent in the system, and if applied to crude sores would cause a phagedænic tendency which might be called disease.

Dr. Johnson had had many opportunities of seeing men go into battle with their mouths affected with mercury, and had observed that, when wounded, the sores in such patients healed even more rapidly than in others not so affected.

Mr. Stevens had seen mercury cause various symptoms, but did not conceive that it ever produced disease resembling syphilis.

Mr. Headland said the ambiguous appearances, which mercury caused, would show the ambiguity of the subject;—he had seen nodes produced after taking three grains of mercury, the periosteum being in the first instance affected.

After some further observations by Mr. Jones and Dr. Johnson the Society separated.

THE LONDON UNIVERSITY HOSPITAL.

A museum consisting of specimens and preparations of morbid anatomy, midwifery, and various casts, with numerous prints and drawings, has been presented to the London University, for the use of the students of the new North London Hospital, which will be opened at Michaelmas with 110 beds, by Gore Claugh, Esq., of Upper Norton-street, Fitzroy-square. The museum cost 3000*l*. This is a noble bequest, and shows a kind feeling to an institution founded on liberal principles.

THE PARLIAMENTARY INQUIRY.

On Tuesday last Sir David Barry, Sir George Tuthill, Dr. Holland, Dr. Paris, and Dr. Hume were examined. On Wednesday, Dr. Stanger, Dr. Tweedie, and Dr. Copland. On Thursday, Dr. Henderson, Dr. Farre, Sir W. Knighton, Dr. Birkbeck, Dr. James Johnson, and Dr. James Clarke. On Friday Dr. Ramadge is to be examined. Next week, Sir Astley Cooper, Mr. Guthrie, Mr. Brodie, and Mr. Green will be examined.

We are delighted, but very much surprised, at the complete knowledge which Mr. Warburton possesses of all medical abuses. Had he been a member of the profession, nay President of the College of Physicians or Surgeons, he could not be better acquainted with the subject. We feel perfectly convinced that a radical and most beneficial reform will be effected in all the branches of the medical profession; such as will promote the interests of science, while it protects and secures those of the public. We see no reason why it should not be accomplished this Session of Parliament.

THE
London Medical & Surgical Journal
Saturday, April 19, 1834.

THE MEDICAL PROFESSION IN ENGLAND.

Under this imposing title a pamphlet has just issued from the political press, to which, as the first publication in defence of things as they are, we are in justice bound to call our readers' attention,—although, in doing so, we give it a notoriety beyond what it solicits. It is, in truth, intended merely for the members of the legislature, in order to counteract the effect of some observations, made in both Houses, upon the presentation of the petition of the Licentiates. It is undoubtedly the manifesto, of which the appearance was revealed to a confidential cotemporary on a late occasion, and repeated on its authority by us. We shall analyse its contents for the satisfaction of the profession.

After prefacing with Lord Durham's speech upon presenting the above petition, the pamphleteer states his object to be to examine the truth of the allegations of that speech, and of an assertion made in the House of Commons, that the science of medicine in this country, as compared with its condition on the Continent, is in a state of the greatest barbarism.

This last assertion is refuted to the satisfaction of dukes, marquises, &c. by the simple fact, that almost all families of distinction, on going abroad, take with them medical men of their own choice, and of their own country!

As to the comparative supply of physicians, in reference to the population of the different capitals, London, Paris, and Berlin, a point which attracted Lord Durham's attention, the pamphleteer argues thus:—

"What is meant by a physician in

England is a very different person from him who is so designated on the Continent. For physicians, in the present English acceptation of the term, the demands of the public are not great; but if men are called doctors abroad, who having had the education of apothecaries, are content with the remuneration of apothecaries, their numbers will necessarily be great; but call themselves what they will, they are in fact minor practitioners. Any forcible attempt, on the part of the legislature, to bring about such a change here would probably be impracticable, so long as the country retained the least trace of civilisation and intellectual superiority."

Of course it is unnecessary to expose the utter ignorance displayed in the passage just quoted, of the medical schools in France and Prussia. A writer, who can make such observations, is sure to find an analogy in the present demand of reform in medical education to the supposed conspiracy of the *workies* in America against an aristocracy of knowledge. (p. 7.)

It is impossible to state, within reasonable limits, the precise object of the cursory remarks which occupy the rest of the pamphlet. After stating that the public is not in the slightest degree interested in the denominations of the profession, the next question of importance set forth is—

"How to maintain, in a *high* station, the medical character for the benefit of the public, that they may have persons of *high* abilities, generous and honourable feelings, and of perfect integrity, to whom they may apply for assistance and advice in the most serious distresses of private life. The question for the *educated* and *informed* public is not as to mere qualification for the administration of remedies, but whether they will be honestly and conscientiously administered, and whether the administrator of them is one who, by his conduct and propriety of behaviour, is fit to be the confidential adviser of a family."

But how is the public to be assured the medical practitioner possesses the requisites of skill and character? By comparison says the pamphleteer, and for the purpose of that comparison there must be created

"A *high* order of well educated medical men, bred up in the honourable feelings of gentlemen, with acquirements which belong to the scientific, the literary, and most polished orders of society."

There is nothing particularly exclusive in all this; and to those who are unacquainted with the style of Sir Henry Halford, and who cannot detect the undercurrent of his application of the sounding epithets, is there in it any thing peculiarly appropriate to the Fellows of the College of Physicians? But a few pages afterwards the application is pointed in a manner not to be mistaken.

"If the man, who has studied several years in *an* university, and qualified himself with every accomplishment which the best education of *this* country affords, is to be upon the level of a five years' apprenticed apothecary, who has lived behind a shop board, mixed up and dispensed medicines according to the order of his master, attended as many lectures as may enable him to pass an examination, and to be licensed as soon as he has attained the limited age;—why then there will be none but the lower order of practitioners."

We agree with the President in his conclusion;—but we ask, as has been asked elsewhere, does an university degree certify the possession of these rare accomplishments? and to whom, but to one versant in stratagems, whose high moral character can bend to—misrepresentation, when it suits his purpose, does the level-

ling system belong, which is stated with such insinuating address?

As to the plan, that there should be a Board to examine and license all medical men, that is despatched in a few words; it is stated to be "absurd enough. The Board, indeed, to use a homely simile, may furnish joiners and carpenters but will supply no cabinet-makers, nor call into existence any architects, who will understand the difficulty or intricacy of disease, as it affects the complicated machinery of the human frame."

We have almost exhausted our patience in criticising such matter; but we cannot forbear adding a word relative to the distinction of *Fellow* and *Licentiate*. On this subject the positions of the pamphleteer finish his labours. He did well to reserve the climax of absurdity for the close of the pamphlet. The profession, it is stated, has by no means *exact* notions of the distinction, and as to the public, whose good opinion is worth having,—

"It seldom happens that they send for the College list to examine whether the Doctor is a Fellow or a Licentiate. How then does it happen, that in this great metropolis, a large portion of the leading physicians are in the class of Fellows? The answer is ready and obvious. They have almost all of them been brought up at the English Universities, where, in the course of a *liberal* and *classical* education, they have had early opportunities of forming valuable friendships and extensive acquaintances with those destined, in after life, to fill *high* situations in society, with whom they have imbibed the *same* feelings, formed *congenial* habits, made *similar* acquirements in *science* and *literature*, &c. A few are admitted into the Fellowship by other modes of election;—*and with what feelings does the College regard such a preference?* Surely none of envy or of jealousy. They choose a man already eminent in his profession; and, by this preference and distinction, do not think they make him a more dangerous rival; but conceive that they only add *to the respectability of their own body, at the same time that they pay him a compliment.*"

We hope we have afforded our readers some amusement from the tone and temper of the extracts we have made from the President's defence. The conventional language of *high life*, which pervades the pamphlet, is in admirable keeping with the utter indifference it displays to the necessities of society at large,—of the people; and the assumption of peculiar refinement, as distinguished from manly bearing, is more than paralleled by the effrontery of the claims it asserts for the little coterie it defends to superior medical attainments.

THE UNIVERSITIES.

The spirited and enlightened conduct of the Cambridge petitioners has, as was to be expected, produced a reaction upon the little elements of bigotry; and we understand an effort is to be made to present a University petition to a reformed Parliament, in favour of intolerance.

"When the sun shines, flies think of coming forth."

We hope the representative of the medical faculty at the Caput will, by the exercise of his veto, save a learned body from such a disgrace *. Matters are come to that crisis, that the legislature must interfere. The ebullition of party spleen cannot counteract the course of justice, and may provoke animosities and jealousies which it would be difficult to allay.

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* We have since heard Dr. Hewett has acted with becoming spirit. There can be no corporation petition.

The London University has received a liberal accession to its museum; and what is of still greater importance to its interests, the City has resolved to support its petition for a charter of incorporation. To the extent of degrees in literature and science we are its hearty well-wishers; but, we must again protest against any grant of the power of conferring medical degrees to it, or to any particular school of medicine. We shall return to this subject if we see occasion.

From a pamphlet we have just received from Edinburgh*, it seems the rival parties of Professors and Private Teachers at that city carry on their war of invective with much spirit, but to very little use. Our northern brethren require to be informed, that a Committee is actually sitting in London, which will unquestionably take into its cognisance their mutual complaints.

THE PARLIAMENTARY COMMITTEE.

It is announced by the very highest authority, that the "Fellows" of the College of Physicians have been *roused into increased excitement* during the progress of the Parliamentary Inquiry. This singular advertisement must undoubtedly induce a large flow of visiters to the Committee Room, under the expectation of seeing some interesting specimens of corporation irritability when the fit is on; and, sooth to say, it is possible the curious may be entertained or grieved with many an exhibition of irritated self-interest, of bigotry convulsed,—the consequence, we presume, of increased excitement,—of, in short, the desperate struggle of dying monopoly; and, according to their tempers, they may despise or pity the wretched exposure of assurance and inconsistency, into which a false position leads persons reputed honourable, and justly respected in their private relations. The *morality*,—to use an expression now notorious for its abuse,—the morality of corporations or societies is very distinct from the morality of individuals. Conscience the former have none, other than the most exclusive self-interest; and responsibility is so subdivided, that his share sits lightly upon each member.

But what shall be said of the imputation the same authority has ventured to throw upon the honourable Chairman of the Committee?—That he has lent himself to the malice of certain exclusives! We know nothing of associations—we are averse to coteries of all descriptions—we know nothing of the business, but that we have exclusive confidence in the integrity and honour of Mr. Warburton, and the rest of the Committee. But is it not truly ridiculous to hear complaints about the quality of witnesses called, when it is palpable every possible interest has its representative in the Committee, who may call whom he pleases. There is no pleasing some people, beat high, or beat low. Something analogous to this takes place in other operations beside flogging. Some of the persons whose assistance was needed have been called. —What then?

Reviews.

Traité des Maladies des Enfans nouveau-nés, et a la Mamelle, fondé sur de nouvelles Observations Cliniques, et d'Anatomie Pathologique, faites a l'Hôpital des Enfans-Trouvés de Paris, dans le service de M. Baron. Par C. M. Billard, D.M.P., Membre de Plusieurs Societés Savantes. Deuxieme Edition, augmentée d'un Memoire Médico-Légal sur la Viabilité du Fœtus; avec des Notes, et un Notice sur

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* Refutations of Some Misstatements respecting the University of Edinburgh. 1834.

la Vie et les Ouvrages de l'Auteur, par M. Ollivier (D'Angers). Paris et Lond., 1833. 8vo. pp, 728. J. B. Baillière.

A Treatise on the Diseases of New-born Infants and those at the Breast, founded on Clinical Observations and on Pathological Anatomy, made at the Foundling Hospital at Paris. By C. M. Billard, M.D., &c. Second Edition. *Enlarged by a Medico-Legal Memoir on the Viability of the Fœtus, with Notes, and a Notice of the Life and Works of the Author.* By M. Ollivier (D'Angers).

This work differs from those which have preceded it, in being based on pathological anatomy, and proves its author to have been possessed of indefatigable industry. Before we institute a comparison between it and extant productions on the same subject, we shall inform our readers of its contents and of its merits. It consists of two parts, arranged as follows:—Part I. contains six chapters, with introductory remarks, entitled "Study of the General Phenomena which the exterior Examination of the Infant presents." Chapter I. Attitudes of the Infant; II. Coloration of the Integuments; III. Fall of the Umbilical Cord; IV. Exfoliation of the Epidermis; V. Of the Size of the Infant and its Weight; VI. On the Means of Expression of the Infant: art. 1. Of the Cry, considered in relation to Semeiology: art. 11. Expression of the Physiognomy; VII. Of the State of the Pulse in Infants; VIII. Of the Feebleness at Birth. Part II. contains seventeen chapters—"History of Particular Diseases." I. Of the Diseases of the Skin; II. Of the Diseases of the Digestive Apparatus; III. Of the Diseases dependent on the Intestinal Canal; IV. On the Diseases of the Urinary Apparatus; V. On Peritonitis; VI. On Ascites; VII. On Hernia of the Abdomen; VIII. On Diseases of the Respiratory Apparatus; IX. On Diseases of the Circulatory Apparatus; X. On Diseases of the Cerebro-Spinal Apparatus; XI. On the Diseases of Locomotion; XII. On Diseases of the Organs of Generation; XIII. On Diseases of the Lymphatic System; XIV. On Diseases of the Eye; XV. On the Jaundice of New-born Infants; XVI. On the Accidental Tissues of New-born Infants; XVII. Alteration of the Blood. The Medico-Legal Dissertation on the Viability of the Fœtus, considered in relation to the Pathology of the new-born Infant, concludes the work.

We are bound to add our testimony in favour of the admirable execution of this work so far as it extends; but we cannot agree with some of our contemporaries, that it exceeds every other on the subject. We are not, however, surprised at their declarations, because it is manifest to us they are unacquainted with those works which are far more comprehensive and useful. Of all the reviews of this work which we have perused from the pens of our contemporaries, that of the Glasgow Medical Journal is the fairest and best. It clearly demonstrates the insufficiency of M. Billard's work. In this production the Physical Education or Management of Infants is entirely omitted; though treated of, we admit, very imperfectly, by Underwood, Dewees, Hamilton, and Burns. So far as this most important subject is concerned, the works of Capuron, Underwood, Dewees, and Roberton, are infinitely superior to M. Billard's. But our worthy contemporaries overlook this part of infantile medicine; they reason but to err. They seem to be ignorant of the importance of the physical management of infants, upon which depends the proper development of mind and body, of the health, happiness, and misery of man. They forget that millions of human beings are annually, we think we might almost say daily, destroyed by bad management, by errors in clothing, by imprudent exposure to the vicissitudes of the weather, by bad air, filth, and every form of mismanagement. They overlook the immense mortality of infants from this cause: amounting to one-half in some countries, two-thirds in others, four-fifths where physical education is the best; and yet they pronounce a work which is silent on the proper rearing of infants superior to those which describe it.

But M. Billard's production is founded on pathological anatomy, abounds with a vast number of observations or inspections illustrating diseases of the digestive, respiratory, circulatory, and all the physiological systems, and therefore it is unequalled. Those who have jumped at this conclusion must be ignorant that M. Capuron has arranged the diseases of infants in this manner; and, moreover, by giving an eloquent and unequalled account of their physical education, has produced decidedly the most comprehensive and

useful work on the physical management and diseases of infants. Dr. Dewees approaches him, Dr. Underwood's production is more remote, the works of Dr. Hamilton and Dr. Burns are epitomes, that of Mr. Roberton better than either on physical education, to which, with the mortality of children, it is not confined; but every one of these authors has produced an imperfect work; and, in truth, there is not a complete treatise on infantile hygiene and medicine in our language. It could not be expected that such a work was likely to be published, when our Colleges of Physicians and Surgeons in this United Kingdom, the Dublin College of Surgeons excepted, exclude midwifery and diseases of women and children from the examinations for medical qualifications. It would be foolish to suppose or expect, that students will attend to the physical management of infants, or their diseases, when they are not to be examined on such subjects; and hence we find a universal ignorance among practitioners upon this branch of medicine—hence the lamentable ignorance of parents, who have no guides but ignorant men to direct them in the rearing of infants and the prevention of their diseases. Under all these circumstances, it is no wonder so few have studied the physical education and diseases of infants, and that our best works should be defective.

But, readverting to the treatise which elicited these strictures, we are ready to acknowledge that, so far as it goes, it is extremely valuable, and the result of faithful and accurate observations.

The revered and zealous author illustrates the diseases of which he treats, by several dissections of each class; and these he repeats to an unnecessary extent on many occasions. It was unnecessary to detail three, four, or six illustrations of the same disease in the same tissue or organ, and by this plan augment the size of his book. Some of our readers will, no doubt, think this a great advantage. M. Billard is entitled to great merit for having adduced so many histories of each disease, and added the morbid appearances. In this he is, as far as our researches enable us to judge, unrivalled; and his work will be one of reference and authority; but it does not supersede in utility for study and practice, those which we have already mentioned. It appears to us that there is something more than a knowledge of pathological anatomy requisite, for the inculcation of correct precepts on the physical education of infants, on infantile hygiene, and on the judicious treatment of the diseases of children.

Lectures on the Morbid Anatomy, Nature, and Treatment of Acute and Chronic Diseases, delivered in the Theatre of Anatomy, Webb-street. By the late John Armstrong, M.D., &c. Edited by Joseph Rix, M.R.C.S. 8vo. pp. 851. London, 1834. Baldwin and Cradock.

Few physicians of the present century attained such high and well-merited celebrity as the late Dr. Armstrong, nor made such a deep impression on his brethren by his numerous works. His fame was raised to the highest pitch in Sunderland by his Treatises on Typhus, Scarlet, and Puerperal Fevers, which made a great number of converts to his opinions. On settling in London, the author of standard works of that date found himself rejected for incompetence by the College of Physicians! This body, among whom Jenner and Hooper were not worthy it seems of being admitted as Fellows, had previously refused its licence to Mason Good, and for these and many similar misdeeds is now arraigned by the profession before the Medical Committee of the House of Commons. But the insult to Dr. Armstrong was soon avenged by a liberal and enlightened profession, who espoused his cause, employed him in every direction, and ensured him in a few months a larger practice than that of any of his opponents. It is worthy of remark, that some of his examiners at the College went so far as to state, to non-professional persons, that they considered he was not the author of his own works. But all opposition proved useless; he was ultimately admitted a Licentiate of the College, and recognised as a lecturer on the practice of medicine, by the most powerful of all our medical corporations, the Company of Apothecaries. He speedily became the most popular lecturer of the day, and left every one of the Fellows far behind him. We have now a literal copy of his last course of Lectures on the Practice of Medicine before us, and can declare with truth, it is very far superior to any hitherto delivered, or published, by the elect

of Pall Mall East. We can conscientiously recommend it to the notice of the medical world, for it well deserves high commendation. It bears internal evidence of extensive experience and great judgment. It will be found a valuable acquisition to the profession, and we should strongly recommend students to possess themselves of it. The work is arranged by a man of sound sense, great practical experience, and a very extensive knowledge of the subject,—one who possessed, in no ordinary degree, the invaluable power of communicating the truths of science in a clear, simple, precise yet popular manner, without the slightest garnish of technology, and scarcely with the introduction of a word which is not intelligible to the humblest understanding. But however highly we estimate this production, it is not of a description which we can illustrate by extracts.

French Hospital Reports.

HÔPITAL DE LA CHARITE.

Sanguineous Tumour in the Hand.

In the month of March, 1830, a man, ætat. 57, was admitted into La Charité for a sanguineous tumour, of the size of a pullet's egg, situated at the tip of the little finger of the right hand; it was covered with plastic lymph, but the integuments were deficient over the part; it felt firm, but the slightest touch caused it to bleed freely. The man complained of lancinating pain, which was so violent that it disturbed his repose. There was enlargement of one of the glands in the corresponding axilla. The first appearance of the disease, which was dated thirty years back, was a small black line below the nail of the little finger. This line remained in an indolent state for the space of twenty-eight years, that is to say, until two years previous to his admission into the hospital. At the commencement of these two years, the line began to swell, and became painful; the nail came away, and from beneath, a sanguineous tumour, at first flat, then globular, sprouted forth; during the three months previous to his applying for advice, it had acquired double the volume which it had previously. M. Boyer, who recognised the disease as a specimen of true fungus hæmatodes, disarticulated the finger at the middle phalanx. In fifteen days the patient was discharged cured, and has not since had any return of the complaint. The dissection of this tumour showed a black coloured firm substance, formed by the interlacing of an infinity of capillary vessels in a varicose state; it was observed that it did not adhere either to the bone or periosteum, these two being perfectly healthy.

HÔTEL DIEU.

Similar Case.

A young man, ætat. 18, presented himself for admission at the Hôtel Dieu during the month of October last, in consequence of a tumour situated in the palm of the right hand. It was of the volume of a small hen's egg, flattened, indolent, soft to the touch, apparently without pulsation, and occupying the base of the metacarpal bone of the thumb. M. Dupuytren, judging from its analogy with one which he removed twenty-five years before, considered the disease to be of a lipomatous character, and determined upon its removal. An incision two inches long having been made over the tumour, the bistoury penetrated into a pouch filled with spongy tissue; a considerable deal of hæmorrhage now took place, but this was restrained by applying a small piece of sponge, and then with the aid of a pair of forceps, the tumour was dissected from its adhesions. It appeared to consist entirely of spongy tissue with numerous veins and arteries in a state of dilatation. Repeated hæmorrhages took place from the wound, but compression finally succeeded in arresting these, and a cure, much delayed by the formation of pus in different parts of the fore-arm, was effected in two months.

Tertian Fever.

A printer upon calico, 38 years of age, was admitted on the 29th of March for the above complaint. His residence is at Jouy, situated in a damp, marshy valley, where intermittent fevers abound. He was in the hospital last autumn for a similar attack of fever, but was discharged perfectly cured, and has remained well until ten days previous to his present admission, when he was so much affected by finding one of his comrades unexpectedly dead in his bed, that, the same night, his body became covered with urticaria. On the following day at noon he had a perfect paroxysm of intermittent fever, which lasted nearly four

hours; and from this time the paroxysms returned at regular intervals of two days.

M. Chomel stated to his class, that this was a case of essential intermittent fever, appearing to be independent of all organic lesions, and was one of the cases in which the preparation of quinine acted with marvellous efficacy. A blister with ammoniacal ointment was placed upon the epigastrium; as soon as the skin was raised this was removed, and two grains of sulphate of quinine were applied to the sore. The result of this case has not yet been published.

Foreign Body in the Œsophagus.

A female advanced in years, sans teeth, swallowed a piece of meat, which passed into the œsophagus, and there stopped. M. Pujos found the old lady, a quarter of an hour after the accident, nearly suffocated, breathing with great difficulty, and unable to swallow even the smallest quantity of fluid. Attempts were made with the probang to assist the passage of the obnoxious body, which was situated at the lower part of the neck, but without success. Having tried what art would do, without relief, the case was left to nature, and at the end of twenty hours the food fell into the stomach, the place for which it was originally destined. —*Gazette des Hopitaux.*

Extirpation of a Tumour in the Axilla—Torsion of the Arteries—Cure.

BY M. BERIOL DE VILLIERS, NIEVRE.

Beauchef, ætat. 34, had been troubled for more than a year with a large scirrhus tumour in the left axilla. It had existed for some years, but about twelve months since it had attained the size of a walnut, and became painful. On the 3rd of February, 1834, the tumour was carefully dissected out. During the operation a branch of the thoracica long was divided, but ceased to bleed as soon as torsion was applied; two other large arteries were cut and twisted successfully. No hæmorrhage occurred, and seven weeks after the operation the patient was discharged cured.

British Hospital Reports.

WESTMINSTER HOSPITAL.

Hare-Lip and Cleft Palate.

A FINE boy, of interesting appearance, about six years of age, was brought to the hospital on March 29th, in order to be operated on by Mr. White for hare-lip. In addition to the hare-lip, there was also a broad fissure extending entirely along the soft and bony palate. When the child was only a month old he was unsuccessfully operated on by Mr. Alcock. No further steps were taken from that time up to the present, the health of the boy being generally good. Much inconvenience, however, resulted from the deformity, and his enunciation was completely unintelligible, except to those constantly in the habit of being near him.

The surgeons of the hospital consulted on the subject, and Mr. Guthrie gave it as his opinion, that something more might be done than merely operating for hare-lip, and mentioned the operation, staphy corrpapihid, which he once performed successfully on a young lady, 17 years of age. The operation consisted in passing ligatures through the soft palate, freshening the edges and bringing them together. Mr. White said he had never seen the operation performed, and wished to transfer the operation to Mr. Guthrie for the succeeding Saturday, April 5th.

Previous to the arrival of the child, Mr. Guthrie explained the nature of the operation which he was about to perform. He exhibited a small curved needle, armed with a ligature, the eye end of which needle was placed between two blades of an instrument, called the porte-aiguille, and secured by a movable slide. The needle was to be passed through one side of the soft palate, and held by a pair of dressing forceps, the slide then being drawn back, the needle can be drawn through, and being again fixed in porte-aiguille, the same operation is to be performed on the other side; two ligatures generally require to be passed; the edges of the soft palate are to be removed with a bistoury or pair of scissors; the ligatures are then to be tied and cut short. The patient is to be kept on exceedingly low diet until the ligatures have separated; during the operation the patient is to be held as steady as possible, otherwise the instrument may pierce the pharynx or elsewhere.

When the child was introduced, the ligatures were applied with great trouble; the boy bore this part of the operation with great fortitude, but afterwards became so very much agitated and alarmed, that it was found advisable to remove the ligatures, and the operation was postponed to some future period, when, it is hoped, the patient will be better able to appreciate the immense advantages which in all probability would result from the performance of this novel but ingenious operation.

The feasibility of the operation has been clearly proved by the instance quoted by Mr. Guthrie. Thus it is sufficiently evident, that it is merely necessary that the patient should have arrived at that time of life, when he sees the necessity of submitting patiently to the knife of the operator, in order to render this a very useful operation.

ST. GEORGE'S HOSPITAL.

Vascular Tumour of the Lip.

Thomas Heffenden, æt. 20, was admitted into Ratcliffe Ward, originally, we believe, under the care of Mr. Babington, but was afterwards transferred to the care of Mr. Brodie. His countenance is very much deformed from there being an extensive puffy swelling of the

whole of the upper lip and of the right side of the face. The inner surface of the lip is completely lifted up and coated, the swelling and enlargement extending on the right side over the antrum to a line even with the lower eyelid, where the cuticle covering it is hard and indurated to the touch, and he very naturally complains of a great deal of pain in the cheek.

The history which he gives of this somewhat singular case is this:—He says that, as well as he can recollect, there has always been some degree of swelling there; that it therefore began when he was a child, and he remembers that it increased much after receiving a blow on the lip from falling against the sharp edge of a chair. When it first attracted his attention it was soft and pulpy in consistence, and of the size of a horse-bean, and always gave him pain up to within the period of the last month. He once had some leeches applied to it, and it was cut open, but no good result followed from this, and it has continued steadily and gradually to increase up to the present time. At present the oral extremity of the lip is two inches thick, and there is a corresponding swelling, but not of the same thickness, up the whole cheek. There is no unusual pulsation or heat of skin to be felt on the surface, but the tumour is evidently vascular in its nature, and the capillary vessels of the part are highly injected with blood. Gradual and steady pressure empties the tumour of blood, and the lip then appears flaccid, but the moment this is removed it refils, and becomes again as large as ever.

6th. Mr. Brodie punctured the tumour in several places with a needle, and a large quantity of blood flowed from it. He complains of a great deal of pain in the cheek, which is rather inflamed. Pulse quick and hard; tongue yellow and furred.

℞. Lotio spirit. parte affect. applicand.
Haustus sennæ cras primo mane sumend.

9th. An abscess which had been previously projecting over the region of the right antrum burst to-day internally, on the inside of the cheek, and discharged a large quantity of matter, which he says has relieved him very greatly, and the swelling of the cheek has in consequence partly subsided.

℞. Hydrarg. submur. gr. iv.
Pulv. antimonial. gr. v., statim sumend.

℞. Haust. salinæ, ℥iss. vin. antim.
Tact. ♏xx. sextis horis capiend.

12th. There is a very free discharge from the abscess; he complains of much bodily weakness; the pulse is rather quick and sharp; the tongue clean and the bowels open.

He thus continued to progress for some time, there being very little done for him either one way or the other; indeed, we almost doubted whether Mr. Brodie intended to do anything for him until towards the beginning of March, when several punctures were made into the texture of the lip, and a large quantity of blood was lost, but apparently without any effect in diminishing the size of the lip, although each operation appeared to cost the man considerable pain.

March 14th. The effect of the last puncture has been to cause the man considerable swelling of the whole lip and right side of the face. Pulse quick and full; tongue furred; skin hot and feverish. Ordered to be kept in bed and to take the saline draught of the hospital every six hours.

Mr. Brodie remarked, that he had a case somewhat similar to this (though situated in a different part of the body—the eyelid) at present under his care; it was of course impossible to puncture it, and he was passing setons through it with the best effect; the parts were agglutinising and solidifying together very favourably.

16th. The tumour, though not much diminished in size, is evidently less vascular; and the patient's general features wear a more pallid appearance, from the loss of blood which he has sustained at different times by the punctures; his general state of health is better, and the attack of fever, under which he was labouring at our last report, has subsided. He complains very bitterly of the pain, which affects the globe and surrounding parts of the right eye, after each operation of puncturing the tumour, and begged very hard to be allowed to leave the hospital, adding that he would rather bear with the inconvenience of the tumour, than be put to such horrid torture. Mr. Brodie pointed out to him that the pain of which he complained so greatly, arose from the abscess in the cheek, and not from the vascular tumour in the lip*; and that he had much better remain in the hospital, and let every remedy be tried for him that could be, and further remarked, that it was very uncertain whether his case could be cured or not.

Mr. Brodie requested that the other surgeons would see the case and give him their opinion upon it, but this the patient prevented, for finding that nothing very beneficial could be done for him, he left the hospital.

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, April 10th.

William Bell . . .	Pocklington.
Johnstone Vicars . .	Exeter.
Edwin Skeate . . .	Bath.
William Blaxland . .	Lynstead.

* This could scarcely have been the truth, as the pain, if caused by the abscess, must have been constant, whereas the patient only complained of it after each puncture was made in the lip; the pain was most probably caused by injury done to some of the nervous filaments supplying the upper lip, communicating with those that go to the lower eyelid.—REP.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON FOR THE ENSUING WEEK.

Sat.	Westminster Med. Society	8 P.M.
	Royal Asiatic Society . .	2 P.M.
Mon.	Medical Society of London	8 P.M.
	Harveian Society . . .	8 P.M.
	Phrenological Society . .	8 P.M.
	Royal Geographical Society	9 P.M.
Tues.	Medico-Botanical Society .	8 P.M.
	Medico-Chirurgical Society	½8 P.M.
	Institution of Civil Engineers	8 P.M.
	Zoological Society . . .	½8 P.M.
	(*Scientific business.*)	
Wed.	Royal Society of Literature	3 P.M.
	Society of Arts	½7 P.M.
	Geological Society . . .	½8 P.M.
Thur.	Royal Society	½8 P.M.
	Society of Antiquaries . .	8 P.M.
Fri.	Royal Institution . . .	½8 P.M.

BOOKS.

Pathological and Surgical Observations on Diseases of the Joints. By C. Brodie, V.P., R.S., Serjeant-Surgeon to the King, and Surgeon to St. George's Hospital. Third Edit., with alterations and additions. 8vo. pp. 334. London: 1834. Longman and Co.

The Signs, Disorders, and Management of Pregnancy; the Treatment to be adopted during and after Confinement; and the Management and Disorders of Children. Written expressly for the use of Females. By Douglas Fox, M.R.C.S., and one of the Surgeons of the Derbyshire General Infirmary. 8vo. pp. 207. Derby: 1834. Mozley and Sons.

CORRESPONDENTS.

A Dublin Subscriber.—We were well aware of the great interest which would be excited by a public course of lectures on embryology, delivered by Professor Montgomery, of Trinity College, and by his illustrations from the largest and best selected obstetric museum in the United Kingdom. We accordingly requested them to be taken down, and shall publish them every fortnight. We expect them in a few days.

Galen.—We have heard of the fracas between Professors Elliotson and Green, and the intended appeal to the Medico-Chirurgical Society; but as they are both Arcadians, we shall leave them to fight their own battles

The London University Charter.—The corporation of London would be the last in Europe to advocate monopoly; and had it been aware that the charter which it petitioned for, would confer the exclusive privilege of lecturing on the University, to the injury, or most likely the destruction of all the medical schools in the metropolis, it would never have lent itself to solicit such a manifest injustice. We prophecy that no school in London will obtain the power of granting medical degrees, but a faculty will be established for that purpose. This body ought to consist of a certain number of eminent physicians and surgeons, not lecturers, and of lecturers on the different branches of medical science, chosen by ballot from all in London, so that the candidates for examination could not know the examiners, and the business of teaching would not be interfered with. It would be preposterous to have an examining faculty composed of individuals who are not conversant with the actual state of the different sciences, which few, if any, actually engaged in practice are.

Medicus.—The Parliamentary Inquiry has brought to light every abuse in the College of Physicians, and in the Hospitals in the metropolis. There is now no doubt in our mind but the medical polity of the United Kingdom will be arranged *de novo*.

METEOROLOGICAL JOURNAL.

MONTH. April, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
10		45	48	34	30·05	30·04	63	64	N.E.	N.	Fine	Fine	Fine
11		45	48	35	29·96	29·90	65	69	N.	N.W.	—	—	—
12		41	46	33	29·76	29·89	68	75	N.	N.	—	Showy.	—
13		42	48	35	30.00	30·05	74	71	N.	N.N.E.	—	Fine	—
14		46	52	36	30·12	30.08	70	69	E.N.E.	E.	—	—	—
15		51	54	38	30·11	30·12	68	68	E.S.E.	E.S.E.	—	—	—
16	☾	50	53	39	30·07	30·01	68	70	E.N.E.	N.E.	—	—	—

50, *High Holborn.* William Harris and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 117. SATURDAY, APRIL 26, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXXVI., DELIVERED APRIL 12, 1833.

Gentlemen,—I have next to bring under your consideration *Scrofulous Inflammation of the Conjunctiva.* The symptoms characterising it are *slight redness, great intolerance of light, and pimples, or small pustules* on the conjunctiva. It seldom attacks infants at the breast, but children at some period between weaning and the eighth year. At the commencement of the disease, the redness of the conjunctiva is very slight and in patches, or clusters of vessels; but, afterwards, it increases, and becomes more uniform, and the sclerotica appears to participate in the inflammation. At the apex of each of the clusters of blood-vessels, one or more minute pustules arise; sometimes a single elevated point, of an opaque white colour, near the centre of the cornea; and sometimes numerous pustules, scattered over different parts of the conjunctiva. In some cases they are small, and filled with a thin colourless fluid, when they are termed *phlyctenulæ;* in others they are larger, and contain fluid more like pus. It is not known, whether there is any specific difference between the phlyctenular and the pustular cases; but it has been observed by Mr. M'Kenzie, of Glasgow, that the pustular cases are in general attended with less intolerance of light.

The phlyctenulæ and pustules may be absorbed, and then, if situated on the cornea, they leave behind a white opaque speck—the effect of that effusion of lymph, which surrounds every circumscribed abscess, but which in time generally disappears. Sometimes, however, a vascular speck is left, which is more difficult of removal.

Quite as frequently these pimples burst, and are converted into ulcers, sometimes superficial and considerable in extent, more commonly deep, and funnel-shaped, as you see in this engraving, so beautifully coloured by the hand of Beer himself. If they happen to penetrate the cornea, the aqueous humour is discharged, and a small piece of the iris protrudes, and unites to the sides of the aperture, which is closed by an opaque indelible cicatrix partially or entirely obstructing vision; but the cicatrix from a superficial ulcer may leave no permanent opacity.

The *excessive intolerance of light*, attending scrofulous ophthalmy, is one of the most distressing symptoms. The child is quite unable to open the eyes in ordinary daylight; and every attempt to look up instantaneously brings on a strong spasmodic contraction of the eyelids. The pain from the light is most severe in the morning; for, in the afternoon, the intolerance of it is sometimes so far lessened, that the eye can be opened. Notwithstanding the violent suffering produced by light, there is frequently an insignificant degree of redness, and the cornea often remains perfectly transparent, or with merely one minute opaque speck upon it, and a few red vessels running over the sclerotica.

The intolerance of light is always attended with *epiphora*, a gush of tears following every attempt to open the eye. Hence the eyelids and cheeks are sometimes much excoriated and swelled.

Occasionally, the disease is conjoined with iritis, but more frequently with ophthalmia tarsi, and other scrofulous complaints.

In the *treatment* of scrofulous inflammation of the conjunctiva, there is not so much occasion for powerful antiphlogistic remedies as in some other inflammations of the eye. In the first stage, which is short, you may apply a few leeches, followed by blisters behind the ears, or on the nape of the neck. The secretions of the skin and alimentary canal are to be restored, for which purpose you may prescribe the liq. ammon. acetatis, combined with the vinum antimonii, and a small quantity of the syrup of poppies. Or you may give rhubarb and carbonate of soda, in equal parts, with or without a little of the hydr. c. cretâ. For the ulcerations on the cornea, the solution of nitrate of silver is the best application. I scarcely need

say that the eye should be protected from the light with a green shade, or by darkening the room. If the cornea be opaque, calomel, or the blue pill, should be given, so as slightly to affect the system.

After the first inflammatory stage is over, tonics are generally found beneficial, especially the sulphate of quinine, with a light nutritious diet.

The best applications to the eye itself are slightly astringent lotions, used tepid, as the decoction of poppyheads, with a small quantity of spirit of wine in it; or a weak solution of the acetate of ammonia, or a solution of one grain of the oxymuriate of mercury in eight ounces of distilled water. In France, the collyria for scrofulous affections of the eye frequently consist of a weak solution of iodine in distilled water, with a small quantity of hydriodate of potash.

Let me next speak of *inflammation of the external proper tunics*, which is characterised by a great deal of external redness, pain, and intolerance of light, soon followed by increased lachrymal discharge and febrile disturbance. The redness begins on the front of the globe, immediately round the cornea, where it forms a red zone, to which numerous vessels proceed from the back of the eyeball. In inflammation of the conjunctiva, the redness begins at the circumference of the organ, its anterior part being at first free from it, and the sclerotica retaining its natural white appearance: the discharge is also of a mucous or puriform kind.

The redness is quite different in the two cases: in inflammation of the sclerotic coat, the vessels seen through the conjunctiva exhibit a pink colour, or a lively carmine appearance, which forms a striking contrast to the bright scarlet tint of the vessels in conjunctival inflammation. The vessels of the sclerotica always follow the motion of the eye; while those of the conjunctiva are capable of being moved, independently of the eyeball. The distended vessels of the inflamed sclerotica run in straight lines forwards to the edge of the cornea, but those of the inflamed conjunctiva have no such distribution, as they are reticulated. However, the conjunctiva soon participates in the inflammation of the external proper coats, and the cornea looks dull. The eye feels dry and stiff, with a burning or aching pain, and feeling of tension, pressure, or as if sand were lodged in the eye. As the disorder increases the pain grows more severe, and extends to the back of the head and nearest temple. Intolerance of light is a strongly-marked symptom of inflammation of the sclerotica, another feature in which it particularly differs from conjunctival inflammation.

Although the eye may be at first dry and stiff, the lachrymal secretion is soon restored, and even increased, so that whenever the eye is opened there is a considerable effusion of tears. In unfavourable examples, attended with chemosis, the cornea first turns grayish, then white and cloudy, and lastly yellow, as if pus were deposited in its texture. The yellow matter, however, is not fluid; neither does it make its way to the surface like pus; but the cornea ulcerates, and the deposited matter is removed by ulceration. A similar deposition may take place in the anterior chamber, producing what is termed *hypopium*. When the whole cornea is thus affected, the ulceration may penetrate the anterior chamber at several points, the aqueous humour escape, and the iris either protrude or become adherent to the inflamed cornea.

The degree of danger will depend on the state of the cornea: when this is only slightly affected there is no danger; when chemosis is present, and the cornea is gray, or white, or when a yellow deposition takes place in its texture, followed by ulceration, and escape of the aqueous humour, sight will be impaired, and perhaps totally lost.

Before speaking of the treatment, I may as well describe

Inflammation of the entire Eyeball, or *Ophthalmitis*, for the practice in each of these cases is founded on the same principles. Common inflammation, seated both in the external and internal structures of the eye, when fully developed, is characterised by considerable pain, increased external redness, more or less swelling of the organ; at first dryness of the eye, but afterwards augmented secretion from the lachrymal gland; and redness and swelling of the upper eyelid. The pain is not confined to the fore-part of the eye, but is deep-seated, and extends to the eyebrow, cheek, temple, and back of the head. At first, the redness is inconsiderable, and chiefly in the vessels of the sclerotic coat; but the conjunctiva very quickly participates in the inflammation, and the distention of its vessels produces the bright scarlet colour, which conceals the fainter pink or carmine tint of the sclerotica. The conjunctiva then begins to swell, and a deposition of coagulable lymph takes place, not only in the texture of the membrane, but in the loose cellular tissue which unites it to the sclerotica. You know, gentlemen, that this red circular projection of the conjunctiva round the cornea, giving the latter membrane a sunk appearance, and even materially concealing it, receives the name of *chemosis*.

Light is very offensive, so that the pupil contracts to exclude it, and the eyelids are spasmodically closed. In a more advanced stage, the colour of the iris is altered, its brilliancy disappears, and its usual motions in different degrees of light are interrupted; the pupil diminishing and losing its clear black colour. The cornea becomes more or less opaque, and vision is lost, sometimes from this cause, and the closure of the pupil; sometimes from injury of the retina, as when the sight is destroyed, though the cornea and pupil do not completely obstruct the light; and frequently from all these circumstances together. Sometimes the thickened eyelids protrude, an ectropium of the lower one taking place, and a

portion of the conjunctiva projecting in the form of a piece of red flesh.

So violent an affection of a vascular and sensible organ, situated in the immediate vicinity of the brain, necessarily produces a great deal of sympathetic inflammatory fever. If the disorder be not checked, suppuration of the eye occurs, preceded by severe throbbing and rigors, and no relief is experienced till the cornea bursts, and the matter is discharged, the vitreous humour and crystalline lens usually passing out at the same time. The eye then shrinks into the orbit; its form is completely destroyed, and its functions annihilated. When the disease does not proceed quite so far, the patient escapes, perhaps, with opacity of the cornea, a closure of the pupil, or injury of the retina. With respect to the prognosis, if chemosis be formed, the cornea cloudy, the colour of the iris changed, and the pupil contracted, the eyesight is in considerable danger.

The *causes* of inflammation of the proper coats of the eye may be wounds; the irritation of extraneous substances lodged under the eyelids; exposure of the eye to a draught of cold air; immoderate exertion of the organ, particularly in the examination of minute shining objects, and in hard study by candlelight; and certain states of the atmosphere. As predisposing circumstances, I may mention a full habit, or plethora, a disordered state of the digestive organs, intemperance, and costiveness.

Treatment of Inflammation of the External Proper Coats of the Eye, and of Ophthalmitis, or General Inflammation of the Eyeball.—1. The first indication is *to remove,* if possible, *the cause,* as, for example, extraneous substances. The eye should be examined in a good light; and, if nothing be discovered on it, the lower eyelid should be depressed, and the inferior portion of the globe brought into view by the patient looking upwards. If no particle of extraneous substance can be detected in this way, the patient should turn the eyeball downwards, and the upper eyelid be raised, so that the upper portion of the globe may be seen. In most cases, the extraneous body lodges in the concavity of the upper eyelid, which must then be everted. The eyelashes are first to be taken hold of, and the eyelid drawn downwards; and, while steady pressure is made against its upper part, by placing a probe across it, its ciliary margin is to be carried upwards and backwards.

When small particles of metal stick in the cornea, they should be removed with the point of a cataract-needle.

Next to the removal of the exciting cause, bleeding is the chief means of subduing these forms of ophthalmic inflammation. Venesection is to be practised, and from twenty to forty ounces should be drawn; and, after two or three hours, if the pain return, you should take away from twelve to fifteen ounces more without delay. The blood may also be taken from the temple, or nape of the neck, by cupping, or from the temporal arteries. Be sure also, gentlemen, to protect the eye with a green shade, and to have the room darkened.

Neither must you omit the repeated application of leeches, which are to be put on the temple, eyebrow, or just below the inner angle. You must also prescribe purgatives, with saline antimonial medicines; and, after depletion, have recourse to blisters.

With respect to topical applications, if the case be attended with violent headach, the decoction of poppyheads may be used as a fomentation. In other instances you may bathe the eye, by means of an eye-cup, with tepid water, or with a warm collyrium, containing five grains of the sulphate of zinc, or acetate of lead, dissolved in four or six ounces of rose-water. In proportion as the irritability of the eye lessens, the application may be used colder.

When the acute stage has completely subsided, you may introduce between the eye and eyelids, once or twice a-day, two or three drops of the vinous tincture of opium; but, as long as much tenderness and aversion to light continue, its use must be deferred, and depletion repeated.

The proposal of puncturing the anterior chamber, and letting out the aqueous humour, when the case is attended with a sense of distention and a cloudiness of the cornea, may be said to be renounced at the present day.

Instead of this practice, when there is risk of effusion, or opacity, I usually give calomel and opium, and keep open a blister. Two grains of calomel, with half a grain of opium, four times a-day, may be administered until the mouth becomes sore.

For the cure of any remains of chronic inflammation, I may say, that astringent applications, blisters, the occasional use of leeches, and the free exposure of the eye to the open air and daylight, are generally the right measures.

Gentlemen, I will now speak of *Sclerotitis.*—There are two very remarkable forms of inflammation of the eye, most frequently arising in adults from atmospheric influences, viz.—the *catarrhal* and the *rheumatic*. The *catarrhal*, as you know, is an affection of the conjunctiva; the *rheumatic*, of the albuginea and sclerotica, occasionally extending to the iris. In the *catarrhal*, the red vessels give a reticular appearance; in the *rheumatic*, they are radiated, or in the form of a zone, and seated under the conjunctiva. *Catarrhal* ophthalmy is an inflammation of a mucous membrane, and attended with an increased secretion from it; *rheumatic* ophthalmy attacks the fibrous membranes of the eye, and is not accompanied by any morbid secretion from its surface. The pain in catarrhal ophthalmy, is like that of sand under the eyelid, does not extend to the head, and is felt chiefly in the morning, or when the eyes begin to be moved. The pain in rheumatic ophthalmy is throbbing and deep-seated, not in the eye chiefly, but round the orbit, and is severely aggravated from sunset

to sunrise. In catarrhal ophthalmy there is little intolerance of light, in sclerotitis a great deal.

Rheumatic inflammation is by no means a good name for the complaint, as it is not connected with a rheumatic constitution; it is a primary affection, and not the result of any transfer of rheumatism from other parts to the eye. *Sclerotitis* is certainly a better term. At all events, this inflammation only resembles rheumatism in its exciting causes, its accompanying pain, its exacerbations, and its treatment.

In sclerotitis, the fasciculi of distended vessels advance in radii towards the edge of the cornea, and sometimes even a little beyond it. They are of a bright red colour, and the degree of inflammation in the conjunctiva itself is never such as to conceal them. In general there is no tendency to chemosis, nor do the eyelids take part in the disease, but there is a haziness of the cornea and pupil, attended with a slightly contracted state of the latter opening, and a sluggishness in the movements of the iris.

The iris may even become slightly discoloured, and lymph be effused from it; but a severe degree of iritis seldom attends rheumatic sclerotitis. Suppuration and ulceration also seldom or never follow this affection of the eye; but there is a considerable degree of symptomatic fever, increasing with the nocturnal paroxysms of pain. The digestive organs are deranged, the bowels confined, and the excretions morbid.

Treatment.—Blood is to be taken from the arm, and *leeches* afterwards applied to the forehead and temples. *Calomel and opium* are effectual in lessening the severe pain in and around the orbit. Two grains of calomel and one of opium may be given every evening till the gums are affected, when the calomel may be omitted, and ten grains of the compound powder of ipecacuanha administered in lieu of it.

The forehead and temple may be rubbed with a mixture of olive oil and extract of opium, or with warm laudanum; and in chronic cases, with equal parts of laudanum and tincture of cantharides.

Blisters are likewise to be put behind the ear, or on the temple, or nape of the neck.

I believe, gentlemen, that in rheumatic sclerotitis the iris should be kept moderately under the influence of belladonna, either by smearing the moistened extract upon the eyebrow and eyelids every evening at bed time, or by infusing ʒj. of the extract in each ounce of the laudanum used for rubbing the head. I may also inform you, that mild purgatives and the warm foot-bath at night, with sudorifics, will be found eminently useful.

In *chronic cases* you may give small doses of sulphate of quinine; and, in old mismanaged ones, eight or ten drops of the liquor arsenicalis, three times a-day, will give great relief.

Local applications have little effect. The lunar caustic solution, which is almost a specific for catarrhal ophthalmy, is decidedly injurious in rheumatic sclerotitis; but, when all painful and febrile symptoms are gone, and little more than chronic redness and weakness of the eye remain, the vinum opii may be dropped once or twice a-day into the eye.

Catarrho-rheumatic ophthalmia affects both the conjunctiva and the sclerotica. The feeling of roughness, or sand, between the eyelids and eyeball, and the secretion of a puriform fluid, indicate the participation of the conjunctiva in the disorder, while the nocturnal accession of racking pain in and around the orbit marks the affection of the sclerotica. In this case chemosis is by no means uncommon, and the eyelids generally adhere together in the morning from the thickened state of the Meibomian secretion. There is also considerable intolerance of light, with epiphora.

The conjunctival pain, which is compared to the feeling produced by sand between the eyelids and eyeball, is felt principally in the morning, or when the eyelids are moved. The sclerotic pain is nocturnal. The conjunctival pain is referred to the surface of the eye, and sometimes to the forehead. The sclerotic pain is felt deeply throughout the orbit.

The cornea frequently ulcerates, or pus is effused between its layers, constituting what is termed *onyx*. The latter, when arising from catarrho-rheumatic ophthalmy, is a very serious effect. It generally commences at the lower edge of the cornea, in the shape of the white spot at the root of the finger-nails, and sometimes extends so as to cover one-half of the cornea. The pus in it is rarely absorbed. The cornea at length ulcerates over the centre of the onyx, and the pus is discharged, but the ulceration frequently makes its way into the anterior chamber, the aqueous humour escapes, and the iris protrudes.

There is also commonly, just before this state of things, an effusion of lymph in the pupil; the iris changes in colour, and the pupil is often obliterated.

The pulse is generally quick and sharp, the tongue white, and the nocturnal pain prevents sleep.

Causes.—Amongst the poor the catarrho-rheumatic ophthalmy may generally be traced to exposure to cold nocturnal air, deficient clothing, and want of proper shelter. North-easterly winds promote its occurrence. It is much more frequent in old than young or middle-aged persons.

Treatment.—1st. Venesection—from ten to thirty ounces, and repeated.

2nd. Leeches to the temple.

3rd. Scarifications are sometimes advised when there is chemosis, but it is a practice which I do not follow.

4th. Calomel and opium every night.

5th. Opiate frictions about an hour before the expected attack of pain in the orbit.

6th. Pupil to be kept dilated with belladonna.

7th. Blisters behind the ear.

8th. Purgatives; a brisk dose of calomel and jalap at first, and afterwards mild laxatives.

9th. Sudorifics; liq. ammon. acet., warm diluent drinks, and the pediluvium.

10th. In the chronic stage, the sulphate of quinine and mineral acids.

11th. Local applications; the solution of two to four grains of the nitrate of silver in an ounce of distilled water, dropped upon the conjunctiva once a-day, relieves the painful feeling of sand, and speedily removes the other symptoms of conjunctivitis.

The eye is to be bathed three or four times a-day with a tepid solution of the oxymuriate of mercury, one grain to eight ounces of distilled water.

The edges of the eyelids are to be smeared with the ung. hydr. nitratis, weakened. If onyx take place, it is not to be punctured, as such practice is always followed by protrusion of the iris and opacity.

Scrofulous corneitis is a slow disease, occupying weeks and months, and sometimes years. The conjunctival covering of the cornea, and substance immediately under it, are chiefly affected. The redness of the sclerotica is not considerable, the vessels are minute, and arranged in a zone round the cornea. Not unfrequently there is a reddish ring at the circumference of the cornea, with red vessels extending to the centre of this membrane. In some cases the conjunctival covering is thickened, and reddened so as to look like a piece of red cloth, whence the term *pannus*. The cornea is more or less opaque and rough; sometimes only hazy, sometimes marked with white streaks or specks, sometimes uniformly white. Occasionally its convexity is increased; the pupil is not unfrequently dilated, with a tendency to amaurosis; there is not much intolerance of light, a striking contrast of this form of scrofulous inflammation of the eye to what is noticed in the pustular variety. In a few cases, however, the patient cannot endure the light, and there is epiphora. The pain is not very severe, and the complaint soon becomes chronic, especially after the cornea has become opaque. Gentlemen, you will also usually notice that the pulse is quick, the patient restless at night, and the skin harsh and dry. The disease is most common in subjects about puberty, and often accompanied by symptoms of struma.

Treatment.—Leeches are to be applied and repeated, but not so as to weaken the patient. You may also try small doses of tartarised antimony, and then the sulphate of quinine, and Dover's powder at bed-time. Calomel combined with opium, so as to affect the mouth, after the acute symptoms have ceased, has great effect in clearing the cornea. Colchicum, sarsaparilla, and elm bark, are useful as alteratives in scrofulous corneitis, but not generally deemed equal to sulphate of quinine.

The *local applications* are fomentations with poppy decoction, and the steam of hot water, with a little laudanum in it. Employ also blisters. The best *stimulating* applications, after all acute inflammation is over, are the vinum opii, a collyrium of the nitrate of silver, or a weak solution of iodine in distilled water, according to Lugol's formula, explained to you in a former lecture. When there is any tendency to iritis, the pupil is to be kept dilated with belladonna. When the cornea is very convex, denoting an unusual accumulation of aqueous humour, the discharge of this fluid is sometimes recommended, but rarely adopted.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XVIII.

Treatment of Chronic Hepatitis—Neuralgia of Liver succeeding to Hepatitis—Connexion of Hepatic with Gastro-Intestinal Disease—Modes of Transmission of Disease from the Mucous Surface to the Liver—Phlebitis of the Vena Porta—Obstruction of the Porta—Collateral Circulation—Occurrence of Inordinate Appetite—Singular case of Pulmonary, Hepatic, and Intestinal Fistulæ—Hepatic Neuralgia.

Gentlemen,—We come now to the consideration of the treatment of chronic hepatitis. It is of great importance in a case of this kind to place your patient under such circumstances as will ensure the full and favourable action of the remedies employed. The use of wine, spirits, and all kinds of exciting food must be laid aside; the patient must not use any thing capable of producing fever during the process of digestion. So long as any kind of food or drink produces uneasiness and sensations of heat and fulness, you may be sure that it will do more harm than good. Give him what will support his strength without exciting the vascular or nervous systems during the process of digestion.

You must next prevail on your patient to give up the use of active purgatives by the mouth. This is a point which you should strongly and firmly insist upon, as in consequence of the ordinary costive state of the bowels which accompanies chronic inflammation of the liver, the patient is generally in the habit of having recourse to those temporary and hurtful remedies. It is the same thing in cases of chronic hepatitis as it is in chronic gastritis, you will find the subjects of these diseases taking different purgatives every day. Break your patient of this practice if possible; you will have some difficulty in doing so, for he has been long habituated to it, and you must exercise all your authority in putting a stop to the pernicious habit. Instead of pur-

gatives by the mouth, make him use every day an emollient injection. You may, if necessary, give occasionally mild laxatives by the mouth, as Rochelle salts, manna, castor-oil, or something equally mild, and in this way you will be able to secure a regular alvine discharge once in the twenty-four hours at least. But where there is considerable pain and tenderness in the region of the liver, this plan alone will not be sufficient; you must apply relays of leeches, a practice which has a most admirable effect in chronic hepatitis. I would advise you to apply cupping-glasses over the leech bites; by doing this you get as much blood as you wish, and you will generally save your patient from the annoyance of an oozing hæmorrhage. When piles exist, it will be often useful to apply leeches to the anus, followed by the hip-bath. But I have no hesitation in saying, that as a general mode of relieving hepatic disease, the application of leeches to the right hypochondrium is far preferable in every point of view. You may in the next place have recourse to blisters, and I have frequently employed blisters, alternately with leeches, with the best results. Tartar emetic ointment, in the form which I have already mentioned, croton oil frictions, and other modes of counter-irritation, will assist materially in bringing about a successful termination. But these must be continued long, and used over an extensive surface.

In this way, by regulating your patient's diet, keeping his bowels open by enemata, or the mildest laxatives, by small and repeated local bleedings, with counter-irritation, you will frequently succeed in removing all the symptoms of chronic hepatitis without the use of mercury. But if, after having carefully employed all these measures, the symptoms manifest a degree of persistence, if your patient has not already taken a large quantity of mercury (which is not likely to be the case in this country), and if he be not of a scrofulous habit, I see no reason why you should not have recourse to mild doses of mercury. For this purpose nothing answers better than to prescribe, once or twice a-day, a pill composed of hydrarg. c. creta, blue pill, or a small quantity of calomel, combined with rhubarb, extract of hyosciamus, and taraxacum. It will be seldom necessary to bring on actual salivation, but if the pain continues to be severe, the swelling undiminished, the symptoms obstinate, and no contra-indication existing, you may bring him under the influence of mercury, and keep him so for a short time. The best mode of doing this is to direct him to rub in a drachm of the camphorated mercurial ointment every day; and if you have employed blisters, you can assist the frictions by dressing the blistered surface with mercurial ointment.

Some practitioners are in the habit of substituting the nitro-muriatic acid for the mercurial treatment, and there appears to be evidence that it is an advantageous mode of practice in these cases. The best mode of using this remedy seems to be the endermic; and hence bathing the feet, or sponging the right hypochondrium with the acid, are most recommended in chronic affections of the liver. As it is convenient to have a formula for making the nitro-muriatic solution, I shall give you the following. Take of strong nitric and muriatic acids of each four ounces, and add to these eight ounces of pure water. Here you have a sixteen ounce mixture; of this combination you may take from two to five ounces, and mix them with three gallons of warm water. This, I believe, is the form recommended by Mr. Annesly. Having placed this solution in a foot-bath, or tub, you should direct your patient to keep his feet in it for twenty minutes or half an hour. If the bath be of proper strength it will communicate to the skin a pricking sensation, if not, you may increase its strength by adding an ounce or two more of your mixture. The same solution will answer for sponging over the liver.

There is no doubt, that in certain cases of chronic hepatitis this remedy has been found decidedly useful, and as its employment is unattended with any dangerous or disagreeable consequences, it has strong claims to our notice. The cases of chronic hepatitis to which it seems to be peculiarly adapted, are first, those where mercury has been used irregularly, or for a long time without any benefit, and secondly, where the patient is of a broken-down constitution, and where you are anxious to dispense with the use of mercury if possible. Here the nitromuriatic treatment is of decided value. I need scarcely remark to you that this acid frequently acts upon the system somewhat like mercury, producing tenderness of the gums and ptyalism. Such an effect as this furnishes us with an example of these cases, in which we find other remedies as well as mercury producing a decided effect on the salivary glands, and exercising a very powerful influence over hepatic and syphilitic affections. An interesting fact bearing on this point is related by Mr. Cox, in his account of his residence on the Columbia river. Several of his party who used a strong decoction of the fresh sarsaparilla were salivated.

There is one circumstance connected with the treatment of chronic hepatitis, which I believe has not been sufficiently dwelt on. You may have a case in which there was distinct evidence of chronic inflammation, and where, under the influence of judicious treatment, the signs of inflammation and organic derangement subsided, but where severe pain still continues to be felt in the region of the liver. The nature of this pain is often mistaken; *it is supposed to depend upon a continuance of inflammation, while it is in reality nothing more than a mere neuralgic affection—a remnant or successor of the former disease, to which the antiphlogistic treatment is totally inapplicable.* Under such circumstances the patient goes from one practitioner to another,

taking different medicines, and submitting to repetitions of the usual modes of treatment, but with little or no benefit. Now I have seen in several cases, this symptom yield completely to treatment calculated to remove purely neuralgic affections. In a case lately under my care of a gentleman who had been attacked with enteritis and hepatitis in India, and who had taken enormous doses of calomel "for the liver," and of croton-oil "for the bowels," this circumstance occurred. When first I saw him he was emaciated, the skin yellow, the urine high-coloured, with thirst, costive bowels, and great tumefaction in the region of the liver. These symptoms completely subsided under treatment, but a violent pain, running at intervals, continued obstinate. This was rapidly removed by a course of the carbonate of iron, and the use of the belladonna plaster.

It is of great importance in the treatment of chronic hepatitis, to bear in mind the state of the gastro-intestinal mucous membrane. You are aware that the disciples of Broussais are of opinion that almost all cases of hepatic inflammation are secondary to a gastro-enteritis; that the first morbid action is on the surface of the intestinal tube, and that it is transmitted from this to the liver. I have taken a considerable share of pains in investigating this subject, and have examined very carefully the question as to the complication of hepatic inflammation with disease of the gastro-intestinal surface, and the conclusions to which I have come are the following:—In the first place, that most cases, whether of acute or chronic inflammation of the liver, present the complication, more or less, with disease of the intestinal mucous surface, and that in the majority of instances there is some degree of actual disease of the digestive tube. It would appear also from observation of different cases of hepatitis, that in a great many the affection of the liver has been secondary, and that symptoms of disease of the digestive tube have preceded those of hepatic irritation. But on the other hand we must admit that the hepatic affection may be primary; that the liver has the irritative, and that disease has been subsequently propagated to the gastro-intestinal mucous surface. Lastly, we may have hepatitis both acute and chronic, quite independent of any disease of the mucous coat of the stomach and bowels. This, I believe, is the rarest case: still it does occur. You observe, therefore, that the doctrine of the physiological school, that all hepatic inflammations are secondary to a gastro-enteritis, is not supported by the authority of facts. It is therefore wrong to say that every case of acute or chronic hepatitis is preceded by gastro-intestinal inflammation. Facts have been brought forward to show that not only has inflammation of the liver been observed in the simple state, and independent of any complication with intestinal disease, but that the affection of the liver has distinctly preceded the symptoms of gastro-enteric disease. On the other hand, however, I am free to admit that these are the exceptions rather than the rule, and that in the majority of cases hepatitis is either secondary or complicated with disease of the gastro-intestinal surface.

Now a very interesting question comes to be considered, and this is, how does the disease come from the gastro-intestinal surface to the liver? Pathology informs us that irritation may be transmitted from one organ to another in three different modes. First, sympathetically, as through the medium of the nerves. Thus, long continued stimulation of the stomach is reflected upon the liver, the liver sympathises with the suffering organ in its vicinity, and finally becomes diseased itself. It is in this way that many chronic affections of the liver and stomach terminate in affections of the neighbouring viscera and dropsy. The first mode then, in which disease may come to affect the liver from the gastro-intestinal surface, is by sympathetic irritation. The next mode is supposed to be the actual transmission of disease along the biliary duct from the duodenum to the liver. Inflammation commences in the duodenum, this creeps along the ducts until it reaches the liver, which takes on the inflammatory action in its turn. Several persons of high authority have supported this view of the question, and assert that they can actually demonstrate the passage of inflammation along the ducts. Without denying the possibility of this, yet I feel convinced that it is rare. I have never been able to discover this mode of propagation of inflammation from the duodenum to the liver; and it must be remembered that in the great majority of cases of duodenitis we cannot detect inflammation in the liver or its appendages. The last mode by which disease may be transmitted, is the propagation of inflammation along the course of the veins belonging to the portal system, that is to say, there is phlebitis of the portal system, and the inflammation travels along the veins until it arrives at and attacks the liver. That this has occurred is proved. But we may suppose that in certain cases, disease of the liver may result from a phlebitis of the minute mesenteric veins, without a continuous spread of inflammation to the larger trunks: just as the lung is affected in cases of phlebitis of the extremities, not by actual spread of inflammation, but rather, as Mr. Arnott has shown, by the transmission of the products of that inflammation.

Inflammation of the portal veins is a circumstance which possesses great interest in a pathological and practical point of view; it is a curious process, and there are some singularities connected with it which have a claim on our attention. In the Clinique Medicale of Andral, there is a case given of a patient who, after labouring for some time under symptoms of fever and gastro-enteritis, was attacked with pain and tension in the region of the liver, followed by jaundice. On dissection, marks of inflammation were found in the stomach and

ileum, there was also some disease in the colon, and the liver was found to be enlarged and presenting the ordinary marks of inflammatory action. On a more minute examination, nearly all the mesenteric veins and the trunk of the porta were discovered to be in a state of intense inflammation, while, on the other hand, the lining membrane of the vena cava was found to be in its normal and healthy condition. Here we have a very remarkable coincidence between disease of the liver and of the portal system. First, the patient had fever with gastro-enteric inflammation, and then pain and tension in the region of the liver, followed by jaundice. On dissection the mesenteric veins and the trunk of the porta are found inflamed, this condition extends to the liver, the substance of which is found tumefied, red, and friable. I believe there can be no doubt that disease of the liver may be brought on by disease of the abdominal veins, particularly those of the portal system. It is a very curious fact, that with symptoms, such as many practitioners would not hesitate to call chronic hepatitis, we may have phlebitis, terminating in obliteration of the porta and even of the vena cava. In such cases nature generally makes an effort to keep up the venous circulation; in consequence of the obliteration of the internal abdominal veins, the external ones become enlarged, and produce a supplementary circulation to a certain extent, and in this way life is prolonged. This drawing, which represents the appearance of a patient labouring under this form of disease, will give you some idea of the matter. You observe the patient's belly is enlarged and prominent, his extremities œdematous, and here you see those enormous veins passing along the surface of the belly, and keeping up a collateral venous circulation. In the patient, from whom this drawing was taken, the porta and cava were obliterated. These are the epigastric and other superficial abdominal veins which ascend to anastomose with the thoracic, intercostal, and axillary veins.

I shall now relate, as briefly as possible, the particulars of this very remarkable case. The patient, who was the subject of it, laboured for more than twelve months under jaundice, accompanied by wasting of flesh and prostration of strength, but for the first eight months he had not been confined to bed. He suffered, however, very considerably even at this period from constant pain in the epigastrium and swelling of his feet. Now, in this country, we would be very apt, under such circumstances, to say that he was labouring under chronic hepatitis. At the end of the eight months he became bed-ridden, and the large veins, which you here see, began to make their appearance. Although he was wasting in flesh, still he had a canine appetite, and was always complaining that he had not enough to eat. This is an interesting fact. It has been observed in other cases, and tends to throw some light on the share the mesenteric and other abdominal veins have in the process of absorption. In tabes mesenterica it has been often remarked, that the little patients have generally enormous appetites, and as it would appear from the same cause, a deficiency of nutritious absorption, with this difference merely, that in the disease before us it is the veins that are diseased, whereas in tabes mesenterica it is supposed to be the lymphatics. But to return to our case,—this patient had, as I remarked, a very voracious appetite, by indulging which he brought on repeated attacks of constipation and colic. He then got diarrhœa and dropsy, for which he was tapped twice without any benefit. From observing that there was in this case an extraordinary supplemental circulation, leading to the inference that there was obstruction of the deep-seated veins; from remembering that the appearance of the patient, and the more prominent symptoms coincided with those of a former case, in which obliteration of the porta had been discovered after death; from these circumstances, and the remarkable voracious appetite, M. Reynaud, under whose care the patient was, came to the diagnosis of phlebitis of the portal system, extending to and affecting the liver; and this diagnosis was subsequently confirmed by dissection. He was, however, unable before death to explain one symptom which was present, namely, infiltration of the lower extremities. You are aware that when the general venous circulation is obstructed either in the chest or belly, we have anasarca of the lower extremities, but when the obstruction affects only the portal system, then we have ascites as the first phenomenon. If you had two cases of dropsical effusion, in one of which there was, *first*, œdema of the lower extremities, in the other *first* ascites, you could thus determine where the primary obstruction existed. M. Reynaud was at a loss to account for this symptom in the present case, as he had not observed it before in the other case, and as the swelling of the feet had preceded that of the belly. On dissection, it was found that the right branch of the porta had been obliterated by the growth of a yellow substance, somewhat like the middle coat of arteries; the same was found to exist in the corresponding hepatic veins, and the inferior cava was found obliterated to the distance of three inches from the left auricle. The left branch of the porta was pervious, the corresponding hepatic veins much enlarged, and the superficial epigastric veins inosculated freely with the intercostal and axillary veins.

The vena azygos was very much dilated; and, what is extremely curious, a large vein was seen to arise from the union of the sub-peritoneal branches on the convex surface of the liver; this passed through the diaphragm, and emptied itself into the cava close to its termination. Here we have an entirely new vein. It was also observed, that the sub-diaphragmatic veins were much increased in size, and apparently varicose; these passed through the diaphragm, and inosculated with

the pericardial and superficial thoracic veins. Some of them ran up and opened into the great coronary vein of the heart, which was as large as the crural vein. The remaining peculiarities of this curious case were inflammation of the duodenum and gall-bladder. The cavity of the latter was half filled with purulent fluid.

I am fully convinced that I have seen instances of this disease, although I was not so fortunate as to have an opportunity of verifying the diagnosis by dissection. I have seen patients who had wasting of flesh, pain and tension in the region of the liver, and jaundice with this singularly varicose state of the external abdominal veins; some of them had ascites; and I recollect distinctly, that in one case the appetite was very great, and the patient had a tendency to diarrhœa. I am satisfied that in such cases you would be fully justified in making the diagnosis of obstruction of the portal system; and if, in addition, there was infiltration of the lower extremities, there would be a probability that the disease had extended to the cava itself.

Before I proceed to the consideration of a subject to which I have already alluded,—hepatic neuralgia, it may not be amiss to exhibit some specimens of organic lesions of the liver. Here is an example of abscess of the liver:—you perceive the softened yellow degeneration of the substance of the organ; and here is the cavity of the abscess, in which you may observe a loose slough suspended. This portion which surrounds the abscess may be looked upon as a fair specimen of the yellow softening of the liver, before its substance breaks down into a purulent mass. Here is another specimen exhibiting the same phenomena. Here is a very curious example of hepatic abscess, which perforated the diaphragm, and made its way into the substance of the lung. I regret that the whole of this preparation has not been preserved. The rest of the preparations before me illustrate chronic disease of the liver. Here is an example of the disease which has been called cancer of the liver. Time will not permit me to enter into a detail of the pathological circumstances of this case. The patient was a female, who had cancer of the breast, scirrhus of the pylorus, and aneurism of the aorta, with this disease disseminated through the substance of the liver. Here is another preparation of what would be called by many persons pure cancer;—the patient, a female, had cancer of the mamma. This, and the preparation on the other side, exhibiting a mass of white, firm, semi cartilaginous substances, are examples of what has been called tubercle of the liver. Here is an example of the disease which has been termed whiskey liver, a disease which is said to be ordinarily found in persons who indulge in the use of ardent spirits. This, however, is a term which has been often abused and misapplied; for persons indulging in the use of whiskey may have every form of disease of the liver, and the appearance before you may be detected in the livers of persons of the most temperate habits. On the label of this preparation is written—"A Specimen of Whiskey Liver," but this you will not mind. There is a very remarkable fact, however, respecting this kind of liver, verified by Professor Carswell, namely,—that this condition of the liver is always accompanied with more or less ascites. I may add, that I have never met with this disease without ascites.

I remember a most remarkable case of disease of the liver, which occurred during my stay in Edinburgh. My lamented friend and instructor, the late Dr. William Cullen, whose loss to pathological medicine was irreparable, and whose splendid attainments and high character justly and rapidly raised him to an elevated rank in his profession, brought me to see a patient. One of the most curious circumstances connected with this case was, that when the patient sat up in bed, a fluid of a serous character was poured out in considerable quantity from the anus; but while he remained in the horizontal posture this did not occur. The patient died shortly afterwards; and on dissection it was found that he had a gangrenous abscess of the right lung, communicating with the pleural cavity, which contained a quantity of a sero-purulent fluid, and a mass of hydatids, some broken down, others perfect and entire. On continuing the dissection, it was found that the cavity of the pleura communicated with the right lobe of the liver through the diaphragm. In the right lobe of the liver the same kind of sero-purulent fluid and a quantity of hydatids were discovered; and, what was still more extraordinary, the cavity in the liver was found to communicate with the colon by a distinct opening. There was then in this very remarkable case a direct communication between the bronchial tubes and the colon, through the pleura and liver. We can thus see that when the patient assumed the erect position, the fluid would immediately pour into the colon.

As I am anxious to finish the subject of hepatic disease to day, I shall now draw your attention to one of the last points connected with this subject, namely,—neuralgia of the liver. It is a singular fact that a patient may labour under severe and harassing pain in the region of the liver; that this pain may last for months and years; that he may die of some other affection; and that, on examination after death, we may find the liver without the slightest trace of disorganisation; and also, that the organs in its vicinity present no appearance of any organic disease. Many cases of this kind have been observed; and it is the opinion of the best pathologists that they are examples of neuralgia, the seat of pain being the hepatic plexus. It is a disease of no very unusual occurrence, and is often found in females of a nervous and hysteric habit. It is constantly mistaken for hepatitis, and there is no greater mistake than this, or one which is likely to entail more

misery on the patient. The persons who are subject to this affection are, as I remarked before, generally of a nervous and hysteric habit; they complain of pain in the right side of more or less constant occurrence, and this pain, during its exacerbations, is often most excruciating. Now, this circumstance furnishes us with a sort of key to diagnosis; for with this dreadful pain, and, in some cases, exquisite tenderness in the region of the liver, we have the skin cool, the pulse tranquil, no fever, no permanent derangement of the bowels, no tumefaction of the liver. If this were the pain of acute inflammatory disease, a fatal result would be produced; or if it belonged to a chronic affection, it would terminate in organic derangement; and yet we find it existing with a clear colour of the skin and eye, healthy fæces, calm pulse, and absence of swelling in the region of the liver. Add to this, that the disease may have lasted for a considerable time, and that it occurs in a person of hysteric and nervous habit. Moreover, if the patient has been treated for hepatitis unsuccessfully, you may make up your mind to the diagnosis of hepatic neuralgia. Here is the diagnosis:—pain in the region of the liver, with occasional violent exacerbations, and accompanied by tenderness of the integuments, but without swelling, symptoms of fever, or abdominal derangement; the disease being of long standing in a person of nervous habit, and having resisted bleeding, mercury, and even counter-irritation, or being made worse by those measures.

Now, gentlemen, it is no uncommon thing to see this disease mistaken for acute hepatitis; and I need not tell you how ruinous to the patient's health such an error must be. When you are in practice, you will meet instances of females labouring under this affection, who have gone through a variety of treatment. When you recollect that the disease occurs generally in hysteric females, and that such persons are injured by depletion, you can conceive how much mischief may be done by repeated bleedings and courses of mercury. Some of the most deplorable cases I have witnessed were those in which neuralgia of the liver had been mistaken for hepatic inflammation by a number of practitioners, and the patient subjected to such modes of treatment as gave her constitution a shock from which it never recovered.

The treatment of this disease must be both general and local, but by no means what you would call antiphlogistic. You will have some difficulty in preventing the patient from getting herself blooded; for though the lancet is inadmissible, yet its employment gives a temporary relief, and this encourages the patient to have recourse to it again. What I would advise you to do in this disease is, first to pay attention to the general condition of the patient. You must pursue a general anti-hysterical plan of treatment, remove every source of irritation and excitement, and take measures to improve the general health by exercise, regimen, moral management, and the judicious employment of tonic medicines. With respect to the pain, one of the most powerful means of arresting and removing it appears to be the use of the carbonate of iron in full doses; and this is an interesting circumstance when we recollect the power which it possesses in removing pain in other nervous diseases. I would advise you to try this after having premised the use of purgatives, and continue it for some time, for you will often find that it will not only cure the pain, but also improve your patient's strength and appetite. While you are giving it, order your patient to take some mild purgative, as compound rhubarb pill, to prevent constipation. When you are about to prescribe a course of carbonate of iron, you should prepare your patient to find the stools coloured. I have known this circumstance taken hold of and turned to their own advantage by quacks. The patient is told that his complaints arise from the existence of morbid and dark coloured matters in his bowels. Preparations of iron are given, and the black matter begins to come away, greatly to the credit of the empiric. After a time the medicine is omitted, and some purgative substituted; the stools become natural, and the trick is complete. During the paroxysms of pain, a mustard plaster, or anodyne stupes and anodyne enemata, will give relief; and in the intervals I would advise you to use the belladonna plaster, after the following formula:—Take of extract of belladonna three parts, of gum ammoniac and soap plaster each one part; spread these on a piece of leather with an adhesive margin, and make the patient wear it over the region of the liver. If there be any tenderness over the lower dorsal vertebræ you may apply a few leeches, followed by narcotic stupes, or counter-irritation.

I have seen this hepatic neuralgia without any hysteric complication. I remember the case of a lady who had three or four healthy children, and had never been subject to hysteria. This lady came up to Dublin to be treated for liver disease—in fact, to be salivated; but happening to fall into the hands of a judicious friend of mine, who recognised the true nature of her complaint, she was treated with carbonate of iron, and cured effectually. I knew another case of a young gentleman, in whom (after being treated for symptoms of chronic hepatitis) this pain continued for a considerable time, and was at length removed by carbonate of iron and the use of the belladonna plaster.

LECTURES

ON THE

PHYSICAL EDUCATION AND DISEASES OF INFANTS AND CHILDREN,

BY DR. RYAN,

At the Westminster Dispensary, 1833.

LECTURE XVII.

Organisation of Infants at Birth—Progress after Birth—Functions at Birth, and their changes during Infancy and Childhood—Dentition—Etiology, or causes of Diseases.

Gentlemen,—At our last meeting I described the symptomatology or diagnosis of infantile diseases, and shall now direct your attention to a general view of the organisation at birth, and its progress afterwards to the functions and their changes during infancy and childhood, in order that you may better understand the etiology or causes of diseases at this period of life.

Every age is characterised by a peculiarity of structure, functions, and diseases; and this position is proved by our inspection of the structure, and our examination of the functions, from the period of nativity to the last hour of human existence.

I have already informed you of the structure and functions of the ovum, embryo, and fœtus; and have now to request your attention to those of the infant at birth and during infancy. I regret to state, that this interesting subject has been too little noticed, both by writers and lecturers. I hold it to be a manifest proposition, that unless we duly appreciate the peculiar structure and functions of our species at birth, we cannot form a just estimate of their peculiar derangements, or of their treatment.

All well educated members of the profession are fully aware, that the human body undergoes different stages of development, from the period of its formation to the cessation of its existence; and hence we observe that physiologists describe ovology, embryology, infancy, childhood, adolescence, manhood, and senescence.

Structure and Functions of the Infant at Birth.—The infant at birth has all its parts distinctly though imperfectly developed; it breathes, and becomes an independent being; it is from seventeen to twenty-two inches in length, and weighs from six to eight pounds, avoirdupois, but sometimes as much as twelve pounds.

After respiration is established it is totally independent of the parent, and is separated from her; it now circulates and purifies its own blood, and requires aliment for its nutrition.

The skin is red, sensitive, and irritable; the muscles are pale, or of a rose colour, soft, feeble, and powerless; the bones are soft, spongy, vascular, cartilaginous, or membranous, incomplete in many parts, and unable to support the weight of the body; and hence liable to various kinds of distortions, rickets, &c. The brain is soft, highly vascular, and easily lacerated; its relative bulk is very great; the spinal marrow and nerves are proportionally large; and hence infancy is the age of nervous energy, of vivid sensations, and all parts possess great sensibility to painful impressions. The organs of sense are developed; their nerves are very large, but are not as yet accustomed to perform their functions; and hence the senses of vision, audition, &c., are less acute than at a later period of life.

The abdomen and head are very large, the pelvis very small, and the inferior extremities are less developed than the superior. The particular disposition of the lips, that of the palate, and the obliquity of the posterior nares, offer a very favourable arrangement for the mechanism of suction. The stomach and alimentary canal are very much developed, the latter containing a dark fluid (meconium); the absorbent glands, especially in the mesentery, are very large, for the ready conveyance of chyle into the circulation, which is so necessary for the nutrition and growth of all the organs in the body.

The lungs are condensed, of a reddish-brown colour, extremely vascular, and suddenly augment their size and weight after respiration, when they become rosaceous, soft, vesicular, and crepitant. The heart is large, especially the ventricles and arteries, but the auricles and veins are less developed. The remains of the apparatus for the fœtal circulation the foramen ovale, the ductus arteriosus, ductus venosus, and the umbilical vein and arteries persist. The liver is very large, the gall-bladder very small, and containing a reddish bile. The system of the vena porta, and the spleen, are less pronounced, the epiploon or omentum is thin, and almost deprived of fat. The salivary glands and pancreas are large, because they are so essential to digestion. The kidneys are large, and perform their function more actively than in the adult, as appears by the rapid secretion and expulsion of urine—an excretion so much influenced by slow or rapid digestion.

The bladder is moderately developed, elongated, and so elevated as to be outside the pelvis, and the urachus is attached to it. The larynx is extremely small, and no preparation is made in the nasal fossæ, or mouth, for the articulation of sound. The genital organs and mammæ are distinct and small; but the clitoris, nymphæ, and penis, are often very much developed.

The progress of the development of the body from birth to puberty, and the modification of the functions, are very remarkable. The head diminishes in size, the pelvis and lower extremities develope in proportion to

other parts; the remains of the umbilical cord form an indestructible cicatrix; the universal softness of all tissues sensibly and rapidly diminishes; the whole body grows and acquires strength; the function of digestion continues to be performed with energy; the excrementitious part of the food is rapidly passed into the intestines, and is more frequently expelled than at a more advanced age. There are two or three alvine evacuations daily; the motions are fluid, and of a light orange colour; when these are of any other colour, they are depraved and unnatural —the infant is indisposed.

The action of the heart and arteries is much greater in infants than in adults, for the purpose of circulating blood most vigorously to every part for its development. The pulse of a new-born infant is from 120 to 140 beats in a minute; that of the adult from 68 to 72.

Dr. Dawson describes the pulse of infants at the following ages:—at birth, 140; towards the first year, 124; towards the second year, 110; towards the third and fourth, 96; when the milk-teeth fall out, 86; at puberty, 80; at manhood, 75; at sixty, 60.—(Practice of Physic.)

M. Billard gives the following account of forty-one healthful infants, from one to ten days old:—in eighteen the pulse was 80; in two, 86; in one, 89; in four, 100; in ten, from 110 to 125; in eight, 130; in two, 145; in two, 150; in one, 180.

Of thirty-five infants, from one to two months old—in fourteen, the pulse was from 80 to 85; in one, from 60 to 62; in two, 90; in two, 94 and 95; in five, from 110 to 112; in two, 114; in seven, from 125 to 130; in three, 140, 147, 150.

Of eighteen infants from two to three months, there were fourteen whose pulse was above 90; in two, it was above 100; in two others, 73; in two, from 70 to 80.—(Traité des Maladies des Enfans, 1829.)

Little reliance, therefore, can be placed on the pulse of infants during disease, and consequently it is seldom felt.

The respiration, which is so essential to the arterialisation of the blood, is proportionally rapid; it is from 35 to 40, or even more, in a minute; while that of the adult is from 18 to 20. The rapidity of the circulation propels the blood into all the tissues of the body, and accounts for the redness of every part, of the skin, brain, bones, &c. Hence, when these parts are inflamed, and consequently contain more blood than usual, and the supply being kept up, we find it more difficult to arrest the mischief, and this explains the frequency and rapid fatality of inflammatory diseases. This fact should be ever kept in mind in our treatment of inflammations in early life. The extreme vascularity of all the textures in the infant, has led many writers to maintain the predominance of inflammatory affections over all others.

The source of growth is nutrition, and therefore the digestive, circulatory, and respiratory systems, which are most engaged in this function, predominate during infancy.

The lining membrane of the lips, gums, tongue, cheeks, and throat, is continued into the air-passages and lungs, and along the œsophagus, stomach, and intestines; it is of a deep red colour, and highly vascular. The irritability of this membrane is often such as to render it unable to bear the stimulation of the commonest food, or sometimes even the mother's milk. When the intestinal lining or mucous membrane is irritated or inflamed, it secretes a large quantity of mucus, and this we often observe in the diarrhœa of infants. When the pulmonic portion of the membrane is irritated by cold, a copious secretion also takes place, and causes the wheezing and rattling which are heard when a child is said to have taken cold.

The skin acquires less sensibility by degrees, the senses gradually become accustomed to external impressions, the intelligence progressively improves: but it is a long time before the infant can recognise the objects connected with its wants, as aliment, &c.; and the first signs of mental development are evinced by its endeavouring to touch those objects which have fallen under its vision.

After a certain time, which will vary according to infantile development, sex, climate, and state of health, a train of new circumstances commence; the maternal aliment ceases, the infant is gifted with teeth for the mastication of more solid nutriment, and the power of articulation, or speech, soon follows.

A new-born infant has no need of teeth, because nature does not intend that it should masticate or drink the aliment she has prepared for it in the maternal bosom. Some infants, however, are born with teeth, as the annals of medicine amply attest. Haller cites nineteen examples; and it is a fact attested in history, that Louis XIV. had four incisor teeth at birth. This phenomenon has been observed in infants born prematurely, as well as in those whose nativity was protracted beyond the usual term of pregnancy.

The rudiments of the teeth have been observed in the fifth month of pregnancy; and, according to M. Capuron, commence, perhaps, at conception. The teeth do not appear at any precise time, or in regular order, though the two middle front teeth of the lower jaw, called *incisors*, generally appear about the fourth or fifth month. There are many instances on record in which they appeared at birth, and many in which they did not pass through the gum until the twelfth or eighteenth month, and even for years. But in general about the time already stated, the two middle incisor teeth of the lower jaw appear; and about two or three weeks, or the sixth month, the two opposite ones in the upper jaw escape through the gum. About the eighth month, the two lateral incisors of the lower jaw are

protruded, and soon afterwards the two corresponding superiorly.

Before the completion of the first year, the whole of the incisors will have appeared, generally, however, at irregular intervals; and sometimes one or two of the *molars*, or grinding teeth, may precede them. In most cases the foremost grinder of the lower jaw escapes first, and next the *canine* or eye teeth. The latter are often very troublesome; and it is indispensably necessary to cut the gum, sometimes more than once.

About the end of the first year, or later, perhaps at the fifteenth month, we observe eight *incisors* and four grinders. During the second year, and at very irregular periods, the last or innermost grinders of both jaws appear, and complete the milk-teeth to the number of ten in each jaw. About the age of four years and a half, four other molar teeth pierce the gum. These are also called deciduous teeth, because they fall out after a certain time, and are too small for the adult. They are to be speedily replaced by the permanent set.

The completion of the eruption of the milk-teeth is an important period of infantile life. There is no longer irritation in the gums; and that which was excited in the head, chest, and abdomen disappears. Nature has now supplied the infant with the means of masticating more solid aliment than that afforded by the mother, and indicates the necessity of weaning. The bones have become firmer and stronger, and the whole body more developed and vigorous.

It is worthy of notice that, when the infant is healthful, dentition commences about the fourth month, and sometimes earlier; and, like all other functions of the body, is effected without inconvenience. But when the physical and moral education of the infant have been badly conducted, it is delicate and irritable, and teething becomes productive of serious mischief, and may induce convulsions, diarrhœa, or water in the head. It would be inconsistent with the usual course of nature, that the development of the teeth should be productive of more pain and danger than the growth of any other part of the body; and it would be contrary to the unbounded goodness of Divine Providence, that so many tender infants should be doomed by dentition to the severest sufferings, nay to death itself. The cause is mismanagement of physical education, and not the intention of the great and beneficent Author of all good.

About the fourth or fifth month, sometimes earlier or later, we usually observe an increased flow of saliva, the infant becomes restless and fretful, the bowels become deranged, the breast milk is vomited in a curdled state, or there is diarrhœa, and sometimes a frequent evacuation of urine. The skin becomes covered, either partially or generally, with some kind of eruption, the mouth and gums are found hot and painful, and perceptibly redder and fuller at one or more points, and the infant conveys every thing it can lay hold of to its mouth, and compresses its gums upon it. Sometimes there is rapid emaciation, with flabbiness of the flesh, and high fever or diarrhœa. In some instances there is not an increased flow of saliva, or any derangement of the stomach or bowels; and in such cases the head is very liable to become affected, and there is great danger of convulsions or hydrocephalus. All these irritations and diseases are excited by the pressure of one or more teeth on the nerves in the gums; and in the same manner as local irritation in any part of the body, may throw the whole into disorder, as a slight wound induces tetanus or spasm of the whole muscles.

The second dentition usually commences about the age of seven years, the jaw grows, the milk-teeth are separated from each other, decay, fall out in the order of their eruption, or require removal, and are replaced by the permanent or adult set, which continue through life. The molar teeth sometimes remain, and about the tenth or twelfth year four others appear, making twenty-eight in number. Sometimes the milk-teeth do not fall out, and the second set protrude, forming a double row. Between the ninth and tenth years the incisors and canine teeth have appeared; and before the twelfth year the smaller grinders have followed. Between the twelfth and twentieth years the two larger grinders make their appearance.

A third dentition may be said to take place between the twenty-seventh and thirtieth years, when the wise teeth, or *dentes sapientiæ* appear, and complete the number of thirty or thirty-two.

The milk-teeth are twenty in number. The secondary teeth are separated from the primary by an osseous partition. The permanent tooth comes in contact with the primary one, which it is to replace, and causes absorption of the fang of the latter. Mr. Hunter denied that absorption of the primary tooth takes place; while Chaussier and Bichat ascribed the falling out of the milk-teeth to the absorption of the phosphate of lime.

In general, the teeth increase from above downwards, from the head to the root. The fang is opposed by the osseous partition, and the crown of the teeth is forced through the gum, which it thins by exciting the absorbents into action,—the infant cuts its teeth.

The absorption of the gum is not always effected in the same manner, or with equal rapidity; and hence there are anomalies and irregularities during the first dentition. Some infants cut their teeth precociously, and others very slowly. Precocious teeth become decayed, or fall out soon after their eruption, and are seen in the most delicate infants. We observe, on the contrary, that some infants do not cut their teeth until twelve, eighteen, or twenty months have elapsed; and some persons have no teeth at all. A gentleman who

attended these lectures about five years ago had not a single tooth. He died soon afterwards. In some the gums are ossified. Plutarch and Valerius Maximus relate that Pyrrhus, King of Epirus, and one of the sons of Prusias, King of Bithynia was in this condition. There are numerous authors cited by Dr. Mason Good, in his learned and elaborate Study of Medicine, attesting this fact, and a variety of anomalies regarding dentition. Some persons at the age of seventy, and even older, had a new set of teeth afforded them, or their gums were ossified. Professor Capuron states that Bernard Gengha found a skull in the Hospital of the Holy Spirit at Rome without a lower jaw, and with three teeth only. Professor Dewees observes, in his sensible and judicious work on the Physical and Medical Treatment of Children,—"1. Sometimes children are born with teeth ready cut, but this precocity is no proof of vigour of constitution. 2. Sometimes the latter cut themselves before the middle ones; at other times the canine may be seen before the incisors. 3. Now and then the teeth are very tardy in showing themselves. We have several times seen the first tooth make its appearance after the fourteenth month; and Van Swieten mentions an instance where this did not happen till the eighteenth month, though the child was perfectly healthy; and a child is now under our care, who has not yet cut a tooth, though rather beyond seventeen months old. 4. Rayer mentions a case where the teeth did not appear till the child was thirteen years old. 5. Fouchard relates an instance where, at six years old, the child had but one foretooth. 6. Brouzet gives an instance where only one half of the proper number of teeth was present at the twelfth year of the child's life, and whose gums had acquired the hardness of an old person's. 7. Professor Beaumes gives the history of a man, in whom no teeth ever appeared."

The teeth present many other varieties in the order of their eruption. The middle superior incisors may appear before the lower; the four *molar* before the *canine* or eye-teeth, or even before the incisors; and the large molar before the smaller ones.

Dentition is more rapid in vigorous infants, and is very slow in those that are lymphatic, as the scrofulous or ricketty. The eruption of the molars or grinders is generally attended with more suffering than the incisors; and this is easily accounted for, by the difference of the crowns which have to escape through the gums.

Sometimes the canine, eye, or angular teeth pass through the gum with great pain and difficulty; and it often happens that the permanent tooth will protrude either inside or outside the former. In such cases the removal of the milk-tooth will be advisable.

As it generally happens that there is more or less irritation caused by dentition, nature endeavours to obviate it in a great measure, by placing an interval between the appearance of the teeth.

As to the secrets of empirics, anodyne necklaces, vegetable syrups, &c., for facilitating dentition, as well as all superstitious remedies, they are, I need not say, useless and absurd. The rational and judicious management of dentition deserves serious attention. The bowels should be regulated; the physical management as to diet, clothing, &c., duly attended to. An occasional warm bath diminishes the local as well as the general irritation in the system. The quality and quantity of aliment should be regulated, because the mucous membrane of the mouth, which is continued into the respiratory and digestive organs, may become speedily irritated by sympathy. If the infant is at the breast, the mother should avoid all high-seasoned or spiced foods, all spirituous liquors, so as to render her milk free from stimulating properties. If the infant is weaned, its food ought to be laxative; in a word, every source of irritation to its moral and physical states should be carefully avoided. Slight friction of the gums sometimes affords relief and excites absorption, or, as the vulgar suppose, expedites the cutting of the teeth: in other cases it is intolerable. All kinds of metallic, ivory, or glass instruments, corals, &c., are too hard, and are only calculated to contuse, wound, or inflame the gums. A crust of bread, a piece of liquorice root, or an India-rubber ring, is preferable.

The prophylactic treatment, or that which prevents disease, must be modified according to temperament and symptoms. There is one remedy of immense advantage in facilitating the eruption of the teeth, and that is, incision of the gum. This is by no means so painful an operation as is generally supposed; and I have often performed it without the infant uttering a murmur. It is, however, painful in the majority of instances, but is indispensible, as I shall prove hereafter, when describing more fully the treatment of dentition. I am convinced that it prevents the majority of diseases caused by teething,—such as convulsions, diarrhœa, inflammation of the brain and mucous membranes of the lungs and bowels.

It is a bad practice to administer large doses of soothing syrups for the purpose of inducing sleep; and great caution is necessary even in applying them to the gums, as they may be swallowed, and cause narcotism or death.

When the milk-teeth have protruded they are very readily injured and decayed by soft sugar, which contains an acid that proves destructive to the enamel. All sweet aliments and very warm fluids are injurious to the teeth in infancy and childhood. Children should not be allowed to crack nuts, almonds, &c., with their teeth, as the concussion will shake or loosen them, and accelerate their decay. When a child or adult suffers from toothach arising from decay, pure nitric acid will afford immediate relief. I believe I was the first who proposed this remedy, at least who pub-

lished its efficacy. Before I ventured to do so, I referred to a great number of works both ancient and modern, but did not find it recommended in any one of them. One individual asserting that he had known the efficacy of the remedy eight or nine years before, I drew the attention of the profession to it in the Medical and Surgical Journal; but it was rather remarkable that he kept his own secret, admitting his claim to be true; and had I not published, he would have probably carried it with him to the grave. The acid should be pure and strong; and the best mode of applying it is by means of a gold, platina, or glass probe covered with lint. The whole of the carious surface must be touched, and the mouth washed with tepid water. There is no pain produced, in ordinary cases of toothach, when application is made early; but should the nerve be inflamed and the cheek swollen, then acute suffering may be produced, though most certainly in very few cases. The remedy is most successful when applied to the lower teeth, because it seldom touches the whole of the caries in the upper. I have used it in a vast number of cases of children, and of delicate and pregnant women, with the most gratifying results. It is a good practice for preserving the teeth, to wash the mouth with tepid water, morning and evening, and some recommend it after each repast.

The term *infancy* is applied from birth to the seventh year, and *childhood* from the seventh to the fourteenth, or to puberty. Each period is characterised by peculiarities, as we see well attested in physiological works. It is now ascertained that ten infants die during infancy to the one that perishes during childhood. The diseases of the latter period are highly dangerous, and are generally of the inflammatory kind; but, as the constitution is generally more vigorous, the majority of feeble infants having been previously destroyed, the mortality is not so great.

In the moral and physical education, and in the treatment of infantile diseases, the corporeal and mental peculiarities must be kept always in view. This is a medical axiom, and its validity did not escape the great observers of nature in ancient times:—

"Ætatis cujusve notandi sunt tibi mores,
Mobilibusque decor naturis dandus et annis.
Reddere qui voces jam scit puer, et pede certo
Signat humum, gestit paribus colludere, et iram
Colligit, et ponit temere, et mutatur in horas."

When the first dentition is completed, and infancy has merged into childhood, all the functions and all the organs improve, and advance until the age of puberty. At this period maternal care is diminished; and the diseases which occur are, to a great extent, treated upon ordinary principles.

It is a remarkable fact, that all infants are generally of the same figure whether male or female, and have the same or the mixed temperaments, constitutions, mental and corporeal condition, and diseases of parents. Some infants are like the father, others the mother, and some have no resemblance to either. The diversity of age, the ardor of love, and the state of life and of season in which conception takes place, establish the greatest difference between infants of the same marriage. There are numerous proofs in attestation of the validity of this conclusion in my work on Midwifery.

When children do not resemble either father or mother, it is because the traits of both are so intimately mixed as to be effaced. But, in general, the resemblance between parents and children is striking, and it is reasonable to conclude, that if an infant has the same conformation of its external organs as those of its father or mother, so it will have those of the internal, and possess the same or a very similar constitution, temperament, and predisposition to disease. The similitude of constitution and disposition between parents and children is universally admitted. It therefore follows, that as the conformation and action of the external and internal organs of children depend, in a great measure, upon those of parents, we are led to the conclusion, that an aptitude to transmit certain diseases is imparted, and that some diseases are hereditary.

Every individual receives from his parents a particular organisation, which generally renders one of the organs more feeble than the rest, and consequently more predisposed to disease. Different diseases are developed at different periods of life. In infancy scrofula attacks the glands of the neck, the bones become deformed or rachitic; after puberty the lower extremities and the spine become deformed. It is also well known that eruptive fevers, as measles, small-pox, and scarlatina are more common in infancy than in any other period of life. Dentition is also peculiar to this period.

The other causes of infantile diseases are very numerous, in consequence of the superabundance of activity in all organs, the delicacy of constitution, and the innumerable external agents to which the infant is exposed. The life of man after birth is subjected to many dangers, and these I have fully noticed in my account of the hygiene of infancy. The greatest of these are the exhibition of improper food, exposure to cold, dentition, and inattention to the precepts on diet, clothing, cleanliness, sleep, exercise, and the other subjects discussed on a former occasion. The most prolific causes of infantile diseases are the aliments and elements.

I have mentioned on a former occasion that every description of food, unless the milk of a healthful mother or nurse, or that of the ass or cow, is improper or injurious to new-born infants. Nature supplies, in most cases, the proper aliment; and every deviation from it is a violation of her dictates. She never intended that a new-born infant should be nou-

rished with farinaceous substances, such as water gruel, arrow-root, pap, bread, &c.; and these excite irritation of the lining membrane of the stomach and bowels, causing hiccup, griping, unnatural stools, inflammation, ulceration of the alimentary canal, and very often death itself. In nine instances of ten, both mothers and nurses overfeed infants, as they generally imagine they cannot give too much food. The stomach is pained by improper food, more especially if over-distended, irritation is excited, and nature expels the offending cause by vomiting. The infant is in pain during and after vomiting, it cries or screams, it is said to be hungry, and is again overfed until it vomits. The stomach becomes more irritable by repeated excitement, the infant screams incessantly, and now the nurse displays her skill, by exhibiting some cordial or soothing syrup, diacodium or syrup of poppies, Godfrey's cordial, Dalby's carminative, syrup of soot, syrup of violets, oil of aniseed, &c., or some ardent spirit, as brandy, whiskey, rum, gin, &c. Every one of these is highly improper, and increases the irritation to such a degree, that the unfortunate little sufferer screams incessantly, and at length is relieved by the judicious treatment of a medical practitioner. Millions of infants are annually destroyed by improper food, and repletion, or overfeeding. These fertile sources of mortality extend to children who are generally allowed solid animal food, puddings, pastry, unripe fruits, too much porter, wine, and, among the lower classes of society, ardent spirits. Tea, coffee, chocolate, or cocoa, &c., are also injurious. In a former lecture I described the proper aliment for children. How often do we observe gratification of the palate, the only incentive held out to children for good conduct. A moderate use of fermented liquors would not be injurious, but an excess of them is highly prejudicial.

Exposure to cold is the second great cause of infantile diseases, and this is so universally known, that I need not expatiate upon it. Every one knows that cold is the commonest cause of inflammations of the external and internal organs, of fevers, and almost all diseases; and hence the imperious necessity of protecting infants and children against its influence. I have already dwelt upon this subject when describing the dress of infants.

In recapitulation I may observe, that the chief causes of infantile diseases are, privation of maternal lactation, the substitution of improper aliment, exposure to cold, vicissitudes of season, bad air, filth, errors in diet, clothing, exercise, repose, improper moral management, precocious mental cultivation, contagions, as small-pox, measles, scarlatina, hooping-cough, &c. The transmission of a feeble, delicate, or diseased constitution, is a predisposing cause of diseases. We see this fact well exemplified in all large cities, and also in manufacturing towns, where women labour as well as their husbands, and are exposed to many privations, vicious habits, improvidence, and intemperance. The lower classes are crowded together in filthy and unwholesome abodes, they are prone to drunkenness, infected with diseases induced by licentiousness, which are communicable to offspring. Their depravity is so great that many of them refuse to enter the marriage state, or enter this condition too early, and the result is enfeebled and diseased infants, which are readily destroyed by poverty, contagious diseases, and every sort of mismanagement. It is proved beyond doubt that the mortality at Manchester and Glasgow, both manufacturing towns, is much greater among infants than in the largest cities. (Roberton on the Mortality and Physical Management of Children, 1827.) This able writer gives a table of the proportion of illegitimate children in different places, which shows some curious results. He states that the proportion of illegitimate children at Manchester is 1 in 12; in Paris, after the revolution, 1 in 11, and in 1821 and 1822, 1 in 3, or 36 per cent.; in Stockholm 1 in 3; and in Sweden and Finland 1 in 20. It is difficult to ascertain the proportion of illegitimate to legitimate births in this capital, but I believe it to be very large. The mortality of such children is immense; Dr. Caspar informs us that 3 per cent of the children born in wedlock in Gottingen are born dead, and 15 per cent of the illegitimate. In Berlin, in 1819 and 1822, the deaths of the infants born in marriage were 1 in 25, of the illegitimate 1 in 10. The mortality of illegitimate infants born alive, and of legitimate, is also proportionally great. "For 10 legitimate infants who die in the first month, there are 24 illegitimate. In the second and third months the proportion is two to one. In the second quarter it is one and three-quarters to one. In the two remaining quarters of the first year it is one and one-half to one. In the second year, one and two-fifths; in the third and fourth years, one and one-third. In the fifth, sixth, and seventh, one and a quarter; and of the total number of natural children, only one-tenth or one ninth pass the age of puberty." (Medical Statistics, &c.) We cannot be surprised at this mortality, when we consider that most of the illegitimate children are produced before the adult age, by dissipated parents, often debilitated by hard labour, intemperance, and vicious habits of all sorts, and that all the sacred duties of parents, especially those relating to physical education, are neglected. Mr. Roberton makes some apposite remarks on this point, and also on early marriages, which are worthy of citation. He says, "Moreover early marriages, though they cannot be called vicious, are always common where the means of subsistence fluctuate to both extremes. Their effect is to produce feeble children, and afterwards to starve such of them as might, under other circumstances, be reared.

"But without adverting to the vices of the

poor, how often do we see the mother of a large family obliged to follow some employment besides the care of her household, and that too at a distance from home. Meanwhile her children are unavoidably neglected. Besides, the abject poverty from which those who subsist by manufactures are never long exempt, occasionally renders it impossible for the poor to feed and clothe their families in a manner compatible with even ordinary health. To such causes of debility and disease, when we add filthiness, impure air, want of exercise, the great liability to infectious complaints, at a very early age, in crowded neighbourhoods, mismanagement in health and sickness, especially the shocking practice of exhibiting spirituous liquors even to infants at the breast, and want of medical treatment, we readily perceive why infantile mortality is greatest where the poor are most numerous; and that it must increase in manufacturing districts, cæteris paribus, in ratio of the increase of the operative population." This excellent observer goes on to state, that a friend informed him of a custom among the poor at Manchester which is common in all parts of the United Kingdom—a landlord of a dram shop stated "that he was in the daily habit of seeing mothers pour undiluted spirits into their infants," "sometimes," as he expressed it, "till they became black in the face." If they showed much aversion at first, the finger was dipped in the liquor, until the taste for it was acquired.

It is also to be borne in mind that there is not a single woman who becomes a mother for the first time, either high or low, who understands the proper management of infants; and hence the mortality of first children is very great, in fact few of them survive. There is, however, another cause of mortality, and it is the injury inflicted on the fœtus in utero by mismanagement during pregnancy, tight lacing, too much exercise, &c., and the compression it sustains during parturition. This last cause accounts for the great proportion of still-born infants, and of those that are delicate and seldom survive. In general there is more difficulty experienced in a first than in any subsequent parturition; and as male infants are usually larger than female, the mortality is greater among them. Dr. Clarke of Dublin has adduced ample proof of this statement. "It appears by a table kept in the Dublin Lying-in Hospital for 27 years, from 1757 to 1784, there were 20,117 infants born, of which the males were to females as 9 to 8, and 1 in 30 was still born. There were 10,647 males, and 9,470 females. At the end of a fortnight the balance in favour of the boys, originally 1177, was reduced to 483, being a greater loss of males to females, by 694." Dr. Clarke is of opinion that the male head is in general $\frac{1}{32}$ larger than the female, and consequently more compressed during labour. The still-born infants were in the following proportions in the different cities, according to Mr. Roberton: 1 in 24 in London and Vienna; 1 in 36 Stockholm; 1 in 19 Dresden; 1 in 33 Brunswick; 1 in 15 Hamburg; 1 in 19 Paris; 1 in 11 Strasburg.

From the preceding facts, it is clear that infantile medicine is not too minute or unworthy of attentive study and cultivation. For my own part I could never perceive the reason why we should not apply the science and practice of medicine to man, from his nativity to the last hour of his existence. In early life he is extremely liable to diseases, on account of the peculiarity of structure, functions, and the delicacy of his constitution. Diseases are more rapidly excited, more difficultly treated, and much more fatal during infancy, than in the other periods of life. The comparative mortality among infants, which will be hereafter noticed, establishes the validity of this position beyond the power of contradiction or doubt. A slight cause will induce local or constitutional irritation, which may rapidly be followed by convulsions, inflammation, and death. Infants cannot bear pain for any length of time without danger to life, and hence all external injuries and surgical operations ought to be carefully avoided; the latter should not be practised unless when the functions of life cannot go on without them. How often do we see cases, in which a slight wound or a burn induces convulsions and death in a few hours, in despite of all remedies.

The greatest judgment is required in the detection and discrimination of infantile complaints, and the greatest caution in the administration of remedies. If medical practitioners encounter such difficulty, it is obvious that those unacquainted with the nature of diseases cannot attempt their treatment with safety. Such persons may exhibit an aperient medicine, but nothing else. In this part of the United Kingdom it is a popular opinion, that every infantile disease is caused by teething, water in the head, or worms, and that every old nurse or chemist is competent to treat them. The ignorance and temerity of non-professional persons in this respect lead to the most fatal results. I have known a case, in which a druggist, who styles himself surgeon, gave a mother a fever powder for a child of three years of age, which was seven grains of tartarised antimony; intense vomiting was excited, the "doctor" pronounced this beneficial, the child died in a few hours,—and this person informed a friend of mine, that this was his usual powder for children.

The mortality among infants is much greater among the poor than the rich, for the reasons already stated, and an immense number is annually destroyed in winter. The latter are better fed and better managed, both morally and physically.

Healthful children recover, but those which are puny or delicate generally fall victims to disease. There is a wonderful power in the constitution to ward off diseases, and many of these have a tendency to cure themselves. Some organs are weaker than others, either

by descent or by former disease, and these will suffer most when re-attacked.

It is an axiom in medicine, that the future health of man is determined by the good or the bad health of infancy. Thus it is well known, that a slight catarrh, or cold, may lay the foundation of asthma or consumption.

A faulty moral management enfeebles the constitution, and often renders the treatment of diseases extremely difficult. Instances are recorded in which a fit of rage or anger has induced convulsions and death. Again, few children will lie in bed during illness, allow a satisfactory examination of their disease, show the tongue, answer questions, or take medicines. This is the result of bad moral management, in consequence of too much indulgence, or the inconsiderate practice of some parents in holding out the threat of the administration of medicine for improper behaviour. When life is in danger neither entreaties, persuasion, nor caresses are of avail, and the sole resource is force, which obliges parents to regret their imprudence when it is too late. Some children, however, become tractable in disease, and by reasoning with them in a kind manner, or by making them some present, may be induced to hold out the arm to be bled.

No child can be considered certain of life until it has had measles, scarlatina, has been vaccinated, or passed through small-pox, dentition, and weaning. Fatal affections of the brain may be induced by teething, and of the bowels by weaning. It has long been observed, however, that when an infant is in perfect health, it does not suffer from dentition or ablactation. We should except this from physiology, as it would be incompatible with the course of nature, that infants should suffer from teething or weaning, which are natural processes. But when infants are improperly managed, when subjected to repeated errors in diet, clothing, cleanliness, &c., they suffer severely, and are often destroyed during the above conditions. If dentition occur as a natural function, and weaning be well managed, an infant escapes many diseases, he passes through childhood, puberty, and adolescence with a good constitution, and arrives at a vigorous manhood and a healthful old age.

There is no doubt entertained by medical practitioners, but that the seeds of a good or bad constitution are sown in infancy, appear in childhood, luxuriate at puberty, and are maturated at the adult age. In a word, both mind and body, health or disease, and happiness or misery depend, in a great degree, upon the good or bad management of the infantile constitution. Infancy is decidedly a period of health when its physical and moral education is conducted according to the laws of physiology. But as education is generally bad, we find infancy the most critical period of human existence. It is certain, however, that the best education or management cannot avert or remove faults in the original structure of the body, or prevent diseases. But in most cases, when infancy is properly managed, childhood is the most healthful period of life.

Dr. John Clarke well observed, that the great mortality among children was owing to mismanagement; "since it is utterly inconsistent with the uniform goodness of the Creator, to suppose that so many children are brought into the world, that they may die at an early period of their existence."—(Commentaries on Diseases of Children).

We cannot wonder at the frightful destruction of children, when their management and diseases were without the pale of the profession, from the time of Hippocrates to the last century, and consequently the profession and public were ignorant on the subject. Even in 1834, in this age of intellect, our Colleges of Physicians and Surgeons in London do not examine in midwifery or diseases of women and children. There is no examination on this branch of medicine in the United Kingdom, except at the Royal College of Surgeons in Dublin.

The mortality among children must, therefore, be immense, until medical practitioners are compelled to study their hygiene and diseases, and until the colleges display more common sense and philanthropy than they do at present. These bodies consider obstetricy and pædenosology unworthy of protection, and think they should be committed to nature and to old women. This piece of wisdom reminds us of the sarcasm of Sennertus:—"Etsi vero nonnulli estimant infantium morbos solum naturæ et mulieribus, quæ infantes tractant, committendos esse; tamen et hic medico partes sunt." "It would hardly be believed possible in a civilised land," says Dr. Clarke, *op. cit.*, "if it did not stand recorded in the by-laws of the College (of Physicians), that any person, at any time, could have had sufficient influence upon so learned a body (and who were, therefore, less liable to prejudice) to induce a majority of them to accede to a prohibitory by-law, by which the Fellows of the College are compelled to exclude themselves from practising midwifery, and therefore from acquiring much knowledge of the diseases of infants and children. It seems to be a law calculated for the perpetuation of ignorance, by preventing men of the best education and highest attainments in learning, from adding to the stock of medical knowledge on subjects most dear to society." I fully assent to this excellent remonstrance, and rejoice that the legislature will speedily reform our antiquated medical institutions, and advance the science of medicine, which, to use the language of Mr. Hume, in the House of Commons (Feb. 1834), is in a state of absolute barbarism compared to those of other countries.

Though some authors of eminence wrote upon diseases of children in the seventeenth century and subsequently, such as Harris, Astruc, Brouzet, Boerhaave, Van Sweeten, Hoffman, Sydenham, Heberden, Underwood, Ha-

milton, Burns, and those I have mentioned on a former occasion, there were many physicians of note "who made no scruple to assert, that there is nothing to be done for children when they are ill. This I am told was the doctrine of the late Dr. Hunter, who, though a great anatomist, was no adept in physic."—(Dr. G. Armstrong on Diseases of Children, 1808.) I have a manuscript copy of Dr. Hunter's lectures in my possession, and, in corroboration of the above statement, may add, that his account of diseases of new-born infants is as superficial as it is possible for it to be. Dr. Hunter was, however, a great man, and was not singular in the opinion ascribed to him, as to the treatment of infantile diseases, for Mr. Abernethy was another who entertained it, within a recent period of his death—1829.

In truth, the treatment of diseases of infants, as well as their physical management, has, in this country, been commonly confided to old women, nurses, and midwives; and it is a popular adage, "the best doctor for a child is an old woman." Sane pol! Ista temulenta est mulier et temeraria,—a midwife so well described by Terence. Many eminent physicians have declared that they never wished to be called to children, because they were really at a loss to know what to order for them.

I am supported in these strictures by Mr. Roberton:—"The importance of infantile diseases," says this admirable and philanthropic writer on the subject, "in a medical point of view, must be obvious, when we reflect, that under ten years of age, nearly five times as many human beings die as in any after period of life of the same duration; and, moreover, that perhaps two-thirds of all the cases, confided to the care of the general practitioner, are children's complaints. That their complaints have not hitherto, in this country, received that share of attention which they merit, is evident from the comparatively small number of works in our language which treat of them. When a department of any science is zealously studied, publications relating to it will be sure to appear as the fruits of such study."—Roberton *op. cit.*

When we consider the immense mortality of infants, amounting to one-half in some countries, two-thirds in others, and one-fourth or one-fifth in the most civilised nations at the present period, we cannot but deplore the imperfect state of our knowledge of infantile hygiene and medicine.

At our next meeting I shall give an account of the mortality of infants and children; and consider therapeutics in reference to those periods of life.

Foreign Medicine.

Sarsaparilline.

M. Thubeuf considers this substance as the active principle of sarsaparilla, since it causes water to froth when shaken, and gives it the acrid and bitter taste which this vegetable imparts to its aqueous and alcoholic macerations. Seen by the aid of a microscope, it offers an assemblage of radiated crystals, of which the laminæ are convergent at their extremities, and has not the slightest action upon turnsole paper. In a state of purity, the sarsaparilline is white, without odour, and, in the dry state, with scarcely any savour. In cold water it is scarcely soluble, whilst it is readily dissolved in boiling, although, on cooling, a great part is precipitated. Alcohol, either cold or hot, dissolves it, but, on adding a little water to these solutions, it may be precipitated, and, on evaporation, will crystallise. Equal parts of æther and alcohol at an increased temperature readily dissolve it, whilst æther alone, even in the boiling state, completely fails in so doing.

Atropine.

MM. Geiger, Hesse, and Mein, have succeeded in extracting this alkaline substance from the Atropa Belladonna. They have obtained it separately from the same plant by two different processes, each, however, offering the same properties. It is white, and crystallisable, in transparent prisms, in silky shining groupes. Water of the ordinary temperature only dissolves one-hundredth part. The aqueous solution renders turnsole paper, reddened by acid, blue; in the same state of solution it possesses the power of dilating the pupil of the eye, which state continues for some time; it also gives an abundant white precipitate on adding an aqueous infusion of gall nuts. Hydro-chlorate of gold precipitates it of a yellow citron colour; it is insoluble in solution of platina, is very little altered by the addition of chloride, and appears to form with acid subsaline compounds.

Aconitine.

The aconitine which has been discovered in the leaves of the *Aconitum Napellus* is not susceptible of crystallisation. In the purest state it is grained, and in transparent colourless masses. The savour is first bitter, then acrid, the latter taste, however, being neither powerful or of long duration, very different from that of the plant, which often remains for more than twelve hours, and leaves the tongue benumbed. The acrid principle resides entirely in the aconitine, and may be separated by several times combining this alkali with

acids. One-fiftieth part of a grain dissolved in alcohol suffices to kill a sparrow in a few minutes, and one-tenth of a grain destroyed a little bird with the rapidity of lightning. It dilates the pupil of the eye, but its action is evanescent.

Codeine.

According to M. Barbier, the codeine of M. Robiquet differs in many respects from morphia and opium : an ounce dose, containing a grain of this preparation, administered either in syrup or in an aqueous solution, acts principally upon the nervous centres of the great sympathetic, especially in the epigastric region. In gastralgia, where the patient complains of pain and weight under the inferior end of the sternum, increased upon pressure, perspirations, palpitations, hiccup, nausea, syncope, &c., the syrup is of the most essential benefit, almost always giving relief. This substance generally produces calm sleep, very different from that obtained from opium. It never occasions weight in the head, numbness or congestion of the brain, but appears on the contrary to create exhilarating sensations. At the Hôtel Dieu, at Amiens, M. Barbier has administered it to women who were suffering at the same time from gastralgia and nervous pains in the head, loins, and thighs. The stomach was much benefited by its use, but it did not appear in the slightest degree to exert any influence on the latter.

Appointment of M. Serres.

The Royal Council have confirmed the nomination of M. Serres to the situation of External Clinical Professor of the Faculty of Montpelier. We congratulate at the same time both the Professor and the Faculty, for no person better merits to replace M. Delpech.

Death of Dr. Chevreau.

Dr. Chevreau, Surgeon-in-Chief to the African corps, and an officer of the Legion of Honour, died lately at Algiers, aged 59. A funeral oration was made over his tomb by M. Stephanopoli, chief physician to the same corps.

PETITION OF THE ROYAL COLLEGE OF SURGEONS.

To the King's Most Excellent Majesty.— The Petition of the Royal College of Surgeons in London,

Sheweth,—That by charters granted by your Majesty's royal predecessors, this College was incorporated for the advancement of surgery, and for the examination of surgeons, with the power of granting them a diploma attesting their ability.

That your petitioners have expended large sums of money in the reception and display, in the preservation and augmentation, of the Hunterian Museum, and in rendering it accessible and useful to the public, so as to advance to the utmost of their power, those great scientific and national objects, which were contemplated by your Majesty's Government and by Parliament in entrusting the Museum to their care; also, in making and constantly increasing a collection of books, not only in all branches of medical science, but in the various auxiliary departments of knowledge, and in opening it freely to the scientific public, as well as to their own members.

That the Museum and Library are attended with a great annual expenditure, entirely defrayed from the funds of the College; and that they could not be maintained in their present state of public usefulness and efficiency if those funds should experience any material diminution.

That in fulfilling the important duties entrusted to them by royal charter, your petitioners have constantly endeavoured to improve the education of surgeons, to advance the healing art, and to uphold the scientific character of the country. They have the satisfaction of believing that these efforts have been successful; they do not hesitate to affirm that the members of this Royal College have contributed very largely to the great improvements which surgery has received in modern times, and that, whether we regard the intelligence and skill of the body generally, or the knowledge and public services of individuals, English surgeons are not inferior to those of any country. The diploma of the College is held in such high estimation by the public, that nearly all who enter the

gical profession consider it indispensable to their success; and its possession is required, almost invariably, as a condition of eligibility to public surgical appointments of all kinds.

Your petitioners, having heard that certain persons, acting on behalf of an institution, called the London University, have applied to your Majesty for a charter of incorporation, with the power of conferring medical degrees, humbly submit to your Majesty, that the grant of such a power to that institution, while it would infringe the chartered rights of your petitioners, would be injurious and unjust to the other medical schools of the metropolis, which your petitioners are bound to protect to the utmost of their ability, from a long experience of their efficiency as instruments of professional education; and that it would consequently be highly disadvantageous to the public.

Your petitioners having heard that the liberation of a large class of your Majesty's subjects, who dissent from the Established Church, from the inconveniences under which they labour in consequence of their exclusion from the English Universities, is alleged as a reason for granting to the London University the power of conferring degrees, beg leave to represent to your Majesty, that no religious distinction is observed in conferring the diploma of this College.

Your petitioners humbly submit to your Majesty's gracious consideration, that the institution which is called the London University, resembles the ancient and venerated Universities of England only in name; that it is, in fact, a joint stock association, established by the subscription of money in shares, which may be bought and sold in the share market. When first opened, it was under the general direction of a Council, and the immediate superintendence of a resident head, called the Warden, and it thus presented to public view the outward semblance of academic arrangement and discipline. These forms have been materially changed, and the office of Warden has been altogether abolished. The institution having spent all the money originally subscribed, has already fallen into pecuniary embarrassments, so that, according to a printed document issued by the Council, the session could not have been opened in October, 1832, without the assistance of a loan from some proprietors, who have therefore a manifest pecuniary interest in the success of that application for a charter, which they have been particularly active in promoting. It has since been found necessary to raise a further supply by way of mortgage. The consequence is, that the original 100*l.* shares are now at a discount of 75 per cent., so that for the sum of 25*l.* a person may become a proprietor of this institution, and have a voice in the appointment of Professors, and in the granting of the proposed degrees.

Your petitioners humbly submit, that a fluctuating body of shareholders, amounting to above 1000, especially when the shares may be bought for 25*l.*, is unfit, by its very constitution, to exercise the powers now solicited on behalf of the London University; that this establishment, even if its constitution were unobjectionable, is entirely deficient in the essential requisites of security and stability, and can only be regarded as an experiment, of which the result is at present extremely doubtful.

In consequence of the state of the finances, the Council of the University, before the opening of the Session in 1833, withdrew from further pecuniary responsibility, by giving up the control of the Schools in a great measure to the Professors, and receiving from them a guarantee to the amount of the estimated annual expenditure. Thenceforth, therefore, the medical and surgical department of the London University can only be regarded as an Association of Teachers, conducting the School as a speculation of their own, superior in no respect to the other medical schools of London, but inferior to most of them in not possessing the means of that practical instruction at the bedside of the sick, without which a due knowledge of medicine and surgery cannot be acquired. On the other hand, the previously existing schools of surgery, connected with the great hospitals of the Metropolis, possess the advantages of a well organised system of instruction, both in precept and in practice; in them the great body of English practitioners have been educated; and their teachers have attained a degree of celebrity, as public men, to which the high character of English surgery may be ascribed.

Your petitioners, therefore, humbly submit,

that the Association of Medical Teachers in the London University has no claim to any superiority of power or privilege over the other medical and surgical schools of London; and that to give to the former distinctions or privileges which are denied to the latter would involve the double injustice of unfair preference and unmerited exclusion.

Your petitioners beg leave to represent, that large sums have been expended in founding and supporting the medical schools of the great hospitals in London, in erecting suitable buildings, and in providing museums, libraries, and the other requisites of professional education; that property to a considerable amount is invested in these establishments, in which gentlemen of abilities, knowledge, and zeal, are employed as teachers. Among these schools, which depend for their success merely on the talents and exertions of their teachers, and on their respective advantages in other points, an honourable competition exists conducive to the promotion of knowledge, and advantageous to the public.

Your petitioners beg leave to express, in the strongest terms, their serious apprehension of the public disadvantage that would result from any measures calculated to derange the present efficient system of medical and surgical instruction; especially from the conferring on any one school a monopoly of power, and thus degrading and injuring the other institutions.

Your petitioners are firmly convinced, that the occupation of teaching, and the power of examining and conferring degrees, ought to be exercised, as they now are, by distinct institutions; and that the union, in one and the same institution, of these discordant attributes, must be attended with danger to the public welfare, on the numerous occasions in which the interest of the teacher and the duty of the examiner would interfere with each other.

Your petitioners therefore most humbly pray that your Majesty will not grant to the Institution, which has assumed the name of the London University, the power of conferring medical degrees; and they further pray, that if the expediency of such a grant should be referred, by your Majesty, to the consideration of your Majesty's most honourable Privy Council, they may have the opportunity of being heard by Counsel on the subject matter of this Petition.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, April 19th, 1834.

Mr. Pettigrew in the Chair.

Abscess in the Thorax.—Artichoke in Rheumatism.—Conferring of Charters on Universities.

Mr. Pettigrew exhibited to the Society a preparation taken from a carpenter, who had died in the Charing Cross Hospital. On the 27th of March, whilst in a state of intoxication, he was knocked down by a carriage, the wheel of which passing over his thorax, fractured four or five of his ribs, and extensively bruised the surrounding parts; when brought into the hospital his pulse was very feeble, and he was still labouring under the effects of liquor: some hours afterwards, reaction having taken place, he was bled; at the end of four days he became much better; his respiration, which was laborious, became easier; there was, however, a slight cough, but he did not complain of any particular pain in the chest. He continued nearly in this state until the 21st of April, when the cough became much aggravated, and the expectoration was of a purulent character; his symptoms continued to grow worse, and at the end of 36 hours he died. The periosteum was found torn from the fractured ribs, which did not show any appearance of reparation; on the pleura costalis there was a large cavity, containing nearly two quarts of purulent matter; the lungs were blanched. This case was interesting, inasmuch as it exemplified the very great extent to which mischief might proceed in the chest, without any symptoms of such disease being excited.

Dr. Johnson thought that abscess in the thorax was much more rare than many medical men were inclined to suppose; purulent depots, which were essentially different, not having any of its characteristic signs, were frequently mistaken for abscess.

Mr. Hunt was not disposed to think that this formation was so rare a disease as Dr. Johnson imagined; at the same time, he thought that those collections of matter, which appeared in the last stage of typhoid fevers, &c., were of a different nature, there not being in the constitution at the time sufficient

strength to produce that adhæsive margin necessary to the forming of an abscess.

Dr. Epps mentioned a case, where the lungs were found perfectly sound, although during life the diagnosis had been phthisis pulmonalis; coagulable lymph had been thrown out between the pleuræ, and had there formed a false membrane.

Dr. Epps sent round some of the extract and tincture of artichoke, to which he had alluded at the last meeting; since that evening he had received two communications on the subject, in one of which the medicine was highly extolled.

Dr. Johnson, understanding that the question of granting charters to Universities was to be agitated this evening, thought he might save the time of the Society, by stating that a memorial had been presented from the London University, praying his Majesty not to grant a charter to that institution, but to confer upon some central body the privilege of granting degrees.

Dr. Epps was rejoiced to hear what Dr. Johnson had just stated, but still he should not, in consequence of what some individuals had done, be deterred from persevering in his resolution. In a speech of considerable length and eloquence, but of which the limits of this Journal will not allow the insertion, he proclaimed against the insufficiency and abuses of the present system of conferring medical degrees, and concluded by moving the resolution which had been read at the last meeting.

This having been seconded by Dr. Johnson,

Mr. Hunt regretted that the present subject should have been brought forward at the present time; the facts of the question being so entirely in the hands of the House of Commons; he thought that many of the grievances alluded to by Dr. Epps were imaginary.

Dr. Johnson agreed with Dr. Epps in the remarks which he had made, with the exception of the necessity of applying to the King at the present juncture: the grievances referred to were not imaginary, and he thought that the voice of the profession should be made known, for the purpose of assisting the parliamentary decision.

Mr. Dewhurst proposed an amendment, the purport of which was diametrically opposed to the original motion.

This not being seconded,

Mr. Greenwood said he felt surprised to hear Dr. Epps bring forward this question; he did not think that there could be any objection to the granting of a charter; but if that charter entitled them to confer medical degrees, it might act disadvantageously.

Dr. Ryan agreed with Dr. Epps in the propriety of discussing his resolution, because he felt convinced that the Corporation of London were under certain influence, or they would never have advocated monopoly. As to the wishes of the professors not to obtain the power of conferring medical degrees, he thought they would be of little effect, when the Council of the University were anxious to obtain that power, and they were the chief of his Majesty's ministers. Another reason advanced against the present resolution was, that a Parliamentary Committee was now engaged on medical education, and the Society ought to wait for its decision. But suppose this decision was not made for six or nine months, and that a charter was granted next week to the University, could the Society express its opinion? He felt convinced that the opinion of the largest medical society in London would have great weight both with the Legislature and Privy Council, and therefore the resolution ought to be discussed. All the profession, who had given evidence before the Parliamentary Committee, the monopolists excepted, approved of the establishment of One Faculty of Medicine, with a power of granting degrees; and many said that this ought to consist of the most eminent members of the Colleges of Physicians and Surgeons, after these bodies were liberalised and modernised, together with other distinguished practitioners, and the lecturers of all the medical schools in London. In his opinion a faculty might be so constituted, provided professors of the elementary branches of the medical sciences were elected by ballot, previously to the examinations for the degree, and by this means the candidates could not know the teachers who would be examiners, and there could not be any monopoly in teaching. It would be absurd to expect that physicians and surgeons in extensive practice would be acquainted with the actual state of the elementary sciences, for example chemistry, and therefore they would be incompetent examiners, though very efficient in practical medicine and surgery. There should be several examinations, as at Paris, or at the Dublin

College of Surgeons, for no one who heard him would admit that an examination of half an hour or less at one place, and of an hour and a half at another, were sufficient tests of competency for the practice of medicine and surgery. There were now many medical schools in London with museums and libraries, purchased at great expense, and it would be manifest injustice to give a monopoly to any one of them.

Dr. Epps replied to all the arguments urged against his motion, and was only surprised that it received such little opposition. He commented upon the amendment, which he showed absolutely contradicted itself, and felt satisfied that the Westminster Medical Society would agree with him in opposing the proposition of conferring an exclusive privilege, a monopoly upon any medical school in the metropolis.

The Chairman then put the resolution, against conferring a charter upon any University in London to the vote, when it was carried by a large majority.

A motion was then made by Mr. Hunt and Mr. Simpson, that a special meeting of the Society should be summoned, to consider the expediency of appointing the officers at the last meeting of the session.

The President announced that this motion would form the matter for discussion on next Saturday evening.

The meeting then adjourned.

MEDICAL SOCIETY OF LONDON.

Monday, April 21st, 1834.

T. E. Bryant, Esq. in the Chair.

Properties of the Lobelia Inflata—Nervous Influence—Causes of Asthma—Treatment of Hooping Cough.

The minutes of the preceding evening having been confirmed,

Mr. Robarts read to the Society a paper on the medical properties of the lobelia inflata, a plant lately introduced into this country from America, where it has for some time been used extensively in the cure of asthma and other affections of the chest. After stating that it possessed rather stimulating than narcotic qualities, and, therefore, was not adapted for cases where inflammation existed, but rather to check the morbid action left in the part by such inflammation, and dependent upon some particular state of the nervous system, he concluded by referring to some cases illustrative of the different states of disease in which it usually proved beneficial.

Amongst other observations elicited from various members by this paper,

Dr. Uwins confessed that he had long considered the bronchitis of hooping-cough very different from ordinary cases of bronchitis, the former requiring a totally different plan of treatment, not being affected, but even benefitted by exposure to changes of temperature, and not being influenced by the medicines which were successful in the latter.

Dr. Whiting did not think, as some of the members seemed to do, that the influence on the nervous system must necessarily be the same in all cases, for according as the agent was different, so would the impression be. The various forms of cutaneous eruptions were caused by the influence, communicated through the nerves, being various; he had observed that some one of these forms of eruption (in general the chronic form of eczema) accompanied asthma.

Dr. Blicke felt convinced that asthma in every instance depended on derangement of the primæ viæ, and might be cured by simply attending to the regulation and improvement of the digestive functions; affections of this kind were, in his opinion, attributable to the acrid state of the blood, in consequence of the derangement of this system, and asthma was nothing more than thickening of the mucous membrane dependent on the same cause.

Mr. Clifton was well aware that asthma, as well as most other complaints, was capable of being much benefitted by attention to diet; but to say that such simple treatment would always suffice for the cure of the complaint, was jumping at once to a conclusion in which his experience would not allow him to coincide. In reference to the remarks of Dr. Uwins, on hooping-cough being benefitted by exposure, he begged to state that he could not agree, having almost invariably found that by keeping the child in one temperature, he could cure the disease, and that by exposing the patient it became aggravated.—Adjourned.

ROYAL COLLEGE OF SURGEONS.

The Jacksonian prize for 1833 was adjudged to Mr. John Green Crosse of Norwich, for "a

Dissertation on the Formation, Constituents, and Extraction of Urinary Calculus;" and premiums of equal value have been adjudged to Mr. Richard Radford Robinson, of Cowper's-row, Trinity-square, London, and to Mr. George Thompson Morgan, of Queen-street, Aberdeen, for dissertations on the same subject.

THE

London Medical & Surgical Journal

Saturday, April 26, 1834.

HOSPITALS NATIONAL ESTABLISHMENTS.

THE present condition of medical appointments in our metropolitan hospitals will, of course, occupy a large share of the attention of the Parliamentary Committee, in its review of the present state of medicine; and in any project for its reformation there will be much to reform and order in these great practical schools of medicine. In them, all the accidents and diseases, which it is the glory of our profession to relieve, are accumulated for purposes of the purest charity, for the enlargement of the domain of science by the most eminent practitioners of the day, and, what is of equal importance to the public, for the instruction and improvement of the many who are afterwards to dispense their skill and knowledge in a thousand different private channels. Dispensaries, to a certain degree, have corresponding claims to attention:—but many of them are got up as mere advertising machines, and are utterly worthless of notice, except for the sake of exposing the tricks of their composition. There are, however, several of them of great practical importance, and although these latter generally differ from hospitals, in being in a great measure dependent upon annual subscriptions for support;—although they do not offer the advantages of intern patients, whose whole regimen is at the will of the practitioner, still we look upon them as very valuable instruments for education; and many of the remarks we are about to make, more particularly with regard to hospitals, will apply to respectable dispensaries also.

It will be one of the objects of the Parliamentary Committee to inquire into the funds by which the hospitals of the capital are supported. We are aware that certain questions have already been sent to the proper quarters, which will elicit all necessary information upon this subject. Some hospital worthies have shown an inclination to kick against the interference of a Committee of the Legislature with their *private* affairs;—and we, in our station, are prepared to undergo their indignant remonstrance against our proposed interruption of their established system. Without, for the present, taking the trouble of very minute inquiry, we conceive we are authorised in our statement, that a very large portion of the funds of every hospital in the capital is derived from fixed and permanent sources, and that the free gifts alone of deceased benefactors would go a vast way in maintaining them in their present efficiency. Besides, as to their floating income, much, very much indeed, of that is derived from the public spirit and generosity,—to lay ostentation aside,—of persons of eminent station, who consider they owe a duty to society, for the protection it affords their wealth and rank, to contribute to the maintenance of public charities. These personages are not likely to be influenced in their annual subscriptions by any selfish motive of personal influence in the management of the hospitals, or the appointment of their medical officers.

We have, then, in the metropolitan hospitals, every element of national institutions. True, they are not the gift of the State; they are not supported out of

the general taxation of the kingdom; Government does not interfere in their management:—but they are truly *English* in their origin;—nor are their funds the less national, in that they have been dedicated to the public service in aid of national wants, by the unconstrained liberality of private citizens. And as to their management, they have of necessity become such important parts of our medical polity, as schools and theatres of medical science, that it is idle to talk of usurpation, when we propose to make them essentially integrant parts of the great republic of medicine, and subject to its laws.

Some of these laws it is our present purpose to suggest. We cannot pretend to give a distinct outline of the comprehensive subject, to the proper consideration of which these observations may, it is hoped, contribute. We shall confine ourselves to a few remarks upon certain very glaring defects at present observable in hospital regulations, which might perhaps be remedied by the hospital governors themselves, although we confess our hopes of amendment would be very slight were there not a Parliamentary Committee now sitting.

The first point to which we shall allude relates to the proper period at which an hospital medical officer ought to retire, and give place to other, not to say better, men. The present system of life-appointments is utterly indefensible upon any knowledge of human nature. It is not more true than remarkable, that, sensible as men are in their youth or manhood of the infirmities of age, they seldom discover these infirmities in themselves as age creeps on apace, till they have in their turn been a spectacle to the youth or manhood of another age. Even in pure medical practice the defect of age is felt; after a certain age a man is deaf and blind to all improvements in his art. There are certainly rare examples of minds vigorous and elastic to the very verge of a long life: but rules must be laid down for average cases. In surgical practice, in the serious matter of operative surgery, it is shocking to behold the tremor of a hand, unsteadied by time, attempting a public operation, after all private practice of the kind is gone. We shall not record the absurd stories which those who "love a joke" repeat of certain miserable exhibitions of hospital octogenarians. Our aim is a reform of a palpable abuse. But the evil inflicted on the sufferers by such practitioners is small compared with the mischief their tenacity of office inflicts upon young men, who are excluded thereby from the advantage of hospital practice at the time it is most likely to be serviceable to them, while the public is debarred from the advantage of so much additional medical skill. The proposition we are advocating, of setting proper limits to the duration of a hospital appointment, has been admitted as most reasonable by many in authority. Some of them, whose promises we have, are still in their vigour; others have admired the principle, but have forgotten its practical application in their own case.

What should be the limit, whether sixty-five or sixty, is another question. We are disposed towards the shorter term. After a surgeon or physician attains *that* age, he cannot expect to improve his practice.—It will be well if he retains what he has. It is not, however, to be concluded from our suggestion for calling younger men into active operation, and employing them publicly while their faculties are unimpaired, that we desire to sever the connexion between eminent practitioners in advanced life,—whose services have been appreciated, who have

had their day,—and our national establishments. If their talents merit the honour, there may be reserved for them the graceful situation of consulting practitioners; and as such, without detriment to the charitable interests, or obstruction to their brethren, they may yet do good service after their retirement.

Suffrages will be more divided upon another proposition touching the same subject.—Every person not of the standard age will agree in the last.—The suggestion on which we expect opinions will be divided, because it is levelled at a monopoly, is this:—That it is desirable for the interest of medical practitioners in the metropolis, and for the interest of the public, which is deeply concerned in their available skill, that the medical officers of the national hospitals should be extended much beyond their present number; and that they should be employed according to some system of rotation in discharging their important duties. A rotation of this kind exists in some of the Continental hospitals. It seems to us an excellent expedient for giving the public at large the benefit of the knowledge to be acquired by hospital practice; and the competition it would produce in regularity and in study, by opening, as far as it is possible, the road to eminence,—by allowing unpatronised talent to make its way before the public,—would contribute to the cultivation of medicine, in a manner scarcely known in this country, as a science, above all others, worthy of public patronage.

We must leave the subject of the proper manner of appointment of hospital medical officers for the present untouched. It must now suffice to say, that those who adopt the principles of this article will not differ from us when it is convenient to discuss that branch of the subject.

UNIVERSITY OF LONDON.

We have received a pamphlet* in support of the application of the University of London for a charter, which appears to be intended as a supplementary brief to counsel. The question at issue, will, in the course of this week, have been argued before the Privy Council. Our opinion upon the impolicy of granting to the University any peculiar privilege in medicine is already well known; and we see nothing in the pamphlet before us to induce us to change our well-considered conclusion. We had intended to repeat our observations upon the present occasion; but, as our readers have the substance of Dr. Epp's speech, in another part of this Journal, we shall reserve ourselves for another occasion, being convinced that the Privy Council will never accede to the preposterous demand of a Medical Faculty, with power to grant Degrees, whilst the House of Commons has the whole subject of medical polity under its consideration.

ANATOMY BILL.

The following petition has been presented to the House of Commons by Mr. Warburton:—

The Humble Petition of the undersigned Medical Practitioners and Students,

Sheweth,

That the act passed by your honourable House in August, Anno Domini 1832, entitled "An Act for regulating the Schools of Anatomy," does not provide for a registry of the names of all the students attending the anatomical classes in the metropolis.

That the only public register known to your petitioners is that at Apothecaries' Hall, (by which the inspector is at present instructed to act); but which merely comprehends those pupils who intend to undergo an examination by that corporate body, exclusive of numerous

* Address from the Senate to the Council, &c. Taylor, London: 1834.

pupils who do not wish to become licentiates of the said corporation; but who dissect for the purpose of passing their examinations at the Royal College of Surgeons in London, or at the Army or Navy Medical Boards; and consequently the above-named register affords no just estimate of the number of pupils absolutely requiring dissection in London.

That the aforesaid Anatomical Bill does not nominate any specific sources whereby the students shall be legally furnished with a supply of subjects for dissection; that at present the principal or sole supply is from the parish workhouses; that the law, at the same time, leaves it optional with the parish authorities whether the unclaimed bodies under their control shall be lent for dissection or not previously to interment; and allows, moreover, the parochial directors to exercise a power of election over the schools, in sending the said bodies to any particular school or schools they may wish pre-eminently to favour.

That the large medical schools or public institutions necessarily possessing more local parochial influence than the smaller anatomical classes, a greater reciprocity of interest and private feelings exist between the teachers of some schools and the parochial authorities, than between the latter and other anatomical teachers.

That in consequence of the above facts, there has not only been a scanty general supply of subjects, but a corrupt exercise of the anatomical law, by the disposable bodies having been very unequally distributed, so that in some schools dissection has been repeatedly suspended, to the immense injury of the teachers, students, and perhaps to the community at large.

That although the Right Honourable the Secretary of State for the Home Department has, by his patriotic exertions and judicious negociations with the parochial authorities, temporarily moderated the complained of evils, the latter still continue to exist in a material degree; and your humble petitioners fear they will remain, until it may seem to your honourable House needful to make the following amendments in the Anatomical Bill, which they humbly suggest for your consideration.

1st. That proper sources shall be legally established for the supply of subjects for dissection.

2nd. That it shall be legally imperative upon the inspectors, or some other persons, as a part of their principal duty, to distribute equitably, according to the number of students in each school of anatomy, the disposable bodies.

3rd. That the books in which the said bodies are registered shall be open at certain times of the day for the inspection of any person, upon leaving his card or address.

4th. That it shall be criminal to sell or purchase dead human bodies.

5th. That a general registry of all the pupils attending anatomical lectures in the metropolis shall be kept at the College of Surgeons, or some other public institution.

6th. That all the bodies disposable for dissection shall be equitably distributed to the various schools, or other licensed places, through the medium of the inspectors.

Your petitioners therefore humbly pray that your honourable House will institute an inquiry into these facts, or lay them before the Committee now sitting on the state of the medical profession, for the purpose of deciding whether it would not be more advantageous to the interests of society, the profession, and science, to adopt the amendments herein respectfully submitted.

And your petitioners, as in duty bound, will ever pray, &c.

GLASGOW ROYAL INFIRMARY.—CASES OF THORACIC ANEURISM.

BY JAMES DOUGLAS, ESQ.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—Every one who has studied auscultation, is aware that the immortal discoverer of that mode of exploration considered it, even in combination with general signs, inadequate to the detection of thoracic aneurisms. Subsequent observers have thought that they have succeeded better in their diagnosis; and Dr. Hope, in his valuable work on the heart, assures us that he has made out "unequivocal criteria." I shall notice, first, the sounds of aneurisms, and how they are confounded with the sounds of the heart, then the supposed criteria, and, lastly, two cases, which, with several others where aneurism was diagnosed and not found, have convinced

me that we cannot be certain of the existence of a thoracic aneurism, unless it can be actually seen and handled.

When we place the stethoscope over an artery, we perceive a simple beat, synchronous with the impulse, stronger in proportion to the size of the vessel submitted to examination. In an aneurism, the same thing occurs, as if the artery were still further increased, the impulse becomes stronger, and the sound also. But an additional circumstance is superadded, a bellows murmur, generally very hoarse, and passing into the *bruit de râpe.* In cases of sacculated aneurism, it is easy to conceive how this sound is produced, by the blood passing from the artery through a narrow opening into a large sac; but in cases of simple dilatation, it can be accounted for only by the reflexion of the fluid from the walls of the sac, so as to form conflicting sonorous currents. The sound is generally simple, and accompanies the dilatation of the artery. Yet I have observed it, in a case of sacculated aneurism of the abdominal aorta, to occur later than the impulse, as if caused by the contraction of the sac forcing the fluid out again through the aperture into the vessel. In this way, of course, must be explained the second sound, where the aneurismal sound is double.

In the abdomen, or over any external artery, the existence of a pulsating tumour, with the sound above described, sufficiently indicates the existence of an aneurism; but in the chest, the action of the heart interferes with the diagnosis: for the first sound of the heart is synchronous with that of the aneurism, and the second sound of the heart is heard along with the aneurismal sound, and makes it appear double also. Dr. Hope says, first, that the first aneurismal sound is invariably louder than the healthy ventricular sound, and generally than the loudest bellows murmur of the ventricles; secondly, that it decreases on leaving the aneurism, while the ventricular sound gets stronger; thirdly, the diastolic sound actually does get stronger as we approach the heart; and, fourthly, that the aneurismal sound is deep and hoarse, with an abrupt commencement and termination. Such are his criteria. Now, the second of these appears to me to be too nice for ordinary ears, and the others, though undoubtedly good, where there is sufficient distance between the heart and the aneurism, require such a separation to exist, as may give the idea of two centres of motion. The following case exhibits a falsification of the stethoscopic diagnosis, from the *situation* of the aneurism, of which I have not seen an instance in any work which I have had an opportunity of consulting.

John Fyfe, æt. 43, a porter, admitted Dec. 20th, 1833; complains of weakness across the small of the back, and inability for exertion. If he walks, or in any way exerts himself after taking food, it is rejected by vomiting. No pain excited by pressure over the stomach. Complains of breathlessness, but respiratory murmur seems pretty good; action of heart rapid and violent, heard over both sides of the back; ventricular systole accompanied by bellows murmur; pulse 100; tongue white; respiration slow. He was bled to relieve the palpitation, and to ascertain the state of the blood, which was healthy, and was put on tinctura digitalis. Urine, however, became scanty, and by the 30th there was general œdema. By the 9th of Feb., under the use of diuretics, this disappeared entirely, and he felt more comfortable than for many weeks previous. On the 4th of March, 1834, the following entry was made in my case-book: — "Complains much of palpitation; action of the heart for the first time observed, irregular; pulse 60; impulse of the heart very strong, raising the head from the chest, and felt over a space about three inches square: first sound protracted, and accompanied with *bruit de soufflet*,—second, scarcely audible. Sounds heard loudest and impulse strongest under the cartilages of the ribs, and less under the sternum: also heard pretty distinctly on both sides of the back. Carotids are seen to pulsate as far as the angle of the jaw. Diagnosis—Hypertrophy of the left ventricle, with some dilatation.

On the evening of the 4th he fell down when in the water-closet, and died soon after being carried to bed.

Inspection.—On removing the dura mater a quantity of blood was found effused over the anterior part of the right hemisphere of the cerebrum; right ventricle filled with coagulated blood, but no ruptured vessel could be

detected. The heart was very slightly, if at all, hypertrophied. Lying exactly behind the heart was discovered a large aneurism, springing from the posterior part of the thoracic aorta. The sac was about four and a half inches long by three and a half wide, extending from the seventh to the eleventh dorsal vertebræ, and communicating with the aorta by a circular opening, upwards of an inch in diameter, with a thick rounded edge, exhibiting a duplicature of all the coats. They were all traced over the sac to near the back part, where the eighth, ninth, and tenth dorsal vertebræ were in contact with the blood, and deeply carious. A large laminated coagulum had been here deposited.

Below the sac, the aorta, which passed in front of it, was contracted; and about an inch farther down, immediately on passing the diaphragm, gave origin to a small globular aneurism, about an inch and a half in diameter, from its fore part, by an orifice rather larger than a common quill. From the lower and anterior part of this sac, which was a true aneurism in its whole extent, and contained a coagulum, the cœliac axis arose. The coats of the aorta exhibited numerous atheromatous patches.

Here, then, to my astonishment, was a diagnosis falsified, founded on all the physical signs of hypertrophy, in which several excellent stethoscopists coincided with me. The aneurism, from its position exactly behind the heart, had jolted it forward against the parietes of the chest at each systole, producing the apparently tremendous impulse. The reason why the sounds were heard on the back, simulating dilatation, was also obvious. The caries of the spine, which in one place penetrated nearly to the canal, was undoubtedly the reason of the weakness in his back, and the apoplexy was, I suppose, the effect of the retardation of the current in the aorta, by the contraction below the great sac. It is curious that there was no irregularity of the pulse till two days before his death, and that without any assignable cause.

The second case shows how the signs, both general and physical, may be marked by a concomitant affection of the lungs.

Thomas Reid, æt. 54, admitted December 20th, 1833. A fortnight ago, after undue exposure to the weather, was seized with cough and dyspnœa, aggravated by lying on the right side. Expectoration is copious, consisting of tough mucus, exhibiting some rusty stains, and is brought up with difficulty, especially in the morning. On examination with the stethoscope, the bronchi are found much loaded, and copious, sonorous, sibilant, and mucous râles are heard all over the chest. The rattling of the mucus in the bronchi may be felt even by the application of the hand to the chest. Pulse 96; respiration 24; tongue pretty clean; bowels open; skin natural; voice very hoarse.

Has been subject to cough and dyspnœa, and had a severe attack of this kind last spring.

Sumat. pulv. ipecac. gr. xv. pro emetica.

Utatim mistura scillitica.

Vomit operated with relief of dyspnœa, and the expectoration became easier. Pains, however, were felt in the chest, which were relieved by blisters. Hoarseness continued; and on examining the larynx, the cricoid cartilage seemed nearer the sternum than it ought to be. Calomel, digitalis, &c., were employed, and one night he was nearly suffocated with tough expectoration, but obtained relief by another emetic. Dyspnœa continued to increase, and he died on the evening of the 2nd of January.

The case had been considered one of chronic bronchitis, with an acute aggravation, and was treated as such. Emetics, of course, would never have been thought of, had there been the least suspicion of an aneurism, as they have induced rupture of the sac, and immediate dissolution. But from the loud and constant bronchial râles, no signs of lesion of the heart or aorta were discovered by auscultation, though the chest was frequently explored. The dyspnœa was referred to the chronic bronchitis, but the dissection showed why it was aggravated when he lay on the right side, the left not being occupied by the lung alone. The hoarseness was referred to inflammation in the trachea, although the position of the cricoid cartilage might have led to suspicion, but it was overlooked.

Inspection.—The lungs when cut into, poured out a large quantity of bloody serum, and the divided bronchial tubes contained much muco-purulent matter. The mucous membrane of the tubes was red and thickened;

the cartilages of the larynx were ossified, but still movable, and the lining membrane was natural. The right ventricle of the heart was found dilated; an enormous aneurism by dilatation of the arch of the aorta, was discovered, rising upwards, attached to the trachea, and passing to the left side, involving the origins of the great vessels, and of much the same volume as the heart itself. It gradually subsides into the natural size of the vessel, about three inches above the diaphragm. The internal membrane is continued all along the sac, except at several rough spots posteriorly, where it would probably soon have burst. A large laminated coagulum is here deposited. There are numerous atheromatous patches between the internal and middle coats of the vessel.

WESTMINSTER HOSPITAL.

Election of Assistant-Surgeon.

The election took place at the board room of the new hospital. The candidates were Mr. Hale Thompson and Mr. J. Maitland. A large number of governors attended, who expressed their admiration of the beauty of the new building. At the close of the poll the votes were—

For Mr. Thompson	169
For Mr. Maitland	100

LONDON UNIVERSITY CHARTER.

It appears, after all, that the Council of the London University are most anxious for a charter to confer degrees in the arts, sciences, and medicine. We feel convinced that the power of granting medical degrees will be withheld.

French Hospital Reports.

HÔTEL DIEU.

Imperforation of the Anus in an Infant two months old—Operation—Cure.

On the 4th of March an infant of the above age was brought to M. Caussade, apparently in a dying state. It vomited fæculent matter, had hiccup, a small thready pulse, livid countenance, and distended abdomen. On examination it was discovered that the anus was deficient, there being only a small capillary opening at the posterior part of the vulva, through which the infant voided, with great difficulty and pain, a thick yellow-coloured fluid. To remedy the imperforation, M. Caussade made an incision, three or four lines deep, over the part which the anus should have occupied. At the bottom of the incision a mass of fæcal matter was found, and, after some difficulty, on account of its hardness, removed. Injections were then administered, and brought away large quantities of similar substance. The wound was kept open by means of pledgets of lint; and, on the following day, the fæces passed easily through their legitimate channel. No bad symptoms followed the operation, and the juvenile patient is now quite recovered.—*Gazette des Hôpitaux.*

Accidental Hæmatemesis followed by Amaurosis.

A peasant, æt. 45, accustomed to endure great bodily fatigue, and to indulge in spirituous liquors, was seized, after walking a long distance and drinking a considerable quantity of cold water, with vomiting of blood to so great an extent, that on the following day M. Revolat found the patient in so enfeebled a state that he despaired of his recovery. The hæmorrhage continued; the pulse became small; the skin cold; and he complained of intense pain and weight in the epigastric and hypochondriac regions. Acidulated ptisans, to which was added extract of rhatania, were given to him; and he was directed to remain perfectly motionless. By degrees the vomiting and hæmorrhage ceased, but he was then seized with amaurosis, which terminated in total blindness. It was supposed that when the strength of the patient increased, the blindness would terminate; hitherto such has not been the case however.

HÔPITAL ST. ANDRE DE BORDEAUX.

Fistula Lachrymalis caused by accidental Inflammation of the Eyelids.

Jeanne Lalande, aged, admitted into this hospital for ulcers on the legs, was attacked in the month of December with ophthalmia. The eyelids became swollen; there was a great secretion of pus; and finally, large abscesses formed at the angles of the eyes: on one side they rapidly got well, but on the other a fistula

lachrymalis formed. Notwithstanding the application of different topical remedies the fistula remained, and caused such severe symptoms, that M. Moulinié plunged a sharp-pointed bistoury into the nasal canal, and then introduced a small catgut bougie, which he left in the wound for twenty hours, after which it was removed. The inflammation rapidly disappeared, the fistulous opening cicatrised, and at the end of a month the cure was complete.

MEETINGS OF THE LITERARY AND SCIENTIFIC INSTITUTIONS OF LONDON FOR THE ENSUING WEEK.

Sat. ...	Westminster Med. Society	8 P.M.
Mon. .	Medical Society of London	8 P.M.
Tues. .	Institution of Civil Engineers	8 P.M.
Wed. .	Society of Arts	½7 P.M.
Thur.	Royal Society	½8 P.M.
	Society of Antiquaries . .	8 P.M.
Fri. ...	Royal Institution . . .	½8 P.M.

APOTHECARIES' HALL.

Names of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, April 17th.

Joseph Baker Bodman . .	Calne.
Thomas Henry Cooper . .	London.
Thomas Charles Cade . .	——
Hammond Chalk . . .	Canterbury.
Llewelyn Parry Mortimer	Pembrokesh.
Arthur Phillott . . .	Wookey, near Wells.
Frederick Plant . . .	Newcastle-under-Lyne.

BOOKS.

The Principles and Practice of Obstetricy, as at present taught by James Blundell, M.D., Professor of Obstetricy at Guy's Hospital. In five parts—I. The Anatomy of the Female System. II. The Physiology of the Female System. III. The Signs and Diseases of Pregnancy. IV. The Art of Delivery. V. The After Management of the Puerperal State, the Diseases of Puerperal Women, and Strictures on the Diseases of Children. To which are added Notes and Illustrations. By Thomas Castle, M.D., F.L.S., Member of Trinity College, Cambridge, &c., &c. 8vo. pp. 838. London: 1834. Woodcuts. E. Cox.

The Natural History of Animalcules: containing descriptions of all the known species of Infusotia, with Instructions for Procuring and Viewing them. Illustrated by upwards of 300 magnificent figures on steel. By Andrew Pritchard, Esq. 8vo. pp. 194. Plates. London: 1834. Whittaker and Co.

An exceedingly interesting volume.

Essai sur la Leucorrhée, et les Causes Diverses qui la produisent. Par M. A. M. Bureaud Reoprey, M.D., &c. 12mo. pp. 161. A Londre, chez J. B. Balliere.

A Refutation of some Mis-statements Reflecting on the University of Edinburgh. 8vo. pp. 23. Edinburgh: 1834. Maclachlan and Stewart.

CORRESPONDENTS.

G. T. D. will find the matter in the last volume.

A. Z.—It is said that the North London Hospital will be opened in October next, and that the fee for medical and surgical practice will be £15, which will be devoted to the support of the Institution.

METEOROLOGICAL JOURNAL.

MONTH. April, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
17		51	55	42	29·98	29·98	70	65	N.E.	N.E.	Fine	Fine	Fine
18		54	58	42	29·93	29.95	63	65	E.N.E.	E.N.E.	——	——	——
19		53	62	45	29·95	29·97	65	61	E.N E.	E N.E.	——	——	——
20		50	55	44	30 03	30·01	67	67	N.N.E.	N.N.E.	——	——	——
21		49	52	46	30.01	30·04	67	68	N.N.W.	N.N.E.	Cloudy	——	——
22		50	57	48	30·00	29·98	65	65	N.	N.	Fine	——	——
23	○	54	56	43	29·93	30·01	64	62	N.N.W.	N.	Cloudy	——	——

50, *High Holborn.* William Harris and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 118. SATURDAY, MAY 3, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE LXXXVII., DELIVERED APRIL 15, 1833.

Gentlemen,—I have next to speak to you of *iritis*. When you recollect that the iris receives its supply of blood by the two long ciliary arteries, the external and internal, which are but little connected with the arteries of the other textures of the eye, you must perceive the reason why inflammation of this organ should frequently exist as independently of inflammation in other parts of the eye, as those cases which are termed conjunctivitis, sclerotitis, and corneitis. I wish you also to be aware, that the danger of iritis chiefly depends upon its partaking of the nature of the adhesive inflammation, by which the pupil is apt to become, under the least neglect, completely and irremediably obliterated by the effusion of coagulable lymph. Iritis is, indeed, attended with a degree of inflammation in the sclerotic coat, the front layer of the capsule of the crystalline lens, and too often with inflammatory action in the choroid coat and retina; yet the iris is plainly the focus of diseased action, the affection commencing on its pupillary margin, and other parts becoming subsequently affected by continuity or sympathy.

Iritis, gentlemen, is divided into *idiopathic* and *symptomatic*, *acute* and *chronic*, and into several specific varieties, as I shall presently explain. Certain common symptoms characterise iritis, however, from whatever cause it may originate.

1. In the early stage you may discern minute red vessels, running in radii in the sclerotica to the edge of the cornea, where they form a red zone, while the rest of the sclerotica retains nearly its natural paleness, though it afterwards becomes uniformly red. In this coloured engaving, you see the disease in a very early stage; there is a zone round the cornea, but the rest of the sclerotic coat exhibits scarcely any redness.

2. Then, gentlemen, another symptom, common to every iritis, is a change of colour in the iris: if naturally blue, it turns greenish; if dark coloured, it changes to a reddish-brown. This is owing to a deposition of lymph in its texture, and to the effusion of such lymph upon its surface. Hence, you frequently notice irregular tubercles, or masses, formed either at the edge of the pupil, or upon the iris itself.

3. Another symptom, noticed in every iritis, is a tendency to contraction, irregularity, and immobility of the pupil.

4. Then, gentlemen, you will commonly also remark an effusion of lymph into the pupil and posterior chamber, and sometimes into the anterior. In rheumatic iritis, however, lymph is more sparingly effused than in venereal iritis.

5. Considerable intolerance of light is another effect of iritis in general; but it is much greater in rheumatic than syphilitic iritis.

6. One thing, which you must not forget, is a disposition in every iritis to the production of adhesions between the pupillary margin of the iris and the capsule of the lens; and sometimes between the iris and cornea, or even between the posterior part of the iris and the ciliary processes. Such adhesions are usually of a dark colour, like that of the edge of the uvea.

7. Together with these common effects of iritis, the patient has dimness of sight, and sometimes total blindness.

8. Pain in the eye, the orbit, and forehead, are likewise invariable attendants on iritis, and often subject to nocturnal exacerbations.

Notwithstanding what I have now stated, when amaurosis exists, iritis may present a dilated pupil.

Next, gentlemen, with regard to the *causes of iritis*, I may observe, that exposure to atmospheric changes, very strong light, syphilitic disease, scrofula, gout, rheumatism, wounds of the eye, may each be concerned. Iritis, I have said, may be *acute* or *chronic*. When acute, the inflammation, beginning on

the pupillary margin of the iris, quickly extends over its whole surface, and affects the external as well as internal tunics. In chronic iritis, the inflammation sometimes begins at the ciliary margin of the iris, whence it may be slowly propagated to other internal textures. Chronic iritis, however, also sometimes produces effusion of lymph, and adhesion of the edge of the iris to the capsule of the lens, without any perceptible inflammation of other textures of the eye. Between this slowly creeping chronic iritis, and the most acute form of it, you will meet with numerous other cases, in which every gradation of the inflammatory process is exhibited.

The constitutional disturbance is different in different cases. Acute iritis is generally attended with headache, restlessness, full and strong pulse, white tongue, thirst, loss of appetite, and costiveness. At the same time, it must be confessed, that in some cases which would be regarded as acute, such symptoms prevail only in a slight degree.

What am I now to say of *syphilitic iritis?* It is indicated by tubercular depositions of lymph, a reddish-brown discoloration of the inner circle of the iris, the nocturnal exacerbations of pain, which is felt either in a much slighter degree, or not at all, during the day, the previous occurrence of syphilis, and, in most instances, the concomitant existence of other syphilitic symptoms. Then, there is an angular disfigurement of the pupil, which, according to Beer, is usually drawn towards the roof of the nose, but, according to Mr. Guthrie, not more frequently in this direction than others.

In *idiopathic iritis*, there is either no distinct deposition upon the iris, or it presents itself as a bright yellow elevation from the texture of the part, increasing to a certain size, and then breaking, so as to allow the escape of a yellow matter, which sinks to the bottom of the anterior chamber. Such yellow little abscesses you will not observe in syphilitic iritis.

In *arthritic iritis*, or that supposed to be connected with a gouty constitution, lymph is effused from the margin of the pupil, but not deposited in a distinct form, and the adhesions are generally *white*. Both in the *idiopathic* and *arthritic* iritis, the pupil generally retains its circular figure and central position in the iris. In the gouty and rheumatic iritis, a white zone is frequently distinguishable between the red one and the margin of the cornea.

In the *treatment of iritis*, gentlemen, you must attend to three principal indications:—

1. That of putting a stop to the inflammation.

2. That of preventing the effusion of lymph, and promoting its absorption, if it has been already poured out.

3. That of preventing the contraction of the pupil, and the formation of adhesions between the margin of the iris, and the capsule of the lens.

The *first indication*, or that of arresting the inflammation, is accomplished by antiphlogistic measures: bleeding, saline aperients, and tartarised antimony. If you do not stop the inflammation, it will soon extend to the choroid coat and retina, and sight be endangered. Have recourse then to venesection, or to cupping from the temple and nape of the neck. Sometimes bleeding and the exhibition of sulphate of magnesia, and the tartar. antimony, with other antiphlogistic means, will accomplish the cure of iritis, if duly followed up; but more frequently additional plans are requisite. Antiphlogistic treatment relieves the congestion of the blood in the eye, lessens the redness, and diminishes the fever; but, it does not always succeed in preventing the effusion of lymph, or in bringing about the absorption of what has been poured out.

This makes it necessary to consider how the *second indication*, or that of preventing the effusion of lymph, and promoting its absorption when deposited, is to be fulfilled. Experience proves, that the grand remedy for this purpose is mercury, employed quickly and freely, so as to affect the system. It must be used immediately after bleeding and other means of depletion have been practised. The effect of it is so to change the action of the vessels of the iris, that they lose their disposition to effuse coagulable lymph; and that which has been already effused, becomes absorbed. The natural colour of the iris is restored, the cornea becomes clear again, the red zone round it fades away, and the power of vision returns. All this improvement is rapidly effected, when the system is expeditiously put under the influence of mercury, and here it is advisable to let that influence be stronger than what is usually deemed necessary in other cases of ordinary disease. I generally give two grains of calomel with one-third of a grain of opium every four or six hours.

Then the *third indication*, or *that of keeping the pupil dilated*, requires the application of belladonna. This must always be preceded by depletion. Other narcotics will produce the same effect, as stramonium and hyosciamus; but belladonna is commonly preferred as most effectual. ℈j. of the extract should be dissolved in ℥j. of distilled water, and filtrated. This preparation is to be dropped once or twice a-day into the eye. But, if the inflammation be acute, it is better, I think, to smear the upper eyelid, forehead, and eyebrow with the extract itself, a little moistened. The other, however, is the most prompt method, if the inflamed state of the eye will bear it, which is not always the case. This use of belladonna is very important, not only as tending to prevent the closure of the pupil, but as keeping its edges away from the capsule of the lens, and even making the iris so withdraw itself from the lens, that, if adhesions be already formed, and the lymph soft, they will give way, and the pupil still recover its natural size and mobility. This beneficial change is also materially pro-

moted by the simultaneous use of mercury. Other local applications are of secondary importance: poppy fomentations generally give most relief, but cold applications may be used, if preferred.

Blisters are not advisable, until the disease becomes chronic; or, at all events, not until bleeding and mercury have been freely practised.

In *arthritic*, or *gouty iritis*, I may say, gentlemen, that mercury is not found so useful as in the idiopathic and syphilitic forms of the complaint. Colchicum and magnesia, and, in the chronic stage, blisters, carbonate of iron, and quinine, are means on which some practitioners place their chief dependence. You should not imbibe the notion, that syphilitic iritis absolutely cannot be cured without mercury. Sometimes it may be cured by antiphlogistic treatment alone; and Mr. Hugh Carmichael, of Dublin, has published a series of well-marked examples of syphilitic iritis, which were cured by giving ℥j. doses of turpentine in the almond emulsion three times a-day. Yet he only resorted to this practice when mercury was inadmissible, in consequence of its occasionally injurious influence on the health.

Choroiditis and *Retinitis*.—The internal inflammations of the eye, gentlemen, may sometimes arise in one texture, and at other times in another; in one case the retina may be first affected, in another the choroid coat, and in a third the iris. From these individual textures, the inflammation may afterwards extend to every part of the eye.

Retinitis is occasionally excited by long-continued immoderate exertion of the sight in the examination of minute microscopical objects, under a strong, and, perhaps, a reflected light. Such cases, however, are generally preceded by determination of blood to the head, or to the eye in particular.

The same consequence may follow the effect of vivid flashes of lightning, or the sudden exposure of the eyes of persons to the light who have long been confined in dark dungeons.

Chronic cases of retinitis are often regarded as weakness of sight, characterised by a morbid sensibility to light, and slight obscurity of vision, followed, after some time, by a gradual contraction of the pupil, immobility of the iris, and amaurosis.

Gentlemen, the *treatment* of acute retinitis consists in keeping the eyes perfectly at rest, with the benefit of darkness, abstinence, and active depletion, followed by the quick introduction of mercury into the system, belladonna being also applied, as in iritis. The treatment, indeed, is essentially the same in both cases.

Having now, gentlemen, given an account of the principal inflammations of the eye, I proceed to notice some other affections, a part of which may be regarded as consequences of inflammatory processes in the eye.

And first, gentlemen, I invite your attention to *glaucoma*, so called from the greenish colour reflected from the pupil, the iris becoming of a dull leaden or dirty green colour, the pupil dilated, the eye painful, its vessels distended, and vision generally destroyed. In the commencement of glaucoma, the green reflection seems as if it came from the very bottom of the eye; as the disease advances, the apparent opacity, which is always of a greenish colour, and often sea-green, looks as if it were situated in the centre of the vitreous humour, and at last appears to be immediately behind the lens. The opacity and green reflection are not the result of any change in the crystalline lens, but are more deeply seated. You cannot see the change by looking at the eye sideways, but only by looking towards the bottom of the eye.

Scarpa ascribes the glaucomatous state of the eye to inflammation and thickening of the retina; Professor Beer to similar alterations of the vitreous humour; and other surgeons to morbid changes in both these textures. Mr. M'Kenzie, of Glasgow, had the rare opportunity of dissecting some glaucomatous eyes. He found the choroid coat, and especially the portion of it in contact with the retina, of a light-brown colour, without any appearance of pigmentum nigrum. The vitreous humour was in a fluid state, perfectly colourless, or slightly yellow, without any trace of hyaloid membrane. The lens was of a yellow or amber colour, firm and transparent. In the retina, no trace of the foramen centrale and limbus luteus was distinguishable. No other change was noticed in the retina; for it was not thickened, nor changed in colour; neither was the vitreous humour thickened, or opaque, but perfectly fluid and transparent.

Glaucoma is always attended with a limited and sluggish motion of the pupil and other amaurotic symptoms. Ultimately, indeed, the pupil is greatly dilated, and the retina becomes insensible to light. The loss of sight, however, is generally gradual, and the want of pigmentum nigrum has been suspected to be capable of affording some explanation of the weakness of sight which accompanies glaucoma in the early stages. This, however, may not seem satisfactory to every pathologist, nor are we sure that a deficiency of pigmentum nigrum is an essential occurrence in every glaucoma.

Inflammation, leading to a destruction of the hyaloid membrane, may perhaps be set down as the proximate cause of glaucoma. The disease is much more common in old than young subjects, and is occasionally believed to occur chiefly in consequence of slow inflammation of the interior textures of the eye in gouty constitutions.

Be sure, gentlemen, not to mistake glaucoma for cataract, and the colour of the eye is sufficient to prove that, at all events, the case is not one of simple lenticular cataract,

for opacity of the lens alone is never green. Also when you dilate the pupil with belladonna, the green appearance seems to be further behind the pupil, and uniform, not streaked or spotted like a cataract.

When glaucoma has commenced in one eye, you will generally find it take place also in the other, the disease being often seen in different stages in the two eyes.

One fact is certain, gentlemen, that complete glaucoma may be set down as absolutely incurable, though it is possible that, in the early stage of the disorder, its progress may be arrested, and even vision improved. I should say, however, that the prognosis is always peculiarly unfavourable. Mild antiphlogistic treatment, with calomel and opium, may be tried, but the prospect of benefit is very slight indeed.

Instead of mercury Mr. M'Kenzie, of Glasgow, suggests the trial of carbonate of iron and sulphate of quinine, directly after depletion, but I know of no fact in support of the practice. Dilatation of the pupil with the aqueous solution of belladonna is sometimes found temporarily to improve the sight.

An *onyx*, or *abscess of the cornea*, gentlemen, signifies a collection of matter between its lamellæ, and so called from its being of a semi-lunar shape, like the white mark at the root of one of the finger-nails. It is generally situated at the lower edge of the cornea, and even when more extensive, may be readily distinguished from a collection of matter in the anterior chamber, called *hypopium*, by its form and situation remaining unchanged, whatever may be the position of the patient's head.

The treatment consists chiefly in the employment of remedies called for by the kind of ophthalmy, of which the onyx is an effect. As a general rule, it is the best practice not to open any collections of matter in the texture of the cornea, as you thus increase rather than lessen the risk of opacity of that membrane, and prolapsus of the iris. When, however, the onyx has a tendency to spread over the whole cornea, without bursting, it becomes necessary to make an opening with a cataract knife.

Gentlemen, you will often hear of *hypopium*, which is a collection of matter in the chambers of the aqueous humour, and frequently the anterior one. The matter is always first noticed at the bottom of that chamber, and it may increase gradually, till it not only covers the pupil but fills the chamber, and even the pupil. Sometimes it shifts its position with every motion of the head; and, in other examples, its thick glutinous properties fix it in one place. If the case be neglected, the prominence of the cornea increases, and, at last, after most agonising pain, that membrane gives way; the suffering now ceases, and the iris falls forwards, protrudes, and becomes adherent to the cornea.

In the treatment, the principal indication is to lessen the inflammation, from which the hypopium has originated, whether of the cornea or the iris; for, if you succeed in doing this promptly, and then give mercury, absorption will often proceed so quickly in the anterior chamber, that the matter will soon be removed. The best general rule is to abstain from making an opening; for, in fact, the matter is a viscid kind of lymph, which will not flow out if a puncture be made.

If the eyeball were to suppurate extensively, things would be different, and then an opening for the discharge of the abscess would unquestionably be required.

Ulcers of the Cornea are frequently the consequence of the rupture of an onyx or small abscess. In purulent ophthalmy, however, the ulceration generally begins externally, and penetrates more and more deeply, until it reaches into the anterior chamber. Sometimes ulcers of the cornea are produced by the irritation of extraneous substances on the eye, as quicklime, or pieces of glass. The ulcer is of a pale ash colour; its edges high and irregular; its margin surrounded by a slight halo of lymph, or a cloudy appearance of the cornea; it gives acute pain, discharges a thin lymph, and is disposed to spread. To the deposition of lymph around the sore, you may observe a fasciculus of vessels proceeding from the sclerotic conjunctiva; a fact beautifully illustrated in this engraving, coloured by Beer himself.

When the ulceration extends superficially, the opacity of the cornea may be destroyed; and when it penetrates the anterior chamber, the aqueous tumour escapes, and a prolapsus of the iris takes place. If the opening be large, even the vitreous humour and lens may be discharged, and the eye be destroyed. Then, if less mischief occur, the cicatrix frequently produces indelible opacity of the cornea, and more or less injury of vision.

Treatment.—Your first endeavour should be to stop the ulcerative process by means calculated to lessen the inflammation which is the cause of it. Local bleeding, therefore, is proper, as long as there is an appearance of active inflammation, and much pain is felt in the eye. The bowels are to be kept open, and opium administered. In strumous cases, give the sulphate of quinine, and wash the eye with a collyrium containing iodine, according to the formula of Lugol. In the chronic superficial ulcer, prescribe calomel. In almost all cases counter-irritation is useful. When the ulcer is kept from healing by the irritation of the motion of the eyelids, and it protracts the inflamed state of the eye, lunar caustic is the grand means of relief.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XIX.

Case of Gastritis with Delirium Tremens—Intestinal Worms—Organisation and Origin—Opinions of Linnæus, Müller, and Bremser—Occurrence of Worms in parenchymatous Parts—Existence in the Fœtus of Man and Animals—Internal formation—Pathological State of the Digestive Tube—Question of their perforative Powers—Worms in Abdominal Abscesses.

GENTLEMEN,—You may recollect that, when treating of acute gastritis, I alluded to the great importance of being aware of its complication with delirium tremens; and stated, that in the form of delirium tremens, which is the result of an excessive debauch, and where the stomach has been subjected to powerful stimulation, we have reason to believe that there is more or less of gastric inflammation. I have it in my power, to-day, to exhibit to you a very accurate drawing of the stomach of a patient who laboured under this form of disease, and whom I had an opportunity of examining several times before death. You will remember, also, I mentioned that in cases where symptoms of delirium tremens had arisen from excess, and not from a want of the customary stimulus, the ordinary routine treatment of giving wine, brandy, and other spirits, was extremely improper, and that where it was persevered in, and the patient died, you commonly found, on dissection, evident marks of inflammation in the brain and stomach. On that occasion, too, I quoted this as an example of the latency of gastric symptoms when complicated with an affection of the nervous centre. I have now to exhibit this drawing, which represents the stomach of a man who died of delirium tremens supervening on a severe debauch. This patient was treated entirely on the stimulant plan; he got wine, porter, brandy, and opium, but their exhibition was not attended with the slightest benefit. Under their use his symptoms changed and assumed a decided cerebral character: he had hot skin, quick pulse, great thirst, and general symptoms of fever, accompanied by a comatose condition. Previously to opening the body, I gave it as my opinion that the stomach would be found to exhibit marks of inflammation. Here is an accurate drawing of the stomach, and from its appearance you will be able to judge for yourselves. (*Here Dr. Stokes exhibited the drawing to the class, representing the stomach in a state of intense vascularity.*) Observe the generally diffused dark red colour of the whole organ, and the excess of inflammation towards its cardiac orifice. The brain, in this case, was but slightly vascular.

Gentlemen, I propose to devote this day's lecture to the consideration of an interesting subject in practical medicine—intestinal worms. There are few subjects possessing so much interest, in a physiological and pathological point of view, as this; and, in order to have correct notions, it will be necessary for you to be acquainted with the investigations of modern science on this subject. You are well aware that worms are found in most classes of animals. They occur in reptiles, fishes, birds, in the different classes of quadrupeds, and in man. In man they do not exist in such abundance, nor so frequently as they do in birds and fishes. With respect to their places of habitation, we find them, first, in cavities which have an external communication, and next, in the parenchymatous substance of organs; and we generally observe, that those which inhabit the cavities are different from those met with in parenchymatous parts. We observe, also, that the species existing in the different organs and cavities are not only different in their nature, but that there is a difference between the worms which inhabit separate portions of the same organ or cavity. In one part of a cavity or organ we find one species, in another a different, and this occurs almost invariably, as if it was regulated by a fixed law of the economy. A peculiar species of worm, occurring in man, called the *distoma hepaticum*, is never found except in the liver or gall bladder. If this animal had been introduced from without, it would certainly be detected in some part of the intestinal canal, but this is never the case. Rudolphi states, that the *Strongylus horridus* is to be met with only in the œsophagus of aquatic birds, and the *Ascaris obtusa* in the stomach of mice.

Generally speaking, worms are of three different forms—cylindrical, riband-shaped, and vesicular. Their organisation varies from the lowest scale, in which we can scarcely trace, as it were, the rudiments of an animal; beginning with the tape-worm, which presents little more than a cellulo-gelatinous mass, we ascend gradually until we arrive at a high degree of organisation, where we find well-developed muscles, a difference of sex, generative organs, and, according to some anatomists, a tolerably perfect nervous system.

Now, to remove all sources of doubt and error on this interesting subject, and to establish proper principles of treatment, let us examine into the origin of these animals. I shall confine myself to the consideration of the origin of those worms which inhabit the human intestines, as they are the only species which we have to do with as practical physicians.

You will at once perceive that worms must be derived from one of two sources; either as introduced from without, or formed originally within the bodies of man and other animals. It is maintained by those who are in favour of the first supposition, namely, that they are

introduced from without, that similar animals are to be found in the external world, and that they are introduced either in the form of ova, or in a state of perfect development, with the food or drink, or by the respiration of the animal. Observe, this doctrine is founded on the validity of the assertion as to whether animals similar to intestinal worms are to be met with in external nature. Linnæus states, that he found the tape-worm, and the small ascarides, a species now called *oxyuris vermicularis*, in a marsh in Lapland: but Müller, a much more accurate helminthologist, has since shown, most satisfactorily, that Linnæus was completely mistaken, and that those he had observed are never found to exist within any animal whatever. There are many observations on record similar to those of Linnæus: but as they were made at a time when Natural History was in its infancy, and as they have been disproved by the researches of modern zoologists, I shall not notice them. I believe there is no well-authenticated instance on record of tape-worms, lumbrici, or ascarides being found living in any situation external to the animal body. Every one of you, gentlemen, have seen worms in the intestinal canal, or recently discharged by stool or vomiting, but I will venture to say that not one has ever observed them in any article of food, in earth, or in water. Bremser, who is a high authority, makes a very pertinent remark on this subject. "We find," says he, "all animals most abundant in that situation which has been assigned to them by nature. Now if these animals were accidentally introduced from without, we ought to find them more abundant in the earth, water, &c.; but the contrary we have seen to be the fact."

But it is contended that these animals may have been introduced from without, and that in consequence of a change in situation, nutriment, and other circumstances, their forms may be altered; and it is argued in support of this hypothesis that external circumstances will and have been observed to change the forms of plants and animals in a very remarkable degree. In addition to this it may be said that an alteration in the nature of its food may even produce an actual change in the function of the animal. It is a singular fact that neuter bees may be made prolific by changing their food; it is shown that when a queen bee dies or is lost, the neuter bees take a grub of their own species in place of her, and by feeding it in a particular manner, it becomes capable of laying eggs.

Now supposing that intestinal worms are introduced in the form of ova into the human body, there is no reason why this sudden, remarkable, and complete change should take place. We see nothing similar to it in nature. The plant which springs from any particular seed will resemble that from which it derives its origin; the egg of any particular bird, no matter in what way it may be hatched, will produce an organised being similar to its parent. The form and character of the animal are given during the act of generation, and remain unchanged. Again, admitting that a difference in circumstances and nutrition might produce a total change in form, it should be in our power to demonstrate the individual in the process of transition; we should find those animals in a state half between what they were and what they are, and this state we should observe of very frequent occurrence. No such thing however has been ever demonstrated. Out of a vast number, Bremser did not find a single one in any stage of transition, nor has it been demonstrated by any zoologist. He also states expressly, that after having diligently examined 15,000 specimens of worms in the cabinet at Vienna, he never was for one moment at a loss to say which were intestinal worms and which were not. If there was any such transition it would have been discovered, but no such thing has ever been observed.

It appears then obvious that there is no direct evidence to prove that these animals have been introduced into the body from without, either in the form of ova or in a state of perfect development. We have nothing then, I think, but to come to the other conclusion, that they originate within the body, and this seems to be the opinion of the best physiologists and pathologists. This doctrine appears to be almost brought to a demonstration by the following facts. First, it appears that the worms which have been found in man and animals have a peculiar structure and organisation, differing materially from that of the worms which inhabit the external world. This is a point admitted by almost every modern writer on natural history. In the next place we find that the worms of certain animals present peculiarities differing from those of the same species in others. Thus the bothriocephalus and tœnia solium in man differ from those of other animals. You are not, however, to conclude from this that every animal has its peculiar worms, for such is not the case. Thus the lumbricus and small ascarides of man are found to exist in various animals, both carnivorous and graminivorous.

It appears obvious, that if worms were introduced from without, we should not find peculiar worms in the bodies of certain animals, yet taking a certain number of different animals living on the same food and in the same situation, we find a difference in the nature of the worms which are met with in the bodies of each. Another important fact is, that worms are to be found not only in the intestinal canal but in almost every part of the body. We find them in the cellular tissue, in the liver, gall-bladder, lungs and trachea; in the brain, heart, kidneys, and spleen. They have been met with in the air-bladders of fishes; and Treutler states that he has found the polystoma pinguicola in the ovaries of a woman which were steatomatous, and the strongylus in an aneurism of the mesenteric

artery of the horse. These animals have been observed in the anterior chamber of the eye in birds and horses, and there are innumerable examples of their occurrence in situations equally strange and anomalous. Another circumstance already mentioned, and which must be coupled with the fact just alluded to, is that there are certain species of worms which occur only in the same organs, and are never met with in any other situation.

Now observe the importance of these facts—we find that worms not only exist in the digestive tube and parts having an external communication, but also in the very substance of deep-seated viscera, and that the worms which are found in the various cavities and organs are peculiar to them. In one case we find a worm in the digestive tube, in another in the brain, in a third in the liver, in a fourth in the pulmonary apparatus, but no one has ever been able to demonstrate the trajet of a worm from one of these cavities or organs to another. It would be ideal and absurd to say in the case of worms found in the substance of viscera, that they had been introduced from without, or came from the intestinal canal. The distoma hepaticus, which is found in the liver and gall-bladder, might be supposed to arrive at those situations by passing along the ductus communis choledochus, but in the various cases in which it has been found, it has never been detected in the intestinal canal, and this, I think, would not have been the case if the digestive tube had been its original situation. One of the most important facts which have been stated is, that certain forms of these animals are found invariably in certain situations, and this has been observed not only in man and other animals of the class mammalia, but also in reptiles and fishes. In man we generally find the lumbricus inhabiting the stomach and small intestine, the tricocephalus in the cæcum, and the small oxyuris, or thread-worm, in the rectum. The preparation before me exhibits a specimen of the rarest form of worms which inhabit the intestinal canal, the tricocephalus. Here is the cæcum filled with these singular worms. The males are distinguished from the females by the whirl of the tail. If these little animals or the oxyuris had been introduced from without, we should expect to find them in various parts of the intestinal canal, but we find, on the contrary, that their situation is separate and distinct.

Lastly, *intestinal worms have been found in the fœtus, both of man and other animals.* Kerking describes a fœtus, the intestinal canal of which contained a vast quantity of small worms, and another of six months, in whose stomach a large lumbricus was found. Rudolphi, Blumenbach, and others of nearly equal authority, have recorded abundance of examples of worms existing in the fœtuses of various quadrupeds, *and also in those of birds which had just broken the shell.* Those who are obstinately attached to the doctrine that worms are introduced from without, have gone so far as to assert, that the ova of the worms have been transmitted at the moment of generation, a doctrine so absurd that it is unnecessary for me to enter into any refutation of it.

With respect, then, to the formation of worms in animals, we cannot help coming to the conclusion that they are originally formed within the body, and that, in fact, there is an original generation of these animals, the result of one organisation taking place within another,—the production, in fact, of a distinct being. This idea does not appear so difficult of conception when you recollect that circumstances analogous to it are extremely familiar and of almost constant occurrence. There is not much more difficulty in conceiving the formation of a living worm within the body, than there is of conceiving the organisation of a portion of lymph thrown out upon the surface of a serous membrane. What occurs in both cases is, that under the influence of the vital principle of the original animal, a portion of matter, previously inorganic, assumes the properties of life, presents distinct traces of organisation, vascularity, and sensibility. The only difference between them is, that in one case the organised mass remains adherent to the matrix, and in the other it is cast off, and forms a separate being. In the present state of our knowledge all speculation on the mechanism of the formation of worms must of necessity be nothing more than mere hypothesis. The idea which Bremser entertains on this subject is, that *intestinal worms* are formed by the presence of semi-assimilated nutritious matter in the digestive tube. Food taken into the system under ordinary circumstances is converted into a substance fitted for the purposes of absorption and nutrition, but when the process is not perfected, it is not taken up by the absorbents, and is then, according to Bremser, converted into an animal substance. This appears to be but a crude idea, unsupported by any facts; and it would be more philosophical to say that we know nothing about the matter. Besides, worms occur in various parts of the body as well as the digestive tube; and to suppose the presence of unassimilated matter in such situations would be only supposing an absurdity. Bremser brings forward, in support of his theory, that worms are of very frequent occurrence in cases where the assimilating powers are weak or deranged, and says that nothing is more common than to meet with an abundance of these animals in scrofulous persons, in those who have great appetites and bad digestion, and in children labouring under disease of the mesenteric glands. On the other hand, there are abundant instances of worms existing without the slightest apparent injury to the general health. In certain countries almost all the inhabitants have worms. But I believe all that we can affirm on this subject is this,—that they are not introduced from without, and that they are

formed within the body by a process the nature of which is exceedingly obscure.

Now, to come to the pathology of this subject,—can we connect the formation of intestinal worms with any known pathological condition of the intestinal canal? This is a question of no ordinary importance, for if we were able to connect their formation with an inflammatory or any other state of the digestive tube, it would furnish us with a key to correct and successful treatment. The school of Broussais are of opinion that worms are the result of an acute or chronic inflammation of the gastro-intestinal surface. This doctrine is by no means supported by the evidence of facts, for it has been established *that worms are found to exist not only in connexion with every possible pathological condition of the intestinal canal, but also where the tube presented the appearance of perfect health.* We cannot, then, safely affirm that intestinal worms are connected with an inflammatory or non-inflammatory condition of the digestive tube. Andral states that he has found them in all conditions of the intestine, whether red or pale, dry, or covered with mucus. They are most commonly, he says, enveloped in a quantity of mucus, and there is some redness in the place where they are lodged, but this appears to be rather the effect of their presence than the cause. I believe it to be the fact, that persons in excellent health, and with the intestinal canal in the normal state, may have worms. Dogs who are killed while in a state of apparently perfect health, are often found to have a large quantity of tape-worm in their intestines. It is idle and hypothetic to say, that the formation of worms depends upon an inflammatory or non-inflammatory, an asthenic or sthenic condition of the digestive tube; their formation is owing to some modification of the vital power, the nature of which is unknown. I again repeat, that nothing can be stronger against the supposition that worms depend upon inflammation, than the fact of their being observed in considerable quantities in healthy individuals.

A very curious point connected with this subject is the question of perforation of the intestines by worms. This question, which is an interesting one in many points of view, has been lately the subject of medico-legal discussion, and therefore demands a share of our attention. Of the different kinds of intestinal worms, the only one which is supposed to be capable of perforating the coats of the digestive tube, and escaping into the peritonæum or some adjoining organ, is the lumbricus, which is remarkable for its vigour and for the sharp and pointed shape of its head and tail. Many of the most eminent pathologists of modern times, and among the rest Andral, Rudolphi, and Carswell, are of opinion that these worms are totally incapable of perforating the intestinal tunics. Andral states, that there is no well-authenticated instance of this occurrence on record; and Rudolphi declares that they have no apparatus for effecting a passage through any continuous tissue. On the other side of the question, however, there are some curious facts and cases given, which, supposing that worms are incapable of perforating, are very difficult to explain. Dr. Fischer, of Vienna, gives the case of a female, in whom the following circumstances were observed on dissection. Two circular orifices were found in the colon, communicating with the cavity of the peritonæum: in one of these openings a worm was discovered, one-half of which lay in the peritoneal sac, the other in the intestine. No other worms were found in the digestive tube, but a second worm like the former was found in the peritonæum. Here we have a very remarkable coincidence of perforation of a portion of the gut, with the existence of one worm in the cavity of the peritonæum, and another of a similar description, as it would appear, in the act of making its way in the same direction. These circumstances, together with the existence of a double perforation, seem to be in favour of the idea, that the openings had been made by the corresponding worms. Another case is mentioned in the Elements of Pathological Anatomy, by Andral, and he quotes the case, not as one of perforation merely, but to show that the symptoms of effusion of matter into the peritonæum may, under certain circumstances, be nearly latent. The subject of this case, a young man, labouring under phthisis, had a tumour near the umbilicus, which increased rapidly in size, and presented a distinct fluctuation. Soon afterwards the integuments gave way, and a large quantity of matter was discharged together with a lumbricus. During the progress of this disease their was some tympanitis, but little or no pain had been complained of. On dissection there was a considerable number of worms and a quantity of matter found in the peritonæum, and a perforation in the arch of the colon, corresponding with the extravasated matter. Bremser gives a very curious instance of this kind as occurring in a species of fish. In this case the fish died, and it would appear, says Bremser, that the worm, finding some extraordinary change had taken place, was determined to take a peep and see what was the matter, for it had perforated not only the intestinal tube, but actually made a passage for itself through the whole body of the fish until it reached the water in which it had been lying. Here, finding that its world extended no further, it stopped, and began to make its way back again to its original situation by a new opening, so that when it was observed by Bremser, the two ends were in the intestinal tube of the fish, and the middle portion external. This, however, does not resolve the question, as to whether lumbrici are capable of perforating the intestinal canal or not. My own impression on the subject is, that we have not as yet any distinct and unquestionable

evidence of these worms being possessed of any perforating power; but it is a fact, that there are a great many cases on record of worms being discharged in considerable quantities from openings in the intestinal tube, and where it would appear that the openings had been formed, not so much by the action of the worms themselves as in consequence of their exciting an irritation in some portion of the intestine, followed by inflammation, ulceration, and escape of the contents of the tube into the peritonæum. There are many instances of this kind. An interesting case is mentioned of a female, who was attacked with pain in the groin, followed by the appearance of a tumour, which she was directed to poultice by her medical attendant. After some time the integuments gave way, a quantity of matter was discharged, followed by a large lumbricus, and during the progress of the case, about one hundred of these animals were discharged through the opening. This is a well-authenticated case. Another case is mentioned of a patient who had been subject to constipation and violent attacks of colic. A tumour began to appear in the right hypochondrium, followed by pointing and ulceration of the integuments and a discharge of matter. A number of worms (I believe twenty-four) were discharged through the opening, which remained pervious, and the patient lived for many years afterwards with an artificial anus. This case appears to be not an example of direct perforation from worms, but of the accumulation of a mass of these animals in a particular portion of the intestine, giving rise to irritation, which terminates in ulcerative absorption of its tunics and escape of its contents. Inflammation is set up in some part of the intestine, this goes on until the coats are all destroyed, and the matter and worms escape into the peritoneal cavity; but if adhesion should prevent this, an opening will be formed in some part of the integuments covering the belly. In both cases the opening is produced, not by an exertion of the worms but by an ulcerative and vital process. In support of this view it has been observed, that worms have come out through these apertures not head foremost; the centre portion appears first, and you can draw it out like a loop. Such cases as the foregoing, then, cannot be fairly given as cases of perforation from worms, but as cases in which these animals, acting somewhat like foreign bodies, produced irritation, inflammation, and ulcerative absorption. There is a very curious case on record, of a patient labouring under abscess of the liver, which burst externally, and a lumbricus was discharged with the matter. The patient died; and on dissection it was found that the cavity of the abscess had a communication with the stomach, through which it was conceived that the lumbricus had got into the liver.

The worms which inhabit the intestinal canal in man are the following:—first, the lumbricus, or common round worm; next, we have the tape-worm, of which two varieties have been described; thirdly, we have the very curious worm, of which there is a specimen before me,—it inhabits the cæcum, and is called tricocephalus; lastly, we have the thread-worm, to which the name of oxyuris vermicularis has been lately given. The lumbricus generally inhabits some portion of the small intestine, but is also frequently found in the stomach. Persons have often vomited them, and they have been known to have crept out by the mouth. They have been found also in the pharynx, œsophagus, and large intestine. There is an interesting case mentioned by Andral of a child, who, in a state of apparently good health, was suddenly seized with symptoms of suffocation, and died. On dissection it was found that a large lumbricus, which had come up from the stomach, had, when it arrived at the glottis, turned into its orifice, and, by irritating the larynx, produced spasmodic closure of that organ, and suffocation.

The lumbricus presents very marked appearances of an advanced state of development. The male has a peculiarly formed penis, the female has her generative organs well developed, and both have an extensive alimentary canal. The tricocephalus is about an inch in length, terminating in a point; the sexes are different, and the male is distinguished from the female by the circular whirl of his tail,—it is always found in the cæcum. The small thread-worms, with which you are all acquainted, are almost exclusively found in the rectum. These worms are found in vast numbers in some children; and it is said that the quantities of them which are discharged by the West Indian negroes are extraordinary.

The tenia, or tape-worm, is generally found in the small intestine; but it has also been observed in the stomach, colon and rectum. The length to which this animal sometimes attains is almost incredible. Bremser mentions a case in which a tape-worm 150 feet in length was discharged by stool. Another case is given, in which the tenia had the enormous length of 300 feet. I have myself seen a large wash-hand basin filled by a mass of tape-worm, discharged after a strong dose of castor-oil and turpentine. Still more extraordinary instances are recorded. Thus, in the Copenhagen Transactions, we read of a tape-worm eight hundred ells in length. But in all probability there has been an error in these measurements, and many worms have been taken for one. This is rendered probable by the fact observed by Robinus, who found in the body of a man, who had before death discharged fragments of tape-worm, a tape-worm extending from the pylorus to within six inches of the anus. The length of this single worm was scarcely thirty feet. One interesting circumstance connected with this animal is, that it is inferior in its organisation to every other species of worm. It

appears to be nearly a simple, homogeneous, cellulo-gelatinous mass, without any division of sexes, and without a nervous system, or generative organs. It is said also to occur principally in persons whose powers of life are low; and if this be the case, as I believe it is in many instances, it furnishes us with a very curious and interesting fact. The other better developed kinds are found in persons of healthy, good constitutions; but the tape-worms, though sometimes met with in such persons, are generally found to occur in persons of low and weak diathesis. Here we see a curious connexion between the product and the producing cause.

With respect to the exciting causes of worms, a vast number of circumstances have been mentioned by authors as giving rise to their formation. Foul air, low, damp situations, bad diet, the constant use of milk, cheese, sugar, vegetables, have been reckoned among their exciting causes. I believe we are not well acquainted with these causes. They appear often to be connected with some morbid influence produced upon the system by bad diet, and other circumstances; but what the nature of this influence is we know not.

CLINICAL LECTURES

DELIVERED BY

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At the Westminster Hospital.

LECTURE XIV.

On the Division of Strictures.

GENTLEMEN,—The question of dividing or of not dividing the stricture after the urethra has been opened behind it, is advocated both ways by many very able men. The fact of the stricture becoming much more manageable after the irritation caused by the pressure of the bladder has been removed, has induced many to trust to the ordinary treatment in order to effect a cure; and as in cases where the bladder was punctured through the rectum or above the pubes, no other method could be adopted, and yet the canal was ultimately rendered permeable, it must be admitted that this mode of proceeding is a good one in many cases. I should say that it is, like many others in surgery, a question of degree; that this method may be adopted in all cases where the stricture is of no great extent, but that it should be divided in completing the operation in all cases in which it is of a thickness, hardness, or extent, leading to the expectation of the cure being difficult or prolonged: for it must be borne in mind, that the incision in the perinæum soon closes up, so as to become a very small opening, no better, indeed, than a fistulous one if the passage is not cleared; and that any particular delay in effecting this object, will bring the parts into the state they are in when a fistula in perinæo has taken place from other causes, and which alone often requires another operation of nearly a similar nature for its cure. The patient also, in submitting to an operation, expects that the obstruction from which he has suffered so much should be divided; and unless it can be proved that some particular advantage will result to him from not doing it, or not having done it, he will not be satisfied with his treatment nor his surgeon if he has to undergo another, from whatever cause it may arise.

If the stricture has not been divided, a catheter is never passed from the perinæum into the bladder; but if the stricture has been divided, it is usual to introduce a catheter immediately into the bladder, which is sometimes good and sometimes bad practice. When there is but little irritation in the bladder the catheter will do little mischief, but when there has been low inflammation of its mucous membrane existing for some time, which is generally the case, the presence of the instrument gives rise to the greatest suffering, and to so much constitutional derangement as often to lead to the destruction of the patient. In no case can it do good as far as the bladder is concerned, and in many it will inevitably do mischief, and more particularly if a silver one be selected instead of an elastic gum catheter, for the end of it necessarily rubs against the upper surface of the irritable membrane and increases the evil, whilst it otherwise does no kind of good.

The particular advantages expected from the introduction of a catheter, are those of keeping the whole passage open, and of allowing the wound to heal over it, so as to re-establish the canal; advantages which I by no means undervalue, but which I well know may be attempted to be gained at too great a risk. The rule is, in my opinion, therefore peremptory, that a catheter of any kind is not to be introduced in such cases where the mucous membrane of the bladder is very irritable, or if introduced, is to be withdrawn as soon as it is found to give rise to an increase or even a continuance of irritation. As soon as the incision into the urethra is completed, the urine will flow through it, and will continue to do so for several days, without the opening being so closed up that it cannot readily be seen when the urine is discharging through it. During the period of this discharge an elastic bougie may, if necessary, be introduced for the space of an inch or two, and retained there by an appropriate bandage, as it will not prevent the urine flowing by the side of it; or a gum catheter or bougie may now be carried along the passage until it reaches the divided part. It is then to be passed into the posterior portion of the urethra, beyond the incision, but not into the bladder; and if it is not carried into the bladder it will not give rise to irritation.

None but those who suffer can know the relief which is obtained by withdrawing a catheter one inch from an irritable bladder, and no precise directions can be given on this point in survey. It must depend on the feelings and sensibility of the patient. I have seen a man with an irritable bladder draw out the catheter and throw it away in despair, although he knew he should not be able to pass his water an hour afterwards. The present agony overcomes all feeling for the future, until that future in turn becomes the present. The relief obtained by allowing the instrument to remain in the urethra instead of the bladder is often great, and it answers every purpose just as well, and can be advanced at any time if necessary. The mechanism required to retain a catheter or bougie at a given distance is simple. The catheter should rarely exceed eight inches in length, and may sometimes be shorter, as it never should project half an inch more than is necessary. It should have a silver extremity to which two rings are affixed, and to each of which a piece of strong bobbin, ten inches long, is to be attached. The catheter being introduced to the proper distance, the two pieces of bobbin or strong thread are to be carried backward along the sides of the penis as far as the pubes, and a fine slip of sticking plaster is then to be bound round the middle of the penis and over them, so as to fix them firmly to it, and which the sticking plaster does as well as anything else. The ends of the bobbin or thread are then to be turned forwards on the outside of the plaster, when they may be tied together on the end of the catheter, which is thus steadily fixed in its place, subject, however, to any motion of the part generally, with which it moves as a whole, and the patient soon learns to manage the matter for himself, so as to change it whenever he pleases without inconvenience; or an elastic band may be sewed or buckled around the penis, with hooks attached to it, through which the threads may run.

There are still two advantages supposed to be obtained by dividing the stricture from without, and by introducing the catheter through the part, and which may be gained by this mode of proceeding. The one is, that the presence of the catheter causes the absorption, and of course the removal, of much of the diseased urethra; and that the division of the outer wall of the urethra renders it less liable to a return of the disease than if the cure had been accomplished by any other means. The first point I admit: the second is doubtful; for I may say I have as much evidence one way as the other. In the course of the last thirty years I have had many opportunities of dividing, and more of seeing the urethra divided by others, for the relief or cure of persons labouring under strictures. In most of these cases the disease has returned in the course of a few months, or would have returned if the patients had not made use of the solid sound regularly every five or six days to prevent it. In the year 1816 I saw the late Mr. Pearson divide a stricture at the part where the scrotum begins, for the extent of an inch, or as much as was hard and gritty; the patient got quite well, and could pass a large bougie with ease; but he subsequently neglected himself, thinking it unnecessary, and one year afterwards I saw him just as bad as he had been before. I find in my case-book two admirable instances of this disease, and of this mode of treatment, and in both the complaint would have returned if not prevented by the use of the bougie. They were under the care of my colleague, Mr. White, in the Westminster Hospital, and I assisted him in the different steps of the very difficult operations they required. In both instances the disease returned, and the necessity for the occasional use of the bougie was demonstrated in the strongest manner.

A friend of mine (now no more), the late Dr. O'Halloran, of the 60th regiment, suffered for many years from stricture; and fifteen years ago took particular interest in the improvements I was attempting to make in the solid instruments, so as to cause them to dilate when introduced into the urethra, and was one of the first on whom they were used. They did him no good; and from neglect of the common sound his stricture contracted, so that he suffered great inconvenience from it, and being in the West Indies, was rendered almost incapable of duty. Being a man of great resolution, he determined on dividing it from the outside, and placing himself before a glass he cut away in the perinæum, just behind the scrotum, until he had completely divided it. He assured me, three years afterwards, that the cure was complete, and that he had never since had occasion to pass an instrument.

The division of strictures by an instrument passed along the canal and down to them, has been often tried and as often abandoned, until of late, when the practice has been revived by Mr. Stafford in very obstinate cases. The general surgical opinion is against it, as being exceedingly dangerous, although I do not think it merits the reprehension it has met with, and may in some cases be advantageously employed. The mode of treatment I have adopted for impassable strictures has rendered it unnecessary to have recourse to it in them, unless the case is so very urgent from retention of urine that no delay can be admitted. In such instances a surgeon may choose; if he fails in dividing the stricture from within he must do it from without. If he succeeds, he should introduce a catheter into the bladder, and allow no urine to pass along the urethra for three or four days, as I have known several severe paroxysms of ague to follow its doing so; and if any evil consequences should take place, it is still but opening the urethra from without. The ill consequences alluded to have, I think, been over-rated; and the

most that can fairly be said is, that if it does not succeed and does no good, it does no harm, and the patient is not in a worse state than he was before.

In cases of passable narrow strictures, which are very troublesome from their irritability and propensity to contract, the division of them is sometimes followed by remarkably good effects; but poor patients, even in hospitals, do not willingly submit to the operation; and many in higher life have so much dread of anything of the kind, that the practice is only likely to prevail in very severe cases.

When the surgeon is unhappily too late, and the urethra has given way by ulceration behind the stricture, the urine makes its escape into the surrounding cellular texture in the perinæum; but as this part is bounded posteriorly by the superficial fascia, which turns under the transversus perinæi muscles to join the deep fascia, the urine can only pass upwards and forwards; it distends, therefore, the scrotum, the integuments of the penis, and often extends even into the cellular structure above the pubes, and into the groins. It has been usual in these cases to scarify the parts deeply so as to allow the urine to drain off, and await the event; but this is not sufficient; a fair and free incision must be made in the perinæum, in any way the surgeon may choose, according to the nature of the case, until the superficial fascia is fully divided, and a free and direct passage for the urine is obtained, so that there may be no disposition, and indeed no possibility of its escaping into the surrounding cellular structure, on account of the dependent outlet which is made for it. The urine being the natural stimulant of the bladder, exercises none but its ordinary power on it; but when it is extravasated, and leaves the natural passages for the cellular structure surrounding them, it gives rise to unhealthy inflammation and mortification to the extent to which infiltration has taken place. In order to prevent the complete destruction of these textures, it is not sufficient that incisions be made, for instance, into the scrotum, or the surrounding integuments, with the view of facilitating its evacuation, or that it be even pressed or squeezed out, but the further admission of urine must be prevented, by making such a dependent opening as will allow it to run directly off without the least impediment. A solid sound or a catheter should be passed down the urethra to the stricture as a guide; and if it be as far down as six inches, an incision is to be made in the perinæum, on either side, as may seem preferable, and nearly as in the operation for the stone; this is to be continued inwards, until the finger can distinguish the point of the instrument in the urethra, in front of the stricture behind which is the rupture or hole in the urethra; and the parts must be so dilated that the urine will run directly on, without further infiltration. In these cases it will always be better to divide the stricture if possible, and carry the catheter into the bladder, from whence the urine may be drawn off every two or three hours, as may seem necessary.

The destruction of parts by the urine is so rapid, that few survive an extravasation of this nature, unless the art and science of surgery are brought forth almost immediately for their relief and assistance, so that the urine may be pressed out as quickly as possible, and the entrance of any further quantity be prevented. I am aware that in such circumstances it may be said, that the patient will inevitably die, if an elderly man and of a bad constitution, in spite of all that surgery and physic can do for him, and it will in all probability be truly said. Still the fact is, that in one case he must die, in the other he may not; and an enlightened and well-educated surgeon must estimate his patient's strength and constitution, and proceed accordingly. I never recommend an unnecessary operation, but I have done operations successfully, and seen them done successfully when abler men thought they must be useless. The preparation before you is from a man advanced in life, who died in this hospital through an accident. He came in very ill with retention of urine. I passed a gum catheter, which surmounted an obstacle without much difficulty about six inches down, and drew off his water, mixed with blood, mucus, and a purulent deposit. The gum catheter gave to the finger the sensation of passing over or through a rough, grisly body, which I thought it had done, and it was fixed in the bladder. Early in the evening, however, it slipped out of the bladder, and the patient, thinking he could do without it, attempted to make his water in the natural way, and forced it into the scrotum, penis, and surrounding parts. It was not discovered by the house-surgeon until the morning, and when I arrived in the middle of the day, he was sinking so fast, that any operation would have been as cruel as it would have been useless. He died shortly afterwards, and on examination the canal of the urethra was found pervious for a good sized catheter which I had used; but a stone had passed from the bladder into it, and had embedded itself on the under part, and eventually gave rise to ulceration in it, through which the urine escaped into the cellular texture and destroyed him, already nearly worn out by long-continued irritation. The inflammation induced by the ulceration had caused the retention of urine, and if I had used a silver catheter, instead of a gum elastic one, or if it had not so readily passed into the bladder, I should have discovered the stone, and removed it by an incision at once. The great object I have in view in mentioning this case, is to show that such an extravasation is not always caused by stricture, and that the removal of the stone by an incision would have prevented the evil, inasmuch as the

urine would have escaped through it, after the catheter had slipped out of the bladder.

After the operation has been done, and the safety of the patient has been so far ensured, your attention must be turned to his general state. Saline medicines, or gentle saline aperients with opiates, will be the best remedies to soothe and allay the constitutional irritation which has taken place; a stage farther, camphor, opium, with saline draughts made with the carbonate of ammonia, will be advantageous, and if gangrene has taken place, ammonia, brandy, quinine, acids, and opium, will offer the best chance of success; but all will and must be useless if the passage of urine is not free, so that no further extravasation can take place. The incisions into the parts distended by urine should be sufficiently long and deep to allow the urine to be squeezed out of the scrotum, and to drain out where pressure cannot be applied, and if the cellular membrane has sloughed, they must extend into the slough. Poultices of stale beer and linseed meal are the best applications, followed by stimulating dressings, but the treatment will be tedious, the whole skin of the scrotum being frequently lost, and a fistulous opening remaining in the perinæum.

Erysipelas will sometimes attack the scrotum, and simulate the appearance derived from extravasation of urine. I was once called to a case of this kind, in which the scrotum was greatly distended, and I was at first sight disposed to attribute it to that cause, but the patient declared he not only could make his water well, but had never had any difficulty in doing it. I was not, however, satisfied until I had passed a catheter and assured myself that there was no disease in the urethra, nor in the perinæum. The patient recovered, but lost a good deal of the skin of the scrotum by sloughing, in spite of several incisions into it, which saved the remaining portion.

A pervious urethra is, however, no proof that an extravasation of urine may not be caused by ulceration in it, but then the extravasation does not take place quickly; the scrotum and adjacent parts are not suddenly distended; the swelling commences slowly,—is situated in the perinæum, where its progress is marked by pain and hardness. It is owing to inflammation, which has taken place outside the urethra, ending in suppuration, and the matter of which cannot find its way to the surface, in consequence of the superficial fascia, which prevents its progress. The pain is often great, the irritation greater, and there may be and often is retention of urine, although the passage is pervious for a moderate-sized elastic catheter. If a lancet is pushed into a swelling of this kind it always gives relief, although no matter should follow for a day or two; if matter should follow the relief will be great, and a little urine will be observed to trickle through a day or two afterwards. In some cases the urine starts forth with the matter to a distance on opening the abscess, but even in this case the inflammation, which existed previously to the ulceration of the urethra, will have consolidated the cellular structure, and an abscess will be formed in the usual manner, with its proper sac retaining and preventing the flow of urine from it. This abscess is to be prevented by rest, leeches, fomentations, and the usual antiphlogistic means, without meddling with the urethra, but as soon as the formation of the matter of the abscess is certain, the sooner it is opened the better. The wound in it, as well as the ulceration in the urethra, will sometimes heal with the simplest after treatment. In other cases the external wound must be laid open and dressed from the bottom with slight stimulants, whilst a catheter must be kept in the bladder or urethra, in order to prevent the urine passing through the wound, for the encouragement of the granulation of which caustic applications, and even the actual cautery, by means of a wire heated to a white heat, have been strongly recommended. Many surgeons advise in these cases the dilatation of the urethra, beyond even its natural size. It has appeared to me, from the consideration of very many of them, that this mode of proceeding is objectionable; for, that the urethra should be dilated, where a stricture exists anterior to the ulcerated opening, is consonant with my views: if the natural size of the urethra is as 12, a No. 13 may be used until it passes easily, but a No. 11 should be had recourse to when it appears desirable to expedite the closing of the ulcerated part. I do not see, I confess, what advantage is to be gained by over distention and the separation of the ulcerated edges, whilst I think I can perceive the good which may be derived from allowing them to remain in contact. The catheter should be large enough to prevent the flow of urine by the side of it, but not so large as to distend completely the canal. The spot when healed will always be liable to re-open on the recurrence of a much less degree of irritation than that which originally gave rise to it. If a considerable portion of the urethra, anterior to the fistula, is impervious, it must be divided, the bladder at the time of the operation being as full of water as it can hold, so that the posterior, or ulcerated opening into the urethra, may be seen on the patient's discharging it, during which process a small director can be introduced, and the orifice, if necessary, enlarged, so as to admit a proper catheter. When a portion of the urethra has been lost, in a circle or nearly so, it is a very difficult thing to establish the canal, and sometimes a fistulous opening will remain even when the largest bougie can be passed with ease. Pressure on the orifice of the fistula often in these cases prevents the inconvenience which would otherwise arise from it.

ON ERYSIPELAS PHLEGMONODES, AND AMPUTATION AT SHOULDER-JOINT AND ACROSS THE FOOT.

BY PROFESSOR LIZARS.

Erysipelas phlegmonodes was, during the last winter, very prevalent in this city. Some of the cases under my care in the Surgical Hospital of the Royal Infirmary ended in such destruction of the parts affected, as to require amputation; others defied the most active general and local treatment, and ran on to a fatal termination, without even an opportunity of having recourse to this operation.

In some patients the disease began locally, for example, in the foot and lower third of the leg, and seemed at first quite superficial, apparently extending no deeper than the subcutaneous cellular tissue; for, on making the ordinary free incisions, sero-purulent effusion flowed, and the affection appeared to be arrested; a few days, however, scarcely elapsed, when abscesses formed between the muscles, and, when the synovial sheaths of their tendons and the synovial membranes of the articulations inflamed and suppurated, so affected the limb as to demand its removal.

In others, the inflammation at the commencement, also superficial, became deeper and deeper daily, and destroyed the periosteum and synovial membranes of the joints and the tendons of the muscles; and it extended from the fingers to the shoulder, or from the toes to the hip-joint. The consequent constitutional excitement or inflammatory fever prevented every operation.

In some individuals an irritative fever was present from the beginning to the termination, as if it had been a purely idiopathic affection. In these the course of the disease was very rapid.

The local treatment consisted in incisions from two to three inches long, and as deep as the disease, and in fomentations of poppy-heads and camomile flowers, and in oatmeal or bread poultices. The general treatment consisted of calomel and aloes, of the solution of the tartrate of antimony, of acidulated drinks, effervescent draughts, low diet, and rest; and, when the activity of the disease was subdued, of animal soups, gin, and wine. By the incisions, enough of blood was lost to render unnecessary the use of the lancet. In some cases, so many small arteries and veins were cut, that the arm or leg required to be elevated considerably above the level of the body, in order to stem the bleeding; this seldom failed; when it did, the wounds were stuffed with dry lint. The elevating of the extremity throughout the cure is of vast importance, as it diminishes the quantity and momentum of arterial blood in the vessels affected, and facilitates the return of the venous.

The rubescence was, in some instances, so very trifling, that the only indication of pus was an œdematous or boggy feel; the appearance was rather that of phlegmasia dolens than of erysipelas.

In two of the amputations I varied the manner of performing the operation as follows:—In that across the foot, between the tarsal and metatarsal bones, I made a large flap from the sole of the foot, which extended from the commissures of the toes to the bases of the metatarsal bones. I began at the os cuboides, or the tarsal extremity of the metatarsal bone of the little toe, and continued along the outer margin of the foot to the commissures, thence round to the inner margin of the foot, and then backwards to the tarsal extremity of the great toe, or to the os naviculare. This semi-lunar or horse-shoe shaped flap was then dissected from the metatarsal bones, in order to make it as fleshy as possible. I next made an incision through the integuments and tendons on the upper or patellar aspect of the foot, of a semi-elliptical shape, the convexity towards the toes, a little distant to the tarso-metatarsal articulations, and extending from the little to the great toe, thus forming a connexion with the flap on the sole of the foot. I then, grasping firmly with the left hand the toes to be removed, divided the insertion of the peroneus brevis, the upper tarsal and the inter-transverse ligaments, and lastly, pressing down the toes, the plantar ligaments, and the insertion of the peroneus longus. The division of the peroneus brevis should be attended to, as it enables the operator to ascertain readily the articulation between the os cuboides and the metatarsal bone of the little toe, for when this joint is opened, the others are easily done.

On the removal of the diseased part of the foot, the anterior tibial artery was secured,

and then the branches of the plantar arteries. These vessels were compressed by the fingers of an assistant during the operation; the former, as it runs along the upper aspect of the foot, and the latter where it courses around the malleolus internus. After this, the large flap from the sole of the foot was approximated to the skin on the upper aspect of the foot with small ligatures.

The other instance mentioned, where I modified the mode of operating, was amputation at the shoulder joint. The patient was placed on a table on his back, the arm being held at right angles to his body, and pronated as much as could be easily borne. I then, grasping with my left hand the integuments and muscles on the outside of the joint, made an outer flap, cutting from without inwards, the half of the deltoid and the insertions of the latissimus dorsi and teres major muscles. The insertions of the teres minor, infra-spinatus and supra-spinatus muscles, together with the capsular ligament, were next divided, the knife being held at right angles to the head of the os brachii, during which the assistant supinated the arm to remove the long head of the biceps muscle from the axillary artery, in order to divide it, and enable the surgeon to dislocate the joint. The head of the bone of the arm was now easily removed from the glenoid cavity of the scapula, and the knife carried sufficiently close to it and its neck to permit the fingers of an assistant to grasp the inner flap and axillary artery; I then completed the operation. In compressing the artery the assistant must recollect, that it runs along the lower border of the inner flap. This vessel was then secured, and also the posterior circumflex, which branch emitted blood during the operation, and required the finger of an assistant on its bleeding mouth. A branch of the supra-scapular artery required a ligature, and was troublesome from its deep and hidden situation. The man lost only two or three ounces of blood. The flaps were approximated with stitches, as in the former case, a mode of dressing preferable, in my opinion, to all others; only one or two, however, should be taken immediately after the operation, as primary hæmorrhage may supervene, the rest being deferred for eight hours. The ligatures ought to be common unbleached linen thread. As soon as the operation has been performed, a large piece of lint dipped in cold water should be applied and kept wet for the ensuing twenty-four hours, and the stump well elevated, in order to prevent hemorrhage. After this period the lint ought to be wetted with warm water, to prevent erysipelas following. Either of the preceding operations ought not to occupy more than thirty seconds, any more than an ordinary amputation.

In these, as in all the capital operations which I have performed in the Surgical Hospital of the Royal Infirmary, I have been ably assisted by my colleague, Mr. Liston.

Edinburgh, 38, *York-place*.
21*st April*, 1834.

A CASE OF CONFLUENT SMALL-POX AFTER VACCINATION — OPENING OF THE PUSTULES.

BY JOHN LANGLEY, ESQ., SURGEON.

On the 21st of March I was called to attend upon a fine robust boy, 12 years of age, who was suffering from severe pains in the loins and epigastric region, coated tongue, and constipated bowels; from the tumefaction of the skin and excessive præcordial oppression I was induced to suspect some suppressed eruption, and in reply to my interrogatories was informed that he had passed through the usual infantile eruptive diseases, with the exception of variola, as an antidote to which, when 18 months old, he had been vaccinated at an appointed vaccine institution, and, upon examination, I found full evidence upon each arm of the integumental mark. I prescribed a brisk purgative of calomel and jalap, followed with a diaphoretic saline, and had him immersed in a warm-bath; on the following day an equivocal eruption appeared, which in course of time proved to be variolous, and a profuse confluent pock was the issue. The disease progressed with alarming violence, notwithstanding active antiphlogistic treatment, until the 10th day, when the face, neck, body, and lower extremities were one mass of vesicated surface, the distinct pock bearing little comparison with the general confluence; the fever was alarmingly high; the cerebral irritation excessive, manifested by delirium; the respiratory functions greatly disturbed; and the general tumefaction of the integument presented a most formidable and loathsome aspect;

the suffering was most acutely felt and expressed, and appeared to me to be greatly heightened by the excessive tension of the skin. I forthwith determined to evacuate the contents of the vesicles, and, in furtherance of such view, with a common lancet made free incisions in the purulent flakes, and punctured all the distinct pocks within my reach, amounting to hundreds; I then, with a sponge and warm water, bathed the surface and evacuated the contents of the vesicular cysts, the parietes of which collapsed, and the comfortable and soothing application of the warm water not only cleansed but relaxed the distended surface; the ease experienced was evidently apparent: after this operation I gave seven minims of laudanum with half an ounce of ol. ricini; a tranquil night was the result, with an abatement of the febrile symptoms; no ill effect resulted from the admission of air into the emptied cells: in 24 hours the surface was covered as it were with dry scales, which in a few days desquamated, leaving the subjacent integument so unimpaired as to induce me to hope, contrary to previous expectation, very little disfigurement will ensue.

36, *Tottenham-street, Fitzroy-square, April* 15*th*, 1834.

Foreign Medicine.

Remarks on the Guinea Worm. (*Gordius medinensis.*)

At a late meeting of the Académie des Sciences, M. Blainville read a letter from M. Jacobson of Copenhagen, containing some interesting and novel details on the guinea worm (*les dragonneaux*). An Arabian had been admitted into the hospital at that city for a tumour situated at the external malleolus, caused by a worm of this description, which was, after many unsuccessful attempts, at length extracted. A similar tumour having formed on the other ankle, an incision was made, and the instrument having divided longitudinally one of the worms, there escaped from the opening a purulent matter, which (examined with a microscope) showed a great number of little elongated filiform worms, with heads slightly enlarged, and tails short and much thinner than the remainder of the body. Having extracted the worm entire, M. Jacobson then saw that it presented the same phenomena in all its parts; judging from which he was led to the conclusion, that what is called a guinea worm is not one individual worm, but a collection of them living in the same nidus.

M. Blainville thought it would be interesting to discover whether all the worms of this kind presented the same phenomena; and he proposed that M. Clot should be requested to repeat these experiments in Egypt, who often had occasion to observe these animals, and that the physicians attached to the establishment at Algiers should also be requested to take observations of them.

Transmission of Sounds through the Bones of the Cranium.

At page 18 of the present volume of the Medical and Surgical Journal are some experiments, showing that sounds may be transmitted to the brain through cicatrices in the skull, thus proving that the ear is not essentially necessary to audition. Treviranus, Esser, and others have also shown that sound may even be conveyed through the osseous walls themselves, but hitherto no person had drawn the attention of physiologists to the use of thinning of the cranium, as relates to the exact appreciation of musical notes, until M. Majon, of Genoa, presented a memoir on the subject to the Royal Academy of Paris. He was led to investigate this subject in consequence of examining the body of Dr. Bennate, the bones of whose head were found much thinner than ordinarily is the case, being even transparent in many places. A like organic peculiarity had already been observed in the cranium of another celebrated Italian musician by the same physiologist, who, reasoning from this coincidence in appearance in the head of two such great philharmonists, presumes that the cranium is not altogether passive in the perception of sounds, and that the difference in the thickness of its walls may contribute to the more or less clear appreciation of the different connexions, qualities, and harmonies of sounds, and so lead us to regard these osseous parietes as a kind of harmonic case, which communicates the vibrations to the acoustic nerve. To confirm this opinion, the author of the paper notices the fact of deaf persons clearly perceiving the sounds of a piano, or organ, when one end of a rod of iron is placed on the sinciput, whilst

the other rests on the instrument, or the ticking of a watch when it is placed on the temple.

Comparative anatomy tends rather to strengthen this opinion, for it is well known that in a great number of animals the transmission of sounds is favoured by numerous extensive sinuses and furrows in the bones. It is also probably in consequence of the thinness in the cranium and of the elastic laminæ which are found in its cavities, that the very remarkable appreciation of sound in some birds is due, and perhaps the small osseous globes, which are found in a great number of animals, may contribute to their audition. May we not imagine, says M. Majon, that the thickness of the bones of the head, in advanced age, has some connexion with senile deafness? When, in the midst of a great noise, we press the head with both hands, is it not for the purpose of stopping the vibrations of the cranium, which, becoming too powerful, become annoying and even painful?—*Journal Hebdomadaire.*

The Influence of Clothing on our Organs—Deformity of the Cranium resulting from the custom of covering the Heads of Infants.

BY DR. FOVILLE, OF ROUEN.

In this work Dr. Foville states that he was led to this subject, by observing the extreme constriction which the Norman women make use of in covering their heads, partly for the purpose of smoothing the skin over the forehead, and partly to form a solid base for the gigantic edifices of dress which they carry on their heads in some of the cantons. This practice, which is pursued also in clothing infants, frequently leaves indelible traces of its injurious effects, for in the asylum for the insane at Rouen, the proportion of deformity of the cranium are 46 out of 100 in males, and 67 in females; such is the influence of this state of the cranium upon insanity, that it is in patients who are the most completely affected that the greatest instances of deformity of the cranium are found. Amongst the morbid results of circular compression, the author enumerates meningitis, cerebritis, epilepsy, imbecility, &c.

Contraction of the Fingers.

M. Sanson, in commenting on a memoir entitled "Researches on Permanent Contractions of the Fingers," by M. Goyraud, of Aix, remarked that this affection was usually referred to contractions of the flexors of the fingers, until M. Dupuytren pointed out that it was owing to contraction of the aponeurosis and its processes: this, however, cannot apply to the second phalanges, contractions of which M. Goyraud had ascertained to be caused by fibrous bands, which he believed to be of recent formation, and there were dissections showing this to be the case. His method of treatment was to make a longitudinal incision through the skin, and remove the bands, by dividing them transversely on a director: the fingers were then to be extended, &c.

Experiments and Observations on the Gastric Juice, and the Physiology of Digestion.

Mr. Beaumont, a surgeon in the United States' army, having had under his care a Canadian, who, from a gun-shot wound in the epigastrium, had a fistulous opening into the stomach, tried several experiments on digestion, from which he has arrived at the following conclusions:—1st. That animal and farinaceous substances are more easily digested than vegetable. 2nd. Digestion is facilitated by the softness and minute division of the substances. 3rdly. The action of the stomach and its fluids is the same on all kinds of food. 4thly. The digestibility of a substance does not depend on the quantity of alimentary principle contained in it. 5thly. The quantity of nourishment taken is generally too great. 6thly. The quantity of the food is as important as the nutritive quality of it. 7thly. Oily substances are difficult of digestion, though they contain a large proportion of nutritious principle. 8thly. The time necessary for digesting a meal varies according to the quantity and quality of the food; a moderate repast requires from three hours to three hours and a half. 9thly. Stimulating seasonings and spirituous liquors are injurious to a healthy stomach. 10thly. Substances introduced directly into the stomach are as quickly digested as those which pass to it by the mouth and stomach, saliva having no solvent power over food. 11thly. Gastric juice is not secreted by mucous follicles, but by particular vessels, and the secretion does not take place unless some stimulant, as food, be present; it coagulates albumen, and then dissolves the coagulum; when deficient in

quantity, indigestion ensues. 12thly. Bile is not, commonly, necessary to digestion, but when oily substances have been taken, it comes in to aid the process. 13thly. Chyme is homogeneous, but variable in colour and consistence; towards the end of chymification it becomes more acid and stimulating, and leaves the stomach more quickly. 14thly. Water, spirituous liquors, &c., are not acted on by the gastric juice, and do not remain long in the stomach. By placing the bulb of a thermometer in the stomach, Mr. B. ascertained the temperature to be 37° 7 (centigrade); that it is not elevated by the ingestion of aliment, and that it is lower during sleep; the temperature of the pyloric end was 0° 4 (cent.) higher than that of the splenic extremity.

ST. PANCRAS MEDICAL ASSOCIATION,

For promoting and carrying into effect a self-supporting Charitable and Parochial Dispensary, "by the adoption of which our philanthropy may be reduced to a system, our best class of Poor prevented from retrograding into Pauperism, and our necessitous and legitimate Paupers separated from the comparatively improvident and vicious."

PRINCIPLE AND OBJECT OF THE INSTITUTION.

1st. To place within the reach of the industrious artisan of small income the means of obtaining medical aid, without subjecting him to the necessity of seeking humiliating charity, or destroying his honest pride, by exposing him to the demoralising influence of the poor laws.

2nd. To afford gratuitous relief to persons of real desert, who may be unable to procure by their own efforts the advantages above described.

The first-mentioned or *free class* of patients, may obtain for themselves surgical and medical attendance by assuring with the small sum of sixpence per month, which is not equal to the amount frequently wasted by them on nostrums and self-prescriptions. In virtue of this premium they may demand and obtain the most efficient professional assistance and medicines, and to their demands, the number of surgeons ensures immediate attention; thus will be saved the time and labour often fruitlessly and always painfully bestowed on seeking the signature of a governor of an honorary dispensary; the unfortunate will be spared the bitter degradation of asking charity, for which will be substituted the honourable satisfaction of claiming assistance as a right, and obtaining it immediately.

The second object of this institution will be attained by the aid of the charitable and humane, who are entreated to be discriminating in the bestowal of their kindness, and thus ensure the legitimate application of their bounty to persons whose destitution unhappily precludes them from the benefits which the industry and self-respect of the first class (the free members) procure for themselves.

As the sum which will entitle the donor to have a patient constantly under medical care, is only half the amount invariably demanded by honorary dispensaries, those who are anxious to give the most extensive effect to their humanity, will see the advantage of supporting this institution. The means by which this superiority is obtained over honorary dispensaries are the following.

The surgeons constituting this Association will dispense their own prescriptions, thus saving the cost of keeping up a dispensary house and appendages, and salary of dispensing apothecary, a charge equal to at least a third of the whole income of such institutions; in other words, of every guinea subscribed by the humane and excellent supporters of these charities, less than 14s. are appropriated to the literal benefit of the poor. This obvious advantage will enable the ST. PANCRAS MEDICAL ASSOCIATION to allow subscribers of one guinea annually to have two patients constantly on the books, and subscribers of half-a-guinea, one. For proportionate increase of subscription, corresponding privileges are allowed.

Application to be made to any of the surgeons of the day from ten till twelve o'clock. The surgeon to whom application is made, will continue to attend to the case till its termination.

N.B. Any of the surgeons may be consulted till eleven o'clock on Sunday.

Extracts from the Laws and Regulations of the St. Pancras Medical Association.

18. Surgeons shall prescribe and furnish medicines at their own houses unless the

patient be too ill to go out; he shall then be visited by his surgeon at his (the patient's) own house.

19. The free members shall consist of working men, their wives and children, and of any other persons who may be unable to provide themselves with medical aid and drugs in the usual manner; the terms of subscription to be sixpence per month from each member above twelve years of age, and three-pence per month from each member under that age.

20. Persons wishing to become free members, must send, or have sent for them, their names, age, and places of abode, to any two members of the Association, who shall immediately present the same to the Treasurer, and report it to the next committee meeting; any one of the surgeons failing to do this, shall be fined one shilling, to go into the general fund.

21. No free member shall be entitled to relief unless all arrears be paid up; every free member in arrear one month shall be fined 1*d.*; if two months, 2*d.*; if three months, 3*d.*; and if a longer period, shall forfeit all benefit derivable from the Association. Each member shall, at the time of his entering as a free member, sign a paper agreeing to this law.

22. Poor married women, *who are free members*, may be attended in their confinement by any one of the surgeons they may please to select, on paying ten shillings as a fee, with the Treasurer, two months previous to their confinement.

23. The ten shillings so deposited, to be paid by the treasurer to the surgeon who has attended the case, at the next quarterly general meeting succeeding the attendance.

24. All free members shall belong to the Institution for at least four months before they shall be entitled to the benefits thereof; but any person may become a free member by paying four months' subscription in advance, unless they apply for admission during sickness, then they shall pay twelve months' subscription in advance.

25. Donors of ten shillings and sixpence annually, shall be entitled to have one patient always on the sick list; donors of one guinea annually, shall be entitled to have always two patients on the sick list; and for every additional half-guinea, they shall have the privilege in favour of an additional patient.

HARRISON'S SPINAL INFIRMARY.

At a Meeting held at the Gothic Hall, New Road, April 26th, 1834,

JOHN UNDERWOOD, Esq., in the Chair,

THE minutes of the meetings which had been previously held were read and confirmed, and

Dr. Epps, in moving the first resolution, stated, that he was so convinced, both of the benefits resulting from Dr. Harrison's plan of treatment, and of the fact that the plan itself is as scientific in principle as successful in practice, as to feel it his duty to give it every support; and he further added, that, as his own experience as a medical man satisfied him that many diseased states are dependent upon a mere disordered state of the spinal cord, he could readily conceive that a permanent deformity must be productive of an immense amount of suffering and of disease; how valuable, therefore, an institution for the relief of these diseased states must appear to him. He thought further, that this Infirmary would be beneficial to the profession in leading its members to see the importance of investigating and appreciating the influence of modifications of the spinal system upon the general health.

Charles Wing, Esq., Wm. Sedgwick, Esq., — Levison, Esq., and other gentlemen spoke in favour of the Institution, testifying from personal knowledge to the benefits of Dr. Harrison's plan.

Griggs Lunn, Esq., moved the thanks of the meeting to Dr. Harrison for his noble donation of one thousand pounds, and testified from a long acquaintance with that gentleman, an acquaintance founded thirty years ago, to his zeal in every thing that tended to diminish human suffering and promote human happiness.

A vote of thanks was moved by Captain Underwood to Drs. Harrison and Serny, Physicians; also to Thornber and Hoyland, Surgeons, for their offer of gratuitous medical and surgical services.

Thanks were then voted to the Chairman, who stated that he had been so fully satisfied of the excellence of Dr. Harrison's plan, by his own observations, that he had felt it an imperative duty to come forward and endeavour to spread the benefits thence arising, by aiding in establishing an Infirmary, and that from the experience which he gained in India,

where he had established a hospital for the native poor, he pointed out the necessity of setting apart all the donations as a fund, not to be appropriated to the current expenses. He thanked the meeting for their kindness in attending to aid in the establishment of an Institution in which every good man must feel interested.

After the meeting was concluded, Dr. Harrison exhibited several misshapen spines, in confirmation of his own doctrines and practice; also various casts taken from the backs of very deformed patients before the treatment began, and who had obtained complete cures by his mode of practice.

One of the skeletons represented the humpback described by Mr. Pott. The vertebræ were all sound and healthy, which prove that this eminent surgeon had mistaken the nature of these formidable maladies. Another skeleton exhibited a striking example of the lateral curve, and was completely at variance with the principle upon which muscular or gymnastic exercises are said to be useful in such cases. The Doctor declared, in commenting upon it, that no cure had ever been performed by muscular exercise alone.

This charity will commence its work of benevolence as soon as the funds are sufficient for the purpose.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, April 19th, 1834.

Dr. Gregory in the Chair.

Torsion of Arteries successfully performed at the Northampton Infirmary—Extraction of Calculi from the Urethra—Conclusion of the Session.

Mr. Costello rose, and said that he had much pleasure in stating to the Society a fact which would be gratifying, and that was, that Mr. Percival, of the Northampton Hospital, had lately amputated an arm, and secured the vessels by torsion. He, Mr. C., had seen the stump about ten days after the operation, and nothing could have done better. It is right to state that Mr. Percival had only made four half twists of each artery in place of six or seven, and still the operation succeeded. It was highly creditable to a provincial hospital to be first to try a new and valuable operation, and especially as this was successful. He hoped he had now silenced those who had opposed torsion. He was aware that it had been tried at St. Thomas's Hospital by Mr. Green, but proved unsuccessful.

Mr. Greenwood was happy to hear such gratifying information, and thought the Society much indebted to Mr. Costello on this and many other occasions for his valuable contributions to science. He, however, thought that further trials of torsion were required before the operation could be adopted in this country. He again referred to M. Velpeau's case of failure, and also to the fact that torsion was not performed at the Hôtel Dieu during the last revolution. He was happy to see Dr. Ryan present, as a mistake was made in the former report of their discussions on torsion, which was, that the operation was not known in 1830, which was not correct.

Dr. Ryan assured the Society, that the gentlemen who reported for the Medical and Surgical Journal were instructed to give faithful and impartial reports on all occasions. He was very much surprised at Mr. Greenwood's statement, because he happened to have been present at the discussion on torsion, and had the clearest recollection that Mr. Costello then stated that torsion was not known in 1830. He now appealed to Mr. C. himself, and also requested the secretary to refer to the minutes of that discussion.

Mr. Costello stated that he certainly had said so, and that the report in the Medical and Surgical Journal was quite correct. The Secretary also referred to the minutes, and the Chairman laid his finger upon the report of Mr. Costello's words.

Mr. Chinnock wished to inquire of Mr. Costello, whether there was any danger of tetanus being produced by torsion.

Mr. Costello replied, that tetanus had not as yet appeared after torsion.

Mr. Hunt then introduced his motion relative to the election of the officers of the Society, which gave rise to much discussion, in which several members took a part, but which was of a private nature.

Mr. Costello then made some observations on the extraction of calculi from the urethra by means of a new instrument which he had

invented. He described the instrument, and related an interesting case of calculus embedded for ten years under the pubis, which he removed.

Several observations followed on the prosperity of the Society, and the great value of the discussions during the present session.

The Society then adjourned until October.

MEDICAL PETITIONS.

To the Editors of the London Medical and Surgical Journal.

Gentlemen,—Many inquiries have lately been made to me relative to the fate of a petition to parliament entrusted to my care, praying for a thorough alteration in the mode of electing all grades of medical officers to public institutions;—that they may be chosen, from the physician down to the dresser, on account of their talent, and not by their pounds, shillings, and pence, and that loathsome system of interest-seeking, so disgraceful, yet so common, in the present day. To convince all the gentlemen interested in the above that I performed my duty, permit me to state, through the medium of your Journal, that I delivered the said petition to our worthy champion and representative, Mr. Warburton, who, on presenting it to parliament, had it referred to the Committee of Inquiry with his decided approval.

It has been lately expressed in some medical journals, that such petitions at this juncture were ill-timed; and, for aught I know, an immediate allusion might have been made to this identical petition.

As, however, differing in opinion from a journalist (whatever degree of talent he may possess) is not disagreeing with a god, I must beg to observe that I do not coincide with the belief as to the impropriety of presenting a petition at this time, regarding such a fundamental point of inquiry: this may be in consequence of my stupidity, or may not. Petitions are evidence; and it is on that account that they are officially transferred to the Committee, or, at all events, they afford just ground for inquiry: they are, therefore, when clearly and concisely expressed, of great assistance to the Committee—not an embarrassment. On these accounts they should be sent in before the inquiry, not afterwards, when they can be of little comparative use. There is no good in those who feel their grievances making a hue and cry after the battle is fought.

The mode of electing officers forms a fundamental part of the regeneration of our institutions, because they can be made strictly responsible persons; it is therefore not a thing of mere minute detail, as insinuated lately by some; let this be properly altered, then all things will, in time, go on well; unshackled emulation will be excited amongst both practitioners and students, whether we have one, two, or more great medical colleges. I therefore consider my conduct regarding this, in every iota, justifiable, notwithstanding some late animadversions which have appeared in print.

I am, Gentlemen,
Your obedient servant,
G. D. Dermott.

Theatre of Medicine, &c.,
9, *Gerrard-street, Soho.*

PROGRESS OF THE PARLIAMENTARY COMMITTEE.

On Monday, Dr. Yelloly and Dr. Frampton were examined, and the next witness was Mr. Guthrie, President of the Royal College of Surgeons. This gentleman excited the admiration of a numerous meeting of the profession by his manly straightforward evidence. He defended the whole conduct of the College, on the grounds of expediency, professional respectability, justice, and public good; and satisfactorily answered the most delicate and difficult questions put by Mr. Warburton. His evidence occupied the greater part of Monday, the whole of Tuesday, and a part of Wednesday, and then his cross examination commenced, when the policy of the College was energetically assailed, and contrasted with that of Dublin and Edinburgh. The tenor of the questions was against all monopoly, and for opening the College. Mr. Guthrie admitted that some changes were necessary, but said that these could not be made until the College had legal authority. Every one admitted that Mr. Guthrie was decidedly the best witness, and the best advocate for the College that could be selected; and all felt astonished and delighted at the consummate knowledge of Mr. Warburton of medical abuses. His name will pass down to posterity as the friend of medical science and humanity. We entertain

the conviction, that the labours of this Committee will lead to a complete change in the antiquated and bad policy of every university and medical corporation in this kingdom.

THE

London Medical & Surgical Journal

Saturday, May 3, 1834.

NEW CLAIM OF THE LONDON UNIVERSITY.

We have always offered a steady and uncompromising opposition to the grant of a power of conferring Medical Degrees to the London University. Every occurrence since the question was first mooted has confirmed our original opinion, that it would be most unadvised to concede to it any such power; and that, in fact, there was not the slightest chance of its succeeding in the attainment of this object. We regret, therefore, with the feeling of true friends to the Institution upon general grounds,—we deeply regret, that the Council has, notwithstanding this certainty of failure, thought proper to persevere in its extravagant demands before the Privy Council. It should have seen that it was raising a storm of opposition not easy to be allayed; and that, in the effort to counteract its injurious claims, the legitimate objects, for which it had to contend against unflinching antagonists, were likely to be hazarded. The resistance of the medical profession is almost unanimous. Parties who agree in nothing else, are, in this respect, of one accord. Discontented friends appear to figure in the ranks of sworn enemies. With the declared sentiments of the medical profession before it, the Council should not have aggravated, by fruitless perseverance, the great difficulties it has to contend with from other and more implacable quarters,—from the spirit of party, of jealousy, of monopoly, and, worst of all, from the spite of theology, the unrivalled *odium theologicum*. With another difficulty it has to contend, which has not escaped the scrutiny of its bitter enemies, and which it has forced into the mouths of its friends by its indiscreet demands;—we mean that the London University is nothing more, after all, than a joint-stock company, whose shares are at this moment in the market at a very great discount. Of this fact there is no doubt; and it certainly is not desirable, if it can be avoided, that an University, about to be chartered, should be in such a condition. It might be possible, perhaps, to vest the patronage of the professorship in a small select body, qualified by education to exercise such an important duty as the appointment of Professors, and above all suspicion of being influenced by unfair motives in their choice. This point might, for the present, be satisfactorily arranged. But, as long as the University was indebted to a number of persons, actuated by the common motives of creditors, however generously and kindly the present proprietors may be disposed, there is much room to doubt of the stability of the corporation. It cannot be expected that a charter will be granted for the mere purpose of raising the price of the shares in the market. The proprietors cannot desire or expect to reap any pecuniary profit from the acquisition of this valuable privilege. We suggest, therefore, whether they ought not to reduce their shares from their nominal to their real value; and, if the gift of the shares at their present low price is considered by the proprietors too great a sacrifice for such a national object as the establishment of an University in the metropolis, they have no right, at least as against the funds which might accrue from the possession of the general

privilege of incorporation they are suing for, to value their property at a higher rate than it now bears.

However satisfactorily this great objection may be disposed of, there still remains an insuperable obstacle to its claims to become a medical corporation. When we call to mind under what circumstances these claims are now urged, the charge of indiscretion is almost too mild a form of rebuke for the Council. We ask, where is the decency of urging its suit at the present moment, when every medical corporation in the kingdom is undergoing the rigid investigation of a Parliamentary Committee,—when it is admitted that our whole medical legislation is at fault, and the profession is confidently expecting a thorough reform in every branch? Is this a time for the London University to set forth its claims for an equality in this respect with Oxford and Cambridge, when the very privileges of these ancient bodies are gasping for existence? or if we make the distinction of the Council, between "a license to practice and a degree, which is an academical title of honour;" is it to be endured, that a particular association of teachers in this vast city, without any pre-eminent title to distinction from their brethren, should possess the privilege of giving to their own pupils a peculiar mark of honour, to pass current as the test of superior qualification? The Council, after having committed itself by its indecorous haste to clothe the University with this privilege, so insulting to the other schools of the metropolis, expresses its willingness to doff its garb of honour, should the Parliamentary Committee come to the resolution, in the course of a few months, as we have no doubt it will, that the medical profession should be incorporated by itself, apart from all Universities for general instruction. "If, after the investigation of the Committee, it should be enacted that these degrees or certificates of superior attainment should be granted only by a Central Board of Examiners, and that the existing Universities should be deprived of the power of conferring them, the University of London would not desire to possess a privilege confided to no other body of teachers, and, if in the previous enjoyment of such a privilege, would be ready to resign it. But if this be the plan adopted, the senate is of opinion, that the examinations for conferring degrees should be entirely separate and distinct from the examinations for granting a license to practise; and the candidate for a medical degree should be required to give a full and satisfactory proof of a sound general education." Such is the statement of the Council, in the pamphlet alluded to in our last number. The modesty evinced in this passage is heightened by the liberality exhibited a little after, where the Council (or rather the Senate, whose opinions it has adopted) declares, that "if any other establishment for medical education shall seek the same privilege of conferring degrees, and shall be able to give the same security for the general education, and for the medical proficiency of its pupils, the University of London will not imitate the example of the existing Universities, by opposing so reasonable a claim."

In the course of the argument before the Privy Council, the difficulty here attempted to be obviated was stated by the Lord Chancellor in such a forcible manner as to drive the learned counsel for the University (Dr. Lushington) into a deviation from the tenor of his instructions, which places this pretended liberality in a new light.

"Supposing," said his Lordship, "the power of granting degrees were to be

possessed, would not King's College, St. Bartholomew's, St. Thomas's, Guy's, and other similar schools, have a right to say, why were these privileges to be confined to the pupils of the London University? They could only qualify for a degree in that establishment. Or suppose Dr. Lushington were to say that they did not desire exclusive privileges; let King's College possess a separate charter from the crown; give the same to other hospitals: and might not this objection be met by another? Would not the establishment in Windmill-street and others put in their claims for similar rights? and might not this succession of claims reduce the value of a doctor's degree below zero, as was the case in some of the Scotch degrees, as those from St. Andrew's? The degree of doctor obtained from Edinburgh was as good as that from any other school. Next came that of Glasgow, and then Aberdeen. This was not so formerly, but it was better now. But St. Andrew's at present still was very low. Would not the remedying of that objection lead to the lowering of the value of the degeee?"

This objection, arising out of the "reasonable claims" of the other London medical schools—claims certainly as reasonable as that of the medical school of the London University—did not occur to the Senate in composing their statement. The learned counsel for the University observed that it was unanswerable, and with admirable adroitness shifted his ground; and in order to evade the consequence of a multitude of degree-conferring bodies in the metropolis, declared he would be content to place the London University *at the head* of the medical profession, and on these terms he would admit the subordinate schools to share in its privileges as parts of the whole. Dr. Lushington held "that the degrees must be distributed generally to all students, and not be confined to those of the University only; that something like a Metropolitan University should be established for this object, which presented itself in the London University, which would be open to all. As to medical examiners, these," continued the learned counsel, "might be selected from every one of the great schools, and all persons who studied in these schools should be at liberty to be candidates for the degrees. By adopting this course, no injury would be done to these schools, because every person studying in them would have a clear right to appear as a candidate for the honours; and, at the same time, by conferring the power of granting the degrees on one body, they would be preventing that which was to be so much deprecated, namely, the depreciation of the value of the distinction conferred."

The senate, in its extreme liberality, never dreamed of such an amalgamation as is here set forth. The idea of treating all other medical schools as off-sets of the University of London, and "in connexion" with it, was rather too arrogant even for its taste. It was evidently the last resource of a clever advocate, who felt that he was foiled in his immediate object.

The argument before the Privy Council, of which we have given a specimen, will be continued in the latter part of this week. We have no doubt of the result. The University cannot have the privilege it lays claim to. Meantime, we have felt it our duty to notice the *new* position the question has assumed.

INFANTILE MEDICINE IN PARIS.

It is a remarkable fact, that Paris is the only capital in Europe that has an hospital especially appropriated to the diseases of children,

from two to fifteen years of age. We are still obliged to have recourse, in the study of these maladies, to the obsolete works of Underwood and Rosen, which are but a continuation of the nosography of Pinel. A translation from a German author, named Henke, has been published, which may be considered in the same point of view. Three parts of the work of Henke are on the diseases of new-born infants, and in these we consider the treatise of Billiard superior to the German author's.

PROPHYLACTIC POWER OF BELLADONNA AGAINST SCARLATINA.

Dr. Killenkamp gives the result of his experience on the efficacy of belladonna in preventing scarlatina in Hufeland's Journal for March, 1831. He states that during the prevalence of an epidemic scarlatina he exhibited the medicine to 120 children, from one to six years of age; 20 or 30 took it irregularly, and 25 or 30 did not take it at all. Of the first, five contracted the disease; of the second, eight; and the last, eleven. Of those who died none had taken the remedy. The formula was two grains of belladonna to an ounce of canella water, of which one drop was administered night and morning for every year of the child's age.

Reviews.

The Principles and Practice of Obstetricy, as at present taught by James Blundell, M.D., Professor of Obstetricy at Guy's Hospital. In Five Parts. To which are added Notes and Illustrations. By Thomas Castle, M.D., F.L.S., Member of Trinity College, Cambridge, &c. &c. 8vo. pp. 838. London, 1834. Woodcuts. E. Cox.

The profession is much indebted to Dr. Blundell for these admirable lectures, which first led the great body of practitioners, in this section of the empire, to the study of obstetricy. The edition before us gives his last course of lectures, and contains a vast number of notes added by Dr. Castle, which enhance the original as a work of reference. The celebrated professor cited very few of his contemporaries, either domestic or foreign, and this omission is now supplied. The work is one of authority and reference. There is no point of practice which is not clearly and admirably described. The introduction of Smellie's plates will prove instructive to students and young practitioners. We are gratified to see our term obstetricy adopted by so eminent a professor; he too was the first to sanction another of our terms, obstetrician, as a substitute for that barbarism man-midwife. We need not recommend this work, for every practitioner will possess it.

The Anatomy and Surgery of Inguinal and Femoral Hernia, illustrated by Plates, coloured from Nature. By E. W. Tuson, F. L. S., Assistant Surgeon to the Middlesex Hospital. Folio. London, 1834. J. Churchill.

This work admirably illustrates the important class of diseases to which it refers. It is so arranged, that every layer of tissue, from the common integuments to the hernia, is shown by raising successive plates. The work is extremely valuable to the operative surgeon, and such a one was much wanted. The author has very largely contributed to the illustration of descriptive and surgical anatomy, and the production before us must add considerably to his reputation.

DR. GRAVES ON THE MODERN GERMAN WORKS.

Utility of Iodine in certain Strictures of the Urethra.

Dr. Trustedt, contributor of many interesting clinical observations to the Berlin Medical Newspaper, has made some excellent remarks upon the employment of iodine in certain cases of stricture. I shall give them in his own words.

"On the 25th June, 1832, a patient was admitted into hospital; he had a gonorrhœa in 1830, and for the last six months laboured under the effects of stricture of the urethra, combined with a very considerable and painful tumour of the prostate, a urinary fistula which opened in the perinæum near the root of the penis, and an extremely large swelling of the left testicle, and spermatic chord, whose tumefaction could be traced to the abdominal cavity. The introduction of the bougie caused excessive pain and irritation, producing an increase of swelling in the affected parts above enumerated; I was consequently obliged to aban-

don all further attempts at dilatation, and confine myself to an antiphlogistic treatment. When the violence of the inflammation had to a certain degree subsided, I determined to try the effects of iodine, for it struck me that its peculiar effects on the genital system, and its well-known influence in producing absorption, might render it a valuable remedy in such cases. The patient took five drops of the tincture of iodine three times a day, and rubbed into the swollen parts a small portion of the ointment of hyd. of potash, morning and evening. Soon after the commencement of this treatment the swelling began notably to decrease, and the testicle and spermatic chord were, in a comparatively short time, reduced nearly to their natural dimensions. The swelling of the prostate now also began to yield, and diminished so much in eight weeks, that a bougie, carefully introduced, occasioned but little pain. The internal and external use of the iodine being continued, the patient's state became gradually better, and from time to time the introduction of bougies was cautiously repeated and their size increased. The difficulty of making water now rapidly diminished, and the patient was at last enabled to pass it in an uninterrupted and tolerably copious stream; the urinary fistula in the mean time closed up spontaneously, and the patient left hospital on the 11th of September, nearly cured.

"The happy effects produced in this case determined me to pursue the same plan in a man sixty years of age, who had been afflicted for nearly thirty years by a stricture and urinary fistula, connected with and depending on the stricture. He had in vain consulted the most eminent surgeons in France and Germany. In this case, apparently so inveterate as to be hopeless, the same method of treatment was remarkably beneficial, for in a few weeks the urethra became more dilatable, and the stricture permitted the passage of bougies of an increased size. A cautious perseverance in these remedies produced a notable expansion of the stricture, and in the same proportion he was able to pass water in a fuller stream, and with less irritation and difficulty. In this patient also, I had occasion to observe with pleasure the spontaneous closing of the fistula, and the mitigation of most of his sufferings. The stricture, it is true, although improved, was not cured; he nevertheless had occasion to congratulate himself upon obtaining a degree of comfort much greater than he ever hoped for, having before tried so many plans of treatment without benefit.

"The advantages of the method of cure I have recommended were still more strikingly displayed in a third inveterate, but less complicated case. The patient was thirty-nine years of age, and suffered, for the last eight years, great inconvenience, in consequence of a stricture, situated about four inches and a half from the orifice of the urethra, and which rendered the passage of water extremely tedious and difficult. I made many and ineffectual efforts to pass instruments, but could not on any occasion succeed in passing through the stricture even the smallest catgut bougie. I therefore desired him to use the iodine, both internally and externally, and in the course of a few days I had the gratification of being able to pass a small bougie. The same remedies being continued, the stricture became more and more dilated, so that the size of the bougies being gradually increased, I could, at the end of six weeks, pass into the bladder a bougie of the natural size of my patient's urethra. He could now make water without pain or difficulty, in an uninterrupted stream of the natural size."—*Dublin Journal of Medical and Chemical Science.*

Contraction of the Uterus after Death.

The following case, communicated by Dr. Trüstedt, is interesting:—

"A woman who was under the care of Dr. Rudolphi died suddenly, at an advanced period of pregnancy, in consequence of an attack of *febris intermittens apoplectica*. Her death took place about four o'clock, P.M., in an hour after which she was removed from the bed, and placed on some straw on the floor, covered with a sheet. A woman, left in the room to watch the corpse, was, about midnight, greatly alarmed by hearing a noise proceeding from the part of the room where the body lay, and immediately alarmed the house, being persuaded that the deceased was coming to life. On examination, a full grown dead child was found between the legs of the mother."—*Op. cit.*

Superfœtation.

A married woman, twenty-two years of age, was brought to bed of twins in the lying-

in hospital at Berlin, on the 25th of January, 1832. The children were both girls, and died in two hours after their birth: their birth took place before the end of the seventh month from the date of pregnancy. One child was white, the other evidently a half caste, as was indicated by the shape of its head and the leaden tinge of its face, hands, and feet, which in colour resembled those who have been tinged by taking nitrate of silver in large doses. The same difference of colour was strikingly evident in the umbilical cords of the infants! but not in the membranes or placenta. On inquiry it appeared that she was in the habits of intimacy with a negro, shortly after or at the time she had conceived by her husband!—*Dublin Journal of Medical and Chemical Science.*

PROGRESS OF VACCINATION IN FRANCE IN 1832.

BY M. GERARDIN.

M. Barrey, who vaccinated 1061 individuals in the department of Doubs, has remarked, that a great number of these vaccinations failed during the heat of summer. From the month of October they improved, and for five months M. Barrey succeeded in almost every instance.

M. Damian, who vaccinated 600 persons in the canton of Lodeve, has observed anamolies in vaccination, which he attributes to great atmospheric variations, humidity having generally prevailed, sometimes with cold, sometimes with heat; and during summer and autumn an epidemic scarlatina attacked almost all the children. Notwithstanding this, vaccination progressed with regularity through its different periods, except that in taking the vaccine matter it was necessary to observe the evolution of the pustule, and wait until the tenth or twelfth day. Besides this circumstance, the circumference of the retarded vesicle was less extended, and the areola less marked. A great number of vaccinations failed, and those that succeeded were frequently attended with boils and swellings of the axillary and cervical glands. M. Damian remarks, that these observations confirm the opinions of those who, in vaccination, attend to the state of the atmosphere and the season of the year. Undoubtedly, in the greater number of cases, the mildness of the disease is such, that this influence is imperceptible; but should we, on this account, deny its existence, when it is so well marked in the study of all eruptive and cutaneous diseases?

M. Parer, at Ille (Eastern Pyrennees), has also remarked the retarded appearance of vaccination. In a great number of cases the disease did not commence until the tenth, and sometimes the fifteenth, day. He also experienced more resistance to the action of the virus than in the preceding years, so that he was obliged to vaccinate the same individual two or three times.

In the Loiret, on the contrary, M. Pellieux, of Beaugency, has observed that the physicians never saw vaccination assume such a marked form as during the latter months of 1831 and the first half of 1832. In almost every case, the number of pustules equalled that of punctures, and scarcely any of that resistance to the development of the vesicles. At the end of the third or fourth day, vaccination advanced with a vigour and rapidity quite remarkable, but without any confusion. The seventh day after vaccination the pustules were from three to four lines in diameter, the base was extended, the circular pustule was large, prominent, and filled with an abundant fluid; the central depression was of a deep colour, the areola from four to five lines in extent, presenting a fine vermilion colour; the fluid collected in tubes and sent to a distance never failed in its effect; in a word, the seventh day from vaccination, the pustules had the same appearance that is usual on the ninth or tenth day of the most favourable vaccination. Without endeavouring to explain the phenomena, M. Pellieux remarks, first, that these vaccinations had taken place in winter or at the beginning of spring, whilst it is usual to vaccinate in spring and summer; secondly, that previously he had always vaccinated in the absence of epidemic small-pox, though at this time he operated while that disease was very prevalent; and, lastly, there prevailed at the same time numerous inflammatory cutaneous affections, such as chicken-pox, nettle-rash, measles, pemphigus, ecthymæ, erysipelas, and furunculi.

M. Tueffard, of Montbeliard, has transmitted a memoir "on vaccination, and small-pox

occurring afterwards," in continuation of one presented in 1818. There are some singular facts stated, which we shall notice in our next.

French Hospital Reports.

HÔTEL DIEU DE BOURDEAUX.

Cerebral Affection—Administration of Sulphate of Quinine—Cure.

A ROPEMAKER, named Hugues, of a nervous temperament, had invariably enjoyed good health up to January, 1833, when he was seized with cephalalgia and general disturbance of the system. At the end of eight days, the pain in the head having continued all the time, he became violently delirious, from which he recovered, having been put under severe antiphlogistic treatment. Six months afterwards he again fell into the same state, did not recognise his relations, and struck his wife and others who attempted to approach him. On the 4th of January he was admitted into the hospital, under M. Dutrouille, labouring under the following symptoms:—Intense frontal cephalalgia, injection of the conjunctiva, distortion of the left side of the mouth, convulsive movements of the muscles of the face, numbness of and inability to move the left limbs, small quick pulse, abundant nocturnal perspirations, attended with aggravation of the symptoms, digestive system healthy, pupil neither contracted or dilated.

Six grains of sulphate of quinine, with infusion of valerian, were given to him on the 6th, the medicines which were previously ordered having done no good.

7th. The agitation and convulsive motions have been less during the night.

These medicines were given daily up to the 11th with marked amendment; the cephalalgia diminished, the delirium left him, and the contraction of the muscles disappeared. On this day he again became worse, and was seized with violent pain in the left middle finger and increase of the numbness in the remainder of the hand. The remedies were notwithstanding persisted in, and he soon afterwards became again better.

He continued to take the sulphate of quinine up to the 21st of the month, on which day he was discharged cured. About a fortnight after this time he was again attacked in the same way, and was again cured by the same remedies.

Violent Contusion of the Left Knee—Extensive Effusion into the Joint—Compression—Cure.

Related by the Patient, M. A. SECRETAIR, *Surgeon to the Hôpital d'Ebreuil.*

On the 20th of Jan. 1832, a horse, on which I was riding, ran away, and struck my left knee against the wheel of a carriage. In a very short time the joint had acquired double its ordinary size, and was excessively painful. Repeated applications of leeches, quiet, and cataplasms caused these symptoms to disappear in the course of the month; but, on attempting to walk, the swelling returned. Leeches, blisters, douches, &c., were now used, but without obtaining any diminution of the superabundant fluid. A month elapsed without any amendment, and I began to despair of a cure; but, pressure being suggested to me, I constructed some graduated compresses, which were placed round the joint, and there retained with rollers. The continued use of this mode of pressure, and the occasional use of douches, have at length (March, 1833) effected a cure.

Hemerolopia caused by Quartan Fever—Cured by Sulphate of Quinine.

The infant of M. Sudreau, aged three years, was attacked with well-marked quartan fever. After the second paroxysm, the parents perceived that in the evening, near sunset, the child could not see, but did not appear to suffer any pain in the eyes. Its sight returned in the morning; but in the evening, about the same time, again failed so completely, that it could not even perceive the candle when placed close to its eyes. A week thus passed, the hemerolopia returning daily; the pupils were dilated, but movable. With the exception of the blindness, the infant did not appear to suffer. Blisters, &c., were used, but without avail, the hemerolopia and fever continuing. Forty days after the appearance of the fever, I ordered ten grains of sulphate of quinine in a potion, which was to be taken in four days. By persevering for the space of sixteen days in using this medicine, the paroxysm of fever disappeared, and two days afterward the hemerolopia was also gone.

HÔPITAL MILITAIRE D'INSTRUCTION D'ALGER.

Gun-shot Wound of the Thigh—Amputation—Torsion—Cure.

J. ——, a soldier of the 59th regiment of the line, whilst disembarking at Bougie on the 1st of October, 1833, received a ball in the lower part of the thigh, which penetrated into the coxo-femoral articulation. On the 12th, when the military entered Alger, this man's thigh was swollen to more than double its volume. The suppuration in the wound was abundant. He complained of thirst, heat of skin, pains in the epigastrium, and loss of appetite. His pulse was full and frequent, tongue red, and bowels constipated. Although these symptoms were so unfavourable for an operation, M. Baudeus amputated on the following day, considering that to temporise in such a case was to deprive the patient of the little chance of success which yet remained to him. Torsion was used to restrain the bleeding from the femoral artery and a large muscular branch. All went on well for eight days; at the end of this time union by the first intention had not taken place, although the edges of the wound were in apposition. By means of stimulating applications, and pressing the parts close together, the wound cicatrised, and not long afterwards the patient was discharged cured.

Gun-shot Wound—Injury and Ramollissement of the Great Sciatic Nerve and its Branches—Death—Autopsy.

B——, a soldier of the 1st African Battalion, æt. 26, on the 20th of July, 1833, received in the middle of the right buttock a ball, which, after having taken a course of about eighteen inches, presented itself at the inferior part of the thigh on the outside of the sartorius muscle, some of the fibres of which were ruptured. Three hours after the wound an examination of the injury was made, when it was found that the ball had passed close to the popliteal artery, without injuring either it or the bone. From the situation and extent of the wound, it was to be feared that there was lesion of the great sciatic nerve, and of the saphena interna, but a thorough examination could not be made, in consequence of the excessive pain which it gave the man. There was nervous hæmorrhage to a great extent; the pulse was feeble; his body was covered with cold perspiration, and his face had become pallid and altered in expression.

Compresses and warm fomentations containing opium were applied, and succeeded in arresting the flow of blood, and in assuaging the pain which for the first thirty-six hours had been excessive. Slight reaction took place, but not sufficient to prevent mortification, which destroyed the patient in forty-eight hours.

Autopsy.—Several of the large branches of the femoral artery were wounded; the internal saphena nerve was grazed, and the peroneal branch of the sciatic was divided and gangrenous at the wounded ends. The neurilema appeared inflamed as high as the lumbar plexus, and as low as the leg. The popliteal branch of the sciatic was entire; but opposite to the superior opening of the wound, and for an extent of four inches, its tissue was softened and in a purulent state. The parts surrounding the course of the ball were much lacerated, and in a gangrenous state.

Gun-shot Wound of the Right Peroneo-Tibial Articulation—Erysipelas—Cauterisation—Cure.

L——, æt. 20, a private in the 59th regt. of the line, was wounded at the superior articulation of the right fibula by a ball, which caused extensive laceration of the ligaments. When M. Baudeus saw the man, eight days after the accident, there was slight reaction, but his pulse was still much depressed and frequent. The head of the fibula, which was bathed with suppuration of a bad character, was almost entirely reduced to fragments; but the tibia did not appear to have participated in the injury. Erysipelas to a great extent had invaded the whole of the limb, which was thereby rendered nearly double the size of the opposite leg. As the state of the patient did not seem to warrant the employment of antiphlogistic treatment, recourse was had to cauterisation, employed with so much success by M. Larrey. The erysipelatous surface of the skin, slightly touched with a hot iron, became of a white colour;

reaction took place, the erysipelas disappeared, granulations appeared over the surface of the wound, and at the end of two months the man was discharged cured.

Remarks.—M. Baudeus considers the above case worthy of relation, for the purpose of directing the attention of practitioners to the employment of cauterisation in erysipelas. He has employed nitrate of silver, blisters, compression, and mercurial frictions successively, but thinks the actual cautery much the most efficacious method of arresting the inflammation, even when it partakes of a phlegmonous character.

Acute Hydrocephalus treated by Mercurial Frictions—Copious Salivation—Cure.

Levi, aged 26 months, of good constitution, was attacked, March 16, with slight rigors, loss of spirits and appetite, and bilious vomiting, which continued through the following day. When seen on the 18th, she presented the following symptoms:—she was faint, inclined to drowsiness; scalp hot; pulse 110; nausea; tongue loaded in the centre, but red at the tip; slight tenderness at the epigastrium. Infusion of mallows to be given; six leeches to the anus.

19th, 20th. Skin less hot; pulse 103; no vomiting. The treatment to be continued, omitting the leeches.

21st. Stupor; hot scalp; pulse 140; subsultus tendinum. Six leeches to the anus, and four to the temples; mild sinapisms to the feet.

22nd. Coma; pulse 130. Four leeches to the epigastrium, and four behind each ear; towards evening two blisters to the thighs. In the night she became worse, with coldness of the extremities, cold sweats, thready and frequent pulse. Bottles of hot water to the extremities, hot fomentations to the abdomen.

25th. Extremities cold; profound coma; pupil contracted; pulse 135. Two grains of calomel to be given every hour. Ung. hydrarg. ℥ss. to be rubbed over the sub-maxillary region three times in the course of the day.

24th. Much the same; copious salivation. A blister to the occiput; eight grains of calomel to be given during the day, with two mercurial frictions at night.

25th. Coma gone; extremities warm; pulse 112. She had three green stools.

From this time the child improved rapidly; and on the 29th was in a state of convalescence.

British Hospital Reports.

ST. GEORGE'S HOSPITAL.

Clinical Remarks by Mr. Brodie.

THERE are at present two female patients in the hospital under the care of Mr. Brodie, with enlarged bursæ of the patella. The treatment employed was to plunge a sharp pointed bistoury through their substance, and cut them through upward, and poulticing them for a few days, and then dressing them with lint from the bottom to excite granulations to spring up, which were further stimulated, if found necessary, by the occasional application of the caustic potash. Under this treatment they are rapidly healing, and Mr. Brodie took occasion to make the following remarks upon them at the bedside of one of these patients.

"In the natural state the coats of such a bursa as this which you have just seen me lay open, are very thin, and can scarcely be examined unless they are dissected very carefully; but when much pressure is exerted on them by kneeling (forming what is commonly termed 'the housemaid's knee'), three distinct changes take place. First, there is an increased deposition of serum, or synovia, in the cavity of the bursa; secondly, the walls of the bursa become much thickened in substance and texture; and, thirdly, there is deposited on the inner lining membrane from inflammation a layer of coagulated or coagulable lymph, which, in an advanced stage of the disease, become organised, and by friction and the motions of the joint become broken down into portions and rounded masses, known (from their shape and appearance) by the name of melon-seed bodies. With respect to the treatment of such bursæ in the early stage, before the inflammation has proceeded to any great length, it is a good practice to apply leeches and cold lotions, and afterwards perhaps a blister. In the more advanced stages, as in the present case, it is the best plan to

lay them open with a scalpel, and let out the serum, or synovia, which they contain, and dress them to the bottom with lint, thus to excite granulations to spring up from the internal surface of the lining membrane, and to cure them in the same way that an old hydrocele is cured. There is, however, another and a third stage, in which such bursæ as these are found, wherein the thickness of the coats of the bursa is equal to the length of a nail (!), and the quantity of fluid which the cavity contains is necessarily very small. In such cases the best treatment which you can adopt is to dissect the parts completely out with a scalpel. It would be supposed that when such a plan as this is followed the bursa would never be regenerated; but a case of this kind occurred at this hospital some years ago, under the care of the late Mr. Rose, who extirpated the bursa completely; it returned, however, again, and again went through all the morbid processes of thickening, condensation, &c., and I removed the bursa again.

"Bursæ, though small, are sometimes the cause of very great pain, as when they are situated under the hard horny substance of a corn, and they inflame, and matter is formed in them, which is pent up by the thickened surrounding structure. I was once called to see a lady, whose foot, ankle, and leg were very much swollen and inflamed, and she herself in the greatest agony in consequence. I found that all this mischief and pain arose from an inflamed bursa of the little toe, situated under a hard corn. I pared this away, and there came out of it two or three drops of pus, which relieved her very much, and the next day when I saw her she was quite well. A bunion is nothing more than a hard thickened portion of cuticle, generally on the inside of the foot over the articulation of the metacarpal bone with the first phalanx of the great toe. At this point there is no bursa naturally, but an artificial one becomes formed in time by the pressure of the shoe over this part. You will sometimes find an inflamed bursa underneath a corn on the joint between the first and second phalanges of the second toe. This is caused by the tight shoe pressing the toes so closely together that they overlap one another and press the joint upwards. The best method of remedying this is to strap some adhesive plaster over and under the toes, so as to bring them all upon a plane. The soft corns that form between the little toe and the adjoining one, arise from these being pressed so close as to overlap one another. These are best remedied by putting a piece of strong buff leather between the toes to keep them apart, and to take off pressure at the same time."

Tumours of the Breast—Scirrhus.—"These tumours are often very difficult to distinguish from scirrhus. A medical man, who had great experience in such cases, once brought me a patient who had a tumour of the breast, which he mistook for scirrhus, and for the removal of which he expected that I should recommend an operation to be performed. I examined the case attentively, and then told him that if it was scirrhus it was one of those cases in which amputation would do no good, and recommended him to try the liquor potassæ, which he did, and his patient entirely lost the tumour. I saw another case of tumour, which was dispersed by the use of the liquor potassæ; it was persisted in, however, for thirteen months. I have frequently seen a wasting away occur from the long use of this medicine, but I never saw any thing like pyrosis."

Pains in the Bones.—"In venereal affections you will find that sarsaparilla in decoction or powder will tend materially to relieve the unpleasant symptoms of pains in the bones. Guaiacum is also a very valuable medicine in such cases; the powdered root of the mezereon also, and iodine."

Disease of the Testicle.—"This a case which I believe is simply one of hydrocele; the patient, you see, has none of the symptoms of malignant disease. There is a thickening of the tunica vaginalis, and you may also feel a hard ridge on the anterior and inner side of the body of the testes. I once had a patient in whom I also noticed this hard ridge; he died of some internal complaint afterwards, and on examining his body after death, I found that there was no malignant disease of the testicle. If there be hydrocele and malignant disease also, and you do nothing for the latter, the consequence will be that repeated abscesses will form in the body of the testicle and burst. If this state of parts has commenced, you may stop it by giving the patient small doses of calomel and opium until his system is completely under its influence: and if not commenced, you may prevent it by using the same means. This man, you see, does not feel at all faint or sick from the injection, the reason of which is, that I have not filled the tunica vaginalis so full as to distend it, and thereby to press upon the testicle, which pressure is in these cases the cause of the faintness and sickness which the patient feels.

"It is not necessary that new bone should be formed before you take away diseased bone in cases of necrosis; the patient will get very well; the diseased bone being *detached*, forms, of course, no support with the surrounding parts."

"Many of the common coughs with which patients are affected do not arise, I believe, from the lungs at all, but are caused by irritation of the mucous membrane of the larynx. I once examined a person after death who had been subject to one of these teasing, harassing coughs: the lungs were found perfectly sound, but the lining mucous membrane of the larynx was studded with numerous little vascular tubercles, having evidently consisted originally of small masses of coagulated lymph, which had become organised."

ROYAL COLLEGE OF SURGEONS.

NAMES of Candidates who received Diplomas during the month of March, 1834.

George Northon Foaker	Colchester.
Edmund Mills	Dublin.
Robert Webb Bradshaw	Dublin.
Clotworthy Lane Monck	Wickwagh, Gloucestersh.
George Frederick Knipe	Hereford.
John Watkins	Cardiff.
Patrick Bingham	Belfast.
William Boles Eames	Ballymahon, Longford.
Henry Bullock	Witham, Lancashire.
Edward Evans	Cardiff.
Thomas Mellor	Manchester.
Samuel Edward Fitch	Cambridge.
William Gerald Dickinson	Canada.

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, April 24th.

William Arpthorp	London.
Arthur Wellington Thurnall	Cambridge.
John Thurnam	Lynn.
Henry Harvey	Newcastle.

BOOKS.

The Liverpool Medical Journal, published monthly, under the superintendence of an Association of Physicians and Surgeons, chiefly attached to the Medical Charities of Liverpool. No. I. May, 1834. London: Henry Renshaw. Liverpool: W. Grappel.

This is a clinical Journal, containing several instructive reports which we shall notice in our next.

CORRESPONDENTS.

Professor Lizars.—The Committee-room is filled with communications, and the excellent Chairman received the information suggested, which, like every thing else, has already been turned to account.

Dr. Blake's communication in our next.

Medicus, A Friend, A Reformer, and others are informed that we should commit a breach of privilege by publishing the evidence given before the Parliamentary Committee.

An Inquirer.—It is impossible to guess at the intended changes in medical legislation; but there is every reason to believe that they will be most extensive.

A Surgeon.—We do not think that parish surgeons are too highly remunerated; indeed the Poor Law Commissioners record that this is the only moderate item in parochial accounts. It is a question, however, whether the poor would be as well attended, were they at liberty to apply to any surgeon in the parish, who would be entitled to ordinary remuneration from the overseers, as the medical officer of the workhouse. The Parliamentary Committee have turned their best attention to this as well as to every other question relating to medical education and practice.

A Licentiate.—We have seen the reply of the Fellows to the Licentiates' petition, which is a sad misstatement—a dying struggle.

An Impartial Reporter will receive our attention.

METEOROLOGICAL JOURNAL.

MONTH. April, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
24		50	52	40	30·03	30·00	62	63	N.N.E.	N.N.E.	Fine	Fine	Foggy
25		48	54	42	29·89	29·86	64	64	W.	N.E.	Foggy	——	Fine
26		50	54	40	29·80	29.69	64	63	E.N.E.	E.	Fine	——	——
27		52	64	54	29·41	29·22	63	65	S.E.	S.E.	——	——	Rain
28		57	64	47	29·08	29·06	67	69	S.	S.S.W.	Showy.	——	——
29		54	59	53	29.16	29·23	74	76	S.W.	S.W.	Cloudy	——	Cloudy
30	☾	56	60	52	29·27	29·40	73	74	S.S.W.	S.S.W.	Cloudy	Cloudy	Ovcast.

The quantity of rain fallen in April was $\frac{49}{100}$ of an inch.

50, *High Holborn.* WILLIAM HARRIS and Co.

ALL Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 119. SATURDAY, MAY 10, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECT. LXXXVIII., DELIVERED APRIL 16, 1833.

Gentlemen,—I will next make a few observations on *Opacities and Specks of the Cornea*, which receive different names according to their degree and mode of formation. The slightest degree of opacity is termed *nebula*, in which the cornea presents a diffused cloudiness, a hazy or milky appearance, that has no distinct boundary, but is gradually lost in the surrounding transparent portion of that membrane. It is often accompanied by an enlarged and reddened state of the vessels of the conjunctiva, some ramifications of which extend into the delicate layer of this membrane, spread over the cornea.

Then, gentlemen, opacities of a more circumscribed and complete kind are exemplified in *Albugo* and *Leucoma*, which consist of a deep extravasation of a dense lymph in the substance of the cornea. They are of a clear white or pearl colour, and only differ in one respect, namely, that the albugo is the consequence of some description of ophthalmy, or of an abscess or ulceration of the cornea, while the leucoma is the opaque speck or mark occasioned by a wound of that membrane. For some time after the completion of the healing process it continues to diminish; but this improvement can only take place in a certain degree, and an indelible opacity will yet remain, though considerably smaller than the original wound which was the cause of it.

Numerous red vessels are sometimes observed running into an albugo from the conjunctiva, and, when this is the case, the opacity is apt to spread, and is somewhat raised above the level of the cornea, the delicate layer of the conjunctiva, spread over this membrane, being much thickened. This variety of albugo is occasionally seen in scrofulous adults, and sometimes in children.

Gentlemen, as a general observation, I may say, that the remedies calculated to do good to specks of the cornea, in their early stage, are those which have the effect of removing the inflammation that has given rise to them. At the same time, there are both general and local means peculiarly adapted for hastening the absorption of opaque depositions in the cornea: such are mercury and iodine. We have likewise various applications for quickening the action of the absorbents in the removal of specks, if employed at the proper time. If you commence their use too soon, that is, before the cause of the opacity is removed, you will do more harm than good. For instance, if in an albugo, arising from scrofulous corneitis, and still attended by considerable vascularity, you were directly to attack the opacity of the cornea with stimulating powders and strong solutions of nitrate of silver, oxymuriate of mercury, or iodine, you would not only fail in accomplishing the object in view, but create a great risk of rendering the patient totally blind. But if you begin with attacking the strumous inflammation, which still lingers in the eye, and that chiefly by constitutional remedies, you will not only disperse the redness, but often find the cornea begin to become clearer from day to day, and the eyesight to be proportionally improved.

The best local applications for opacities of the cornea are, a solution of the nitrate of silver, from two to five grains, in an ounce of distilled water; a solution of one or two grains of oxymuriate of mercury in an ounce of distilled water; the vinum opii; the ung. hydr. nitratis; or a finely levigated powder, consisting of 3j. of red precipitate and one ounce of white sugar. The latter is generally blown on the speck through a quill. The useful effect of iodine collyria I must also not forget. The vascular forms of albugo sometimes require the trunks of the vessels distributed to them to be divided, and mercury or iodine to be exhibited.

Gentlemen, *Staphyloma* is a term applied to various protrusions or projections on the front of the eye, in consequence of their fancied

resemblance to a grape, *staphyle* being the Greek word for that fruit. Thus, a protrusion of a portion of the iris through an ulcer, or wound of the cornea, used to be called *staphyloma racemosum*, but now more properly *prolapsus of the iris*. At the present time, the term *staphyloma* is usually restricted to protuberances of the cornea and sclerotica. Staphylomatous affections of the sclerotica, however, are so rare in comparison with those of the cornea, that it is only the latter which need detain us. When the cornea becomes staphylomatous it loses its natural transparency, rises above its proper level, and even projects between the eyelids, in the form of a whitish, pearl-coloured, or bluish tumour, attended, when the whole cornea is affected, with loss of sight. To this grievance are added, in bad cases, all the evils which unavoidably result from the projection of the cornea: inability of closing the eyelids; exposure of the eyeball to the air and extraneous matter suspended in it; irritation and inflammation from this cause and the friction of the eyelashes; and soreness and excoriation of the lower eyelid and cheek from the constant stillicidium lachrymarum. Even the other eye is often sympathetically affected, becoming tender, and sometimes truly inflamed.

Staphyloma of the cornea is either *partial* or *total*. Although the most evident symptoms are opacity and projection of the cornea, a common effect of the disease is adhesion of the iris to the diseased cornea, and consequently a diminution or total obliteration of the anterior chamber.

In those cases where a partial staphyloma neither covers nor involves the pupil, the patient may be able to see objects placed above him or on a level with his eye; but he is generally affected with epiphora and painful sensibility of the organ. In more unfortunate cases, all the margin of the pupil is adherent to the opaque and projecting portion of the cornea, and it is only by the formation of a lateral artificial pupil, that a degree of vision can be recovered.

Gentlemen, partial staphyloma is sometimes confounded with leucoma; but it is to be recollected, that in general the iris is firmly adherent to the whole extent of a partial staphyloma, but either quite unconnected with a leucoma, or connected to it by a mere point. In partial staphyloma, the whole cornea inclines to a conical form, the apex of which is the centre of the staphyloma; whereas, in leucoma, the general spherical form of the cornea remains unaltered.

If either from closure of the pupil, or from the partial staphyloma being situated over it, no vision exists, you should try to lessen the staphyloma itself, and then consider whether by an operation for artificial pupil the eyesight can be restored.

Now, the safest plan of reducing a partial staphyloma is to apply to its apex the muriate of antimony with a camel-hair pencil, while the eyelids are kept widely separated. Then before the eye is shut, the surface of the staphyloma should be washed with a large camel-hair pencil dipped in milk. The caustic is not to be repeated, till the slough has come away, and the inflammation caused by the former application subsided.

In one form of total staphyloma, the tumour is *spherical;* in the other, it has the shape of a *blunt cone*.

As there is no possibility of restoring sight to a patient afflicted with total staphyloma, even in cases where the lens, vitreous humour, and retina are sound, the only thing you can usefully do is to lessen the protuberance of the cornea, which is not only a great disfigurement, but a cause of the serious annoyances already specified. This is done by an operation, which consists, first, in the formation of a flap with the cataract knife; and, secondly, in completing the circular excision of the most prominent portion of the tumour with a pair of curved scissors.

This may be easily done without the ceremony of first passing a ligature through the cornea, for the purpose of fixing and drawing it outward. The lens and vitreous humour generally escape; the eye shrinks into the orbit; and though the organ is destroyed, the patient is freed from a disease, which, besides being attended with total loss of sight, was a source of great misery and suffering.

Synechia, gentlemen, is a term employed to signify a morbid adhesion of the iris. When the adhesion is to the cornea, the case is called *synechia anterior;* when to the capsule of the crystalline lens, *synechia posterior*. The former is often the consequence of a wound or ulcer of the cornea attended with escape of the aqueous humour; the latter is more frequently brought on by iritis.

Partial and recent adhesions of the iris to the capsule of the lens may sometimes be separated by the use of belladonna and mercury. In some instances of partial synechia anterior, and even of complete synechia posterior, which is mostly attended with closure of the pupil, vision may also be restored by the formation of an artificial pupil.

The adhesion of the iris to the cornea produces a change in the size, position, and shape of the pupil; and when the result of inflammation or of a prolapsus of the iris, the cornea mostly becomes opaque, the speck more or less covering the pupil.

Prolapsus of the iris, sometimes termed *staphyloma racemosum*, is a protrusion of the iris through a wound or ulcerated opening in the cornea. It is necessarily of the same colour as the iris, brown or greyish, and its size varies from that of a pin's head to that of a small pea. As the cornea is rarely perforated at more than one point, the prolapsus is usually single, and its base is generally surrounded by an opaque circle of the cornea.

The inconveniences of a prolapsus of the iris are pricking pain in the eye, inflammation

of the organ, intolerance of light, a deviation of the pupil towards the seat of the prolapsus, and a lessening of its diameter. In cases of long standing, the protruded portion of the iris becomes less sensible, and the distress experienced less acute.

When the prolapsus is quite recent, and the consequence of a wound, no doubt can exist about the propriety of reducing the iris into its right situation again. In other examples this is impracticable, and then the inconveniences of the projection of the iris are to be relieved by touching the tumour repeatedly with the nitrate of silver, until it is sufficiently levelled and the ulcer healed; while the obstruction of vision itself, caused by the displacement and alteration of the pupil, and the partial opacity of the cornea, may sometimes be removed by the formation of an artificial pupil. When the tumour of the protruded iris is large, it may be necessary to snip off a part of it with scissors, before the nitrate of silver is applied.

Gentlemen, I will next make a few observations on *the closure of the pupil and formation of an artificial pupil.* A permanent contraction, or a closure of the pupil, is most frequently a consequence of inflammation of the iris; but sometimes it follows operations for the removal of cataracts, coming on slowly and insidiously at some indeterminate period afterwards, without any marked inflammation in the eye. The iris becomes motionless, assumes a radiated wrinkled appearance, and, when the lens is free from opacity, a small black point is seen in its centre. Under these circumstances, if the retina be sound, the patient may sometimes regain a considerable power of vision by the formation of an artificial pupil. The pupil may also be obstructed by the effusion and organisation of coagulating lymph from inflammation; or you may have such a displacement of the iris from prolapsus as causes an alteration in the shape and position of the pupil, attended with serious obstruction of vision. You are already aware, that synechia anterior is frequently attended with opacity of the cornea.

The several varieties of the operation for the formation of artificial pupil may all be referred to three principal methods; the first is *a simple cut through the iris*, without the removal of any portion of it, termed *coretomia*. The second is an incision in the iris, and the removal of a part of it, *corectomia*. The third consists in separating some of its external margin from the corpus ciliare, *coredialysis*.

The changes preventing the passage of light through the pupil, and requiring the formation of an artificial pupil, I have already described; but, gentlemen, it must be manifest to you, that such an operation could not be performed with a reasonable prospect of success, unless the changes in the condition of the pupil were the only defect in the eye. Thus, unless the retina were sensible, it would be doing no good to make a new opening in the iris. The patient should always be capable of discerning the difference between light and darkness; and, if he had not this power, the operation would hold out little prospect of success. This state, however, does not amount to an absolute prohibition of it, because sometimes the iris is so thickened, and the posterior chamber so full of dense lymph, and the transparency of the lens is so affected, that the power in question may be annihilated, yet the retina itself not be incapable of resuming its functions. The experiment, though unpromising, may be made.

An artificial pupil should never be formed in one eye, as long as the patient is able to see with the other. Nor ought the operation to be attempted if the eye be affected with inflammation, preternatural hardness, dropsy, or atrophy.

When a part of the cornea is opaque, the place for the artificial pupil must of course be determined by the situation of the transparent portion of that membrane; and if the operator has the choice of placing it behind either the nasal or the temporal edge of the cornea, the former situation is to be preferred, as affording a more useful degree of vision.

Whenever the lens and capsule are transparent, one chief caution in the operation is to leave those parts completely undisturbed.

As an artificial pupil possesses no power of contraction and dilatation, care must be taken to make it neither too large nor too small. Too small an opening would not be very serviceable; and if it were too ample, the quantity of light admitted would dazzle vision, and the new aperture be comparatively useless.

Now, gentlemen, it is manifest that it would be impossible to describe, in a course of lectures on surgery in general, all the modifications of operations, rendered necessary by the infinite variety of circumstances attending a closure of the pupil. The state of the pupil itself, its being filled or not by opaque lymph, the condition of the cornea, the state of the lens, and the disease being complicated or not with prolapsus and adhesion of the iris, are several principal considerations influencing very much the particular mode of operating.

Coretomia, or the simple division of the iris, may be performed with an iris-knife, or couching-needle, that has a sharp edge only on one side; or else with a minute pair of scissors, one blade of which has a sharp point the other an end, like that of a small probe, such as I now show you. The iris-knife, which is also before you, is but little larger than a common couching needle. It is introduced through the sclerotica, about a line and a half from the cornea, and after perforating the iris on the side towards the temple, its point is conveyed across the anterior chamber nearly as far as the ciliary margin of the iris towards the nose. Then the sharp edge is to be turned backwards, and pressed against the iris as it is withdrawn, so as to make a transverse cut in the iris.

Another plan of dividing of the iris is per-

formed by making an incision near the side of the cornea, and introducing the small scissors, one of the blades of which has a sharp point, the other a probe point. The sharp point is then passed through the iris, near its ciliary margin, while the probe point is passed under the cornea, the requisite distance, when the blades are to be shut, and the necessary division of the iris performed.

These methods of operating are proper when the iris has a tense appearance, when the cornea is transparent, and there is no crystalline lens, or when the closure of the pupil has followed extraction of the cataract.

The *excision of a portion of the iris*, termed *corectomia*, is another method. It is performed in different ways. Thus, you may puncture the cornea, draw out a piece of the iris by means of a minute hook, made for the purpose, like what is before us, and snip it off. This was Professor Beer's way, which appears quite as good as that adopted by the late Mr. Gibson, who made an incision in the cornea, so as to let out the aqueous humour, after which he made a piece of the iris protrude by means of gentle pressure, and cut it off. The iris then receded into the eye with the new circular opening formed in it.

These last plans are proper when the centre of the cornea is densely opaque, but the whole, or a portion of its circumference, transparent, and the lens and its capsule sound.

The operation of separating a portion of the outer margin of the iris from the corpus ciliare, *coredialysis*, was first done by Scarpa, on the side towards the nose; but, as the opening did not continue to be permanent, this plan was abandoned in favour of Reisinger's method, which is executed by means of a very fine double hook forceps, capable of being put into the form of a single hook by slight pressure. A small puncture is made in the cornea near its margin, the double hook forceps introduced, and conveyed, with the points turned downwards, as far as the place where the iris is to be separated, but always as near as possible to the ciliary edge. The points are then to be slightly opened, and made to enter the iris. The blades are now to be shut, and the instrument slowly drawn outwards, by which means a sufficient piece of the iris will be detached, which, having been disengaged from the instrument, is to be left strangulated in the wound of the cornea. In fact, this operation is a combination of coredialysis with corectomia. In this country coredialysis, I believe, is not in much favour, and surgeons generally prefer either *coretomia* or *corectomia*.

Hydrophthalmia, or dropsy of the eye, seems, gentlemen, to be generally a local disease, or, at all events, is never connected with, or dependent upon, ascites, anasarca, or other dropsical affections, and, if it depend upon constitutional causes, they have not yet been satisfactorily made out.

You may have dropsy of the chambers of the eye, that is, an increase in the quantity of the aqueous humour; or you may have a preternatural accumulation of the vitreous humour; or, lastly, you may have a collection of serous fluid between the sclerotic and choroid tunics.

The symptoms of dropsy of the anterior and posterior chambers are a greater prominence of the cornea than natural, and an increase in its diameter, attended in the advanced stages with loss of its transparency. The iris is soon rendered motionless, and of a darker colour than usual. At first, the eye is farsighted, but afterwards the power of seeing becomes considerably impaired, or lost. When this variety of hydrophthalmia follows injuries of the eye, it may be combined with a tremulous state of the iris, and partial amaurosis.

In the treatment, you may try blisters to the temple; or, behind the ear, mercury, and purgatives. In inveterate cases, paracentesis oculi has been proposed and practised.

With respect to the *Subsclerotic Dropsy*, if its existence could be made out, which would be a matter hardly practicable, the discharge of the fluid by puncture would be indicated.

Dropsy of the vitreous humour is attended with enlargement of the posterior part of the eyeball, a conical projection of the cornea forwards, advance of the iris towards the cornea, deep blue colour of the sclerotica, shortsightedness followed by complete amaurosis, the eyeball becoming hard and motionless.

As sight is totally lost, all that the surgeon can do is to relieve those inconveniences which arise from the distended state of the eye, and its pressure. A piece of the cornea may be cut off, and the humours discharged.

A general and considerable enlargement of the eye, from an accumulation of the aqueous and vitreous humours, is sometimes termed *buphthalmos*, from its resemblance to the eye of an ox.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XX.

Symptoms of Intestinal Worms—Various Sympathetic Irritations—Affections of the Nervous and Respiratory Systems—Exciting Causes—Verminous Fever—Treatment and Specific Mechanical Purgative—Use of Mercury, and Turpentine—Animal Oil of Dippel—Preventive Measures.

Gentlemen,—Let us proceed with the consideration of intestinal worms. At my last lecture you will recollect that I spoke of the different kinds of worms, and stated that there was a difference between the worms which are found in various parts of the body; that I examined the question as to the origin of these

animals, and came to the conclusion that they are formed originally within the bodies of man and other animals. I mentioned the various kinds of worms which inhabit the digestive tube in man, and examined at some length the question of perforation of the intestinal canal by lumbrici. We come now to the investigation of the symptoms.

With respect to the symptoms of worms, it is a singular fact, that we have not one single pathognomic sign of their existence, except the circumstance of their being occasionally passed by stool, or vomited; almost all their symptoms are referable to irritation of the gastro-intestinal surface, and its sympathetic relations. Persons, who are much subject to worms in these countries, are generally of a pale complexion, with a bluish circle round the eyes; the belly is more or less prominent, and there are various signs of irritation of the digestive tube, with itching at the nose and anus; headach; foul breath and tongue; irregular and sometimes canine appetite, nausea, hiccup, borborygmi, tenesmus, diarrhœa, and constipation. Though the patients take abundance of nutriment they are generally thin and pale, and in such cases there is either one or two very large worms, or a great number of smaller ones, or their presence is complicated with disease of the intestinal canal. Such persons are also observed to be of an indolent and languid habit; they have perspirations, disturbed sleep, with grinding of the teeth, and irregularity of pulse.

The sympathetic irritations, produced by worms, are numerous and extraordinary. The genital organs may be excited, and we may have priapism and seminal emissions in the male, and irritation amounting to nymphomania in the female. There is a very singular case on record of a female, aged seventy, being seized with a violent attack of nymphomania from this cause. The nervous affections, produced by worms, are so Protean and so numerous, that it would be almost impossible to detail them; in fact, there is not a single nervous disorder which may not be simulated by the sympathetic irritation of worms. Epilepsy, hysteria, convulsions, dilatation of the pupil, amaurosis, symptoms of hydrocephalus, and even mania are among the affections of the nervous centres, or their immediate connexions, which, in repeated instances, have been found to depend on the presence of worms. Kraus gives an extraordinary case of a man, who, at a very advanced age, became subject from this cause to fits of continued and inordinate laughter.

There is another case on record of convulsions depending on worms, which, like those from the bite of the Tarantula, are said to have been soothed and relieved by music. Hufeland, in his journal, mentions a case of yellow vision from the same cause, and there are several instances of aphonia and mania on record, which have yielded to treatment which had removed intestinal worms. A case is mentioned of a person who got violent spasmodic action of the muscles of the eye, producing inversion of that organ to such a degree, that the eyeball appeared to be nothing more than a mass of red flesh. A case is recorded by Serres, in which the symptoms strongly resemble those of hydrophobia, and it is probable that some of the cases of hydrophobia, said to have been treated successfully, were nothing more than this extraordinary irritation of the nervous system produced by worms. I saw myself a case, in which two eminent physicians made the diagnosis of hydrocephalus; it was that of a child, who was certainly to all appearance labouring under cerebral disease, for he had convulsions, coma, and dilated pupils. It was remarkable, however, in this case, that the treatment directed to the head, though early and well applied, proved totally inefficacious. A large dose of calomel was given, and some lumbrici passed; in the space of two or three hours there was an evident improvement, and the child quickly recovered.

During the course of practice I have met with several examples of affections of the respiratory organs, depending upon the irritation of worms. This affection has been long known. I recollect the case of a boy who was brought to me with an extraordinary affection of the chest. He was of a gross habit of body, of a flabby scrofulous appearance, and labouring under disease of the elbow-joint; but his chief complaint was, that he passed the night in great distress from incessant cough and wheezing. On examining the chest, I found the respiration healthy, and no other symptom of pulmonary derangement except a very slight bronchitic râle. On expressing my opinion of the case to the mother, she said that he was easy during the day, but that his condition was very different at night. To ascertain the truth, I took the child into the hospital, and found that her statement was substantially correct; for from four o'clock in the afternoon until next morning, he was in a state of perfect orthopnœa, with loud, ringing, incessant cough. During the rest of the day he was free from cough, and tolerably quiet. The case was treated with calomel and ipecacuanha, tartar emetic, and other similar remedies, but the disease was rather exasperated than improved. The boy had swelled belly and constipation, and for this he was ordered to take a dose of turpentine and castor oil. He passed some worms with relief to the existing symptoms, and from the consideration of this, and the failure of the treatment for bronchitis, we were determined to persevere in the use of anthelmintic medicines, and, for this purpose, put the child on syrup of cowhage, to be followed by castor oil draughts. He passed vast quantities of thread worms in the course of a few days, and when they had been all removed the cough disappeared altogether, but as long as any of them remained, the symptoms of pulmonary irritation continued. There could

be no doubt that this was a case of intermittent bronchial irritation from worms, for their evacution was immediately followed by a complete cessation of cough and dyspnœa. I have also, since the foregoing, met with many other instances of a similar description. A young girl came into the Meath Hospital with chronic bronchitis and some degree of hepatisation at the lower part of the left lung. Having heard from her friends that she was extremely subject to worms, I determined to try what would result from the use of anthelmintic medicines, and put her on the syrup of cowhage with aloetic pills. Under this treatment the cough was quickly removed, and the lower portion of the lung recovered its permeability. Here, it was remarkable, that not only irritation of the bronchial mucous membrane, but even solidification of the lung, were cured by treatment calculated to remove worms. Mr. Ramsay, in his paper published in the Medico-Chirurgical Transactions, gives several cases of hæmoptysis from this cause. I think I have seen several cases of phthisis, where the original source of pulmonary irritation seemed to be the existence of intestinal worms.

Let me here, however, remind you, that we should be cautious in attributing too much to worms as the causes of morbid symptoms. There are several reasons why you should be on your guard in this respect, one of the most obvious of which is this,—it does not follow, in the first place, that the symptoms in any particular case are produced by worms, because the same cause, which may have predisposed to the formation of worms, may have produced the symptoms in question, and there may be merely a coincidence of worms and of these symptoms. Even if we look to the results of treatment there is a great deal of doubt and difficulty. There are many cases on record which are described as cases of epilepsy from worms, and where all the symptoms have subsided under the use of anthelmintic medicines. In many of these cases we find the medicine chiefly employed has been oil of turpentine, and I need not tell you, that this is an excellent remedy in many cases of epilepsy totally uncomplicated with worms. The results of such cases do not necessarily prove that worms were the source of irritation. Again, immense injury is frequently done to children in persisting in the anthelmintic treatment for the supposed existence of worms. Recollect, the prominent phenomena of worms in the intestines are irritations of the digestive system and of other functions. Now, it is very well known that these symptoms may occur with or without worms. If, then, you have a case where these phenomena are present without the co-existence of worms, and if, under a mistaken impression, you treat it with anthelmintic medicines, you inflict a double injury; you exasperate the original disease by the drastic and irritating medicines which are ordinarily used for the removal of worms, and you do an indirect injury by neglecting to adopt proper means of treatment. There is nothing more common than to see children labouring under some irritation of the digestive tube, which is mistaken for worms, purged again and again until they get incurable enteritis or tabes mesenterica. When a child has foul tongue and breath, picking of the nose, diarrhœa, and turbid urine, it is a common notion that he is labouring under worms. If he gets feverish, it is said to be worm-fever, and the anthelmintic treatment is pursued with unabated vigour. Now, I believe that a great majority of such cases are in reality disease of the mucous surface of the intestine, and that the consequent feverishness is dependent on this state. Another reason why you should be cautious is this,—in persons of an hypochondriac habit, there is nothing more injurious than their getting the idea that they have a worm in their bowels. When once this notion gets into the head of an hypochondriac, it is generally impossible to eradicate it. Some of the most melancholy and fixed cases of hypochondriacism are produced in this way; every symptom is attributed to the worm, the patient is in a state of constant feverish anxiety about it, he talks of nothing else, and is constantly taking medicines to expel it, to the great detriment of his general health and with a manifest exacerbation of his symptoms. Medical men should be extremely cautious on this point. The patient is perhaps a female of hypochondriac and nervous habit; she has gnawing sensations about the epigastrium, which she supposes to depend upon the presence of a worm, and an injudicious practitioner favours the notion. He gives her various medicines to expel the worm; no worm is passed; she becomes more anxious, takes more medicine, and gets weak and emaciated. She then begins to think that all the nutritious matter in her body is going to support the worm, falls into a desponding state, and continues for the rest of her life an incurable hypochondriac.

We come now to consider the exciting causes of worms. On this subject I believe our knowledge is very scanty and inaccurate. The following, however, are generally looked upon as remote causes:—foul air, residence in damp and unhealthy situations, sedentary habits, and want of wholesome exercise, overfeeding, the constant use of certain articles of diet, as farinaceous substances, milk, cheese, sugar, &c. An eminent authority (Bremser) asserts, as I have already stated, that unabsorbed chyle in the digestive tube constitutes the most fertile source of worms. It is a common idea, that poor diet has a strong tendency to give rise to the formation of these animals, but it has been frequently observed that worms are met with in persons who are by no means in want of nourishment; and it is said that in cases where nutrition has been diminished in man and other animals the worms die. If this be the case, it would

appear that, so far from being the exciting causes of worms, poor diet rather tends to favour their removal. Uncooked vegetables and fruits are also reckoned among the causes of worms, but I believe this arises from the mistaken notion that the ova of intestinal worms occur in vegetables, and, being taken with them into the stomach, are there developed, or even changed in their organisation, a position which we have already proved to have no foundation in truth. Persons who live principally on vegetable food have not been observed to labour under worms in a comparatively greater degree than those who use an animal diet. It is said that the Swiss, who consume a great deal of vegetables, are very subject to worms, but other nations who live in a similar way have not been remarkable for the same liability.

Worms have been stated to be occasionally epidemic. It is not very easy to determine this point, but it has been remarked, that at particular periods these animals have been more than usually frequent and numerous. Many authors have described an epidemic of what has been called *verminous fever*, that is to say, fever of a gastric or bilious character accompanied by worms in quantity. It is hard to say what the nature of this fever really was, and whether it might or might not be fever with irritation of the digestive apparatus, one of the consequences of which was a discharge of worms already existing. That worms are endemic, is a proposition very easily conceived, for we see it illustrated by the extraordinary prevalence of these animals in sheep which are kept in low, damp pastures. In such situations worms are met with in great abundance in the liver and other parts of these animals.

It would appear from the following remarkable case, detailed by Bremser, that the use of milk and farinaceous food predisposes to the formation of intestinal worms. This gentleman, who was physician to a monastery, and had ample opportunity of studying the habits of its inmates, was called to visit one of the oldest of the monks, who was said to be labouring under great derangement of the digestive system. On inquiry, he found that the patient had lived for sixty years in excellent health, using animal food, which, however, he had been latterly induced to change for farinaceous diet and milk. For a few days this agreed tolerably well with him, and then he began to be tormented with colicky pains, flatulence, sour eructations, and other distressing symptoms. His physician gave him some purgative medicine, and he passed a large quantity of tape-worm with relief; the treatment was persevered in, his former mode of living resumed, and he recovered quickly. This case bears strongly against the fanciful hypothesis that the ova of worms are transmitted in the act of generation; for how could it be possible that the ovum of this tape-worm, transmitted in this manner, could remain undeveloped in the system for the space of sixty years? This case derives additional interest from the fact of a change to a farinaceous diet being apparently connected with the formation of worms.

Another remarkable case is given by the same author. The patient was a married female who had twelve children,—six boys and six girls. This woman observed, that, whenever she was pregnant of a girl, she had a great longing for milk and farinaceous food, and lived on these articles of diet almost exclusively. After living in this way for some time, she uniformly got an attack of worms, and this, as well as the longing for vegetables, coincided with the birth of a female child so invariably, that she was able to tell with certainty whether the child she carried was a male or a female. This is a singular and well authenticated fact.

We come now to the treatment of worms. Generally speaking, this is extremely simple, the principles of treatment in the various kinds of intestinal worms being nearly the same. Simple as they are, however, some persons entertain false notions respecting them. They appear to think that all they have to do is to evacuate the worms; and, having accomplished this, they rest satisfied and take no steps to prevent their recurrence. But the mere evacuation of worms is no proof of a cure; to effect this you must prevent their return. From what you have learned with respect to their exciting causes, you will be able to give such directions as to the patient's mode of living as will obviate their recurrence; and, with regard to the means to be adopted for removing them, we may divide them into the following:—We have, in the first place, what is called the mechanical treatment, next the specific, and, lastly, the purgative treatment. The first and last are nearly connected. For instance, purgatives appear to act in the same way as mechanical anthelmintics, by irritating the mucous surface of the intestine and the worm, and thus causing its dislodgment and expulsion.

Among the principal mechanical anthelmintics are filings of tin, cowhage, powdered charcoal, and crude mercury. Among he specific are a variety of substances, most of which have a strong and peculiar smell. This is a very curious fact. Valerian, assafœtida, camphor, ether, and other odorous substances have been found to be anthelmintic, and the Geoffræa inermis, which has been employed for this purpose, is remarkable for its strong unpleasant odour. The same thing may be said of tobacco, the oil of chenopodium or wormseed, garlic, artemisia absinthium, and many others. With respect to purgatives, there is not one in the whole list, particularly those of the drastic kind, which may not be looked upon as an anthelmintic.

It is the opinion of the most eminent men, that the thread worm is the most difficult to expel, because they are generated with an ex-

traordinary rapidity, and accumulate in a very short space of time. You are satisfied of their existence, have seen them in the alvine discharges, and the patient has all the ordinary symptoms. Well, what is the best way of getting rid of them? You shall commence by the exhibition of a mercurial. It is difficult to explain why it is that mercury has such an effect in removing these worms, but the experience of the best practitioners can be adduced in proof of its efficacy. The statements of Dr. Latham of London, and of many practitioners in this country and on the continent, go to prove this. In whatever way it acts, mercury appears to be a powerful anthelmintic; and it is a fact that these worms have been expelled where it was given in very small doses, and not sufficient to operate as a purgative. The best plan is, first to give a mercurial purgative, and then to have recourse to the mechanical treatment, giving, with this view, the syrup of cowhage, one of the most efficacious of this class. It is a remedy which is easily managed, and will do no harm; for, though it produces violent itching when applied to the cutaneous surface, it produces very little sensible effect on the intestinal mucous membrane. The form which I employ is the following:—Take of the hairs of the dolichos pruriens one scruple, syrup of orange-peel an ounce; of this an electuary or syrup is to be made, of which you may give a child a teaspoonful three times a-day. This is the remedy on which the West Indian practitioners, who have frequently to treat this affection in the negroes, place the greatest reliance; and you will find that if you employ it a vast number of worms will be often passed. It should be continued for two or three days, and then a purgative must be given, after the operation of which it may be again resumed, if necessary. An excellent adjuvant to this is the use of aloetic injections, composed of two parts of milk and one of the decoction of aloes. In this way, you will be able to remove a vast quantity of these little animals from the rectum. It has also been observed, that injections of cold fresh or salt water have a great power in promoting their expulsion. Bremser mentions that in cases where these worms pass from the rectum into the vagina in females, and excite irritation, there is nothing so effectual in destroying them as injections of cold water and vinegar. This you should bear in mind. You should also remember, in the case of administration of syrup of cowhage, to give strict orders not to let any of it drop on the child's skin, as it would excite a great deal of irritation. You should forewarn the attendants of its effects on the skin; and if any of it should be spilled on the hands, neck, or face, the best thing is to wipe and wash the part well, and then rub it with a little almond-oil.

For the expulsion of lumbrici there is nothing so successful as the ordinary purgative treatment. A bolus, composed of calomel, rhubarb, and jalap, will answer this purpose extremely well; you may also use the syrup of cowhage with much advantage. Bremser gives a formula for an electuary, which I have not tried, but have no doubt of its value, for it appears to combine all the qualities of a good vermifuge electuary. It is made as follows: Take of the seeds of santonicum, and of the flowers and leaves of tansy, reduced to powder, each half an ounce. Here you have two anthelmintics of the specific kind. Add to these two drachms of powdered valerian: here is another. You then combine with these two drachms of sulphate of potass and a drachm and a half of jalap: these are purgatives. You then make them up into an electuary with syrup of squill, which is also an anthelmintic of the specific kind. Of this electuary two or three teaspoonsful are to be taken during the course of a day. Bremser states, that this combination is of great value, particularly against lumbrici and tape-worm.

The treatment of tape-worm is not difficult. All the specific and mechanical anthelmintics are useful in promoting its expulsion, but there is nothing which appears to have such a powerful effect as full doses of turpentine and castor oil. This constitutes the best remedy we possess against the tænia; but if you wish to get rid of it entirely, you must give the turpentine in full doses. You will frequently be astonished at the vast quantities of this worm which will be passed. When you give turpentine, it is safer to order a full dose of it, for if it be given in small quantities it is very apt to irritate the urinary organs. Half an ounce of turpentine, with the same quantity of castor oil, form an efficacious though very disagreeable draught. You may, however, obviate its nauseousness by the addition of a small quantity of camphorated tincture of opium and mucilage of gum arabic. The celebrated empyreumatic oil of Chabert is, in my mind, nothing more than a modification of the turpentine. This is the remedy which Bremser looks upon as most efficacious against the tape-worm. You have all, I presume, heard of the animal oil of Dippel—the oil which is produced by the distillation of bones or harts-horn shavings. To one part of this are added three parts of turpentine: these are left to combine for four days and then distilled; the first three parts of oil which come over are called the empyreumatic oil of Chabert. It is an exceedingly nauseous remedy, has a most disgusting smell, and is seldom used in this country. Bremser recommends it to be taken in doses of a teaspoonful three times a-day. Some persons who have tried it have assured me that it is extremely difficult to be taken, and that it excites a train of most disagreeable abdominal sensations. Bremser, however, thinks highly of it; he is in the habit of directing his patients to take it for three or four successive days, then to omit for a day or two, and then to return to it again; and he says that it not only succeeds in evacuating the

worm, but also in preventing its return. In addition to this, he recommends the use of a fortifying tincture, which I think very useful in worm cases. It is a combination of one of the salts of iron with a preparation of aloes. If you take equal parts of the muriated tincture of iron and tincture of aloes you will have a remedy somewhat similar to the strengthening tincture of Bremser. Twenty drops of this mixture, taken three or four times a day, will prevent the recurrence of worms.

We shall not meet again, gentlemen, until after the Christmas holidays; our next lecture will be, therefore, on Wednesday week, when I shall take up the subject of painter's colic, and some other affections connected with the viscera of the abdomen, and then pass on to the consideration of thoracic diseases.

CLINICAL LECTURES

ON THE

SURGICAL ANATOMY AND TREATMENT OF THE UTERUS AND ITS APPENDAGES.

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LECTURE II.

Diseases of the Uterus and its Appendages—Disorders of the Menstrual Fluid considered as a Cause of Enlargement of this Organ—Flooding or Metrorrhagia—Leucorrhœa—Hysteria—Treatment, &c., &c.

GENTLEMEN,—In my first lecture I gave you an account of the two principal means of diagnosis in morbid alterations of the womb—the vaginal examination (*toucher*), and the speculum. Before I enter into a minute description of these alterations, I think it better to consider the influence which the irregularities of this organ have on its functional development, a study not less useful for the prophylactic than for the etiology, and which has not been sufficiently considered. I shall now speak of derangements of the menses—metrorrhagia, leucorrhœa, and accessions of hysteria, considered as the principal causes of diseased alterations of this organ. I will, at the same time, superficially glance over all points that I believe to be known on this subject, so that I may give you the practical conclusion of my own observations.

Disordered state of the Menses considered as the cause of Plethora of the Uterine Organ.—This morbid sign should be arranged under four heads; the defects of menstruation and the symptoms which accompany it, either at its first approach, at its periodical returns, or at its natural cessation.

1st. *Absence of Menstruation.*—There are some women in whom the menses never appear. I have, within the last ten years, known fourteen cases of this kind, the modifications of which varied according to the temperaments of the individuals. But, at every return of the menstrual period, the patients became susceptible, irritated, and melancholy, frequently affected with headach, suffocations, a sense of weight about the pelvic organs, colic, &c., without ever having the slightest appearance of menstrual discharge. There are others, again, who never experience these periodical indispositions; but, in general, these are women who have very delicate health, are more or less emaciated, tissue lax, flaccid, and colourless; their sallow hue announcing the affliction; and sometimes they are harassed with colicky pains and diarrhœa, sometimes with palpitations, headach, &c.

What must we do, then, under these circumstances? Some practitioners attribute these phenomena to the organisation of the woman and to her sedentary habits; others regard the absence of this fluid to be the principal cause they have to encounter, and try every remedy they can think of to reproduce its discharge, which, in general, does more harm than good, by attracting the blood into the pelvic cavity, and thus augmenting the congested state of the uterus, causing an increase of the symptoms, which frequently continue even from one menstrual epoch to the other, without the least intermission. Above all things (for it is of the greatest importance) you must become acquainted with the cause that impedes its establishment. You will frequently find, by vaginal examination, an engorgement of this organ, which it is necessary to combat. In two instances I have succeeded in subduing this plethora, and establishing a regular menstrual period, in one of which the female has since become a mother. If this cause does not exist, and if many years have elapsed without the catamenia, they are, in general, definitely lost, and it is useless to meditate their reproduction. Would a practitioner, then, abandon such women with their sufferings? Certainly not; but assist nature, by establishing some artificial sanguine evacuation. Thus, when return of pains predicts the menstrual period, it is necessary to take blood from the arm to the extent of four or five ounces, or, what is still better, to apply four or five leeches to the arm, and allow them to bleed moderately; at the same time have recourse to tepid baths, moderate exercise, and mild liquid diets adapted to the constitution. Thus, to weak and nervous women we should allow a nourishing and tonic diet; but on the contrary in those, in whom the nervous susceptibility predominates to a remarkable degree, we should employ narcotics both by injection and friction.

When these pains, instead of returning at the menstrual period, are continual, the indication is the same. We endeavour to find out, after the subsidence of these symptoms, the correspondent period of menstruation, and if

we cannot, it is necessary to choose one, and, at each return of this menstrual period, to employ the practice I have pointed out. It will lessen the plethoric system; and this treatment must be persevered in for a long time—for months, and even sometimes many years, and then it is seldom that the pains are reduced, much less dispersed altogether.

This total non-appearance of the menses is allied to their periodical suppression, when it continues for a time more or less considerable. I have seen some women who have only menstruated once in every fourth or sixth month, and even only every third, fourth, or sixth year, suffering sometimes continually. The indication is then the same as for those who have never menstruated; at other times they enjoy apparently perfect health. It is, however, to be feared, that this deceitful calm serves only to disguise some more serious disease that will make its appearance at a later period—such as disease of the heart, latent peritonitis, or some chronic pulmonary affection. I knew three young women who never became pregnant, and who menstruated only at protracted periods. They are now all dead: one died at the age of 21, from aneurism of the heart; the other two, one at the age of 19, the other at 24, from tubercular pulmonary phthisis; consequently I think it necessary to take, from time to time, small quantities of blood from the arm, and prescribe an appropriate diet. I have adopted this plan in a woman 36 years of age, who for the last six years has not menstruated, and is going on well under this precaution.

2nd. *The first appearance of menstruation.*—It is generally believed, that, before the epoch at which menstruation ordinarily commences, the uterus is exempt from all morbid alterations, an error which it is very important to abolish. M. Carron du Villards has related a case of polypus situated in the cavity of the uterus, with engorgement of this organ, in a child seven years of age. There are a number of women advanced in age, who can trace back the commencement of the symptoms to their infancy. Again; I was consulted by a lady, whose health before the period of puberty began to decline; she complained of pains in the loins, a constant sense of weight, accompanied with pains, within the pelvis,—suspected to have been gastro-enteritis. I feared the cause, on the contrary, was very different. I examined the womb, which revealed to me at once a sub-inflammatory engorgement of this organ; I treated it accordingly, the patient soon became much better, and is now looking forward to a perfect recovery.

Theory alone could have induced us to presume that which the facts in this case have confirmed. The menses do not make their appearance all at once; the blood flows for a long time previously towards the uterine organ. If it encounters any obstacle to its return (and we know what difficulties this evacuation experiences in establishing itself), this monthly determination towards the uterus—will it not occasionally terminate in engorgement of this viscus? It is to this cause we must attribute the lumbar pains, the sense of weight within the pelvis, of which young girls complain under these circumstances, and subsequently paleness, œdema of the lower extremities, want of appetite, weakness, sensations of suffocation with palpitations, which medical men frequently consider to be aneurism, and even sometimes a thing still more vague, *disease of the heart*. Besides, what renders the diagnosis more obscure is, that at the commencement of the affection the patient suffers less than at a more advanced period, and mistaken modesty prevents her, especially at that age, to express clearly all the symptoms she experiences.

You can perceive, then, from what I have said, how important it is, for the prevention of uterine affections, to establish, if possible, menstruation in girls arrived at the age of puberty. I do not speak of those who are healthful and strong, for in them nature is sufficient to produce the new functional formation of this organ. But should the girl be in a delicate state of health at the commencement of this epoch, it is necessary to allow her a very nourishing diet, give her slight tonics, use cold and aromatic baths, combined with exercise in the open air on a sunny day, these are powerful auxiliaries. It is in these cases, especially, that we can employ with advantage local remedies, such as foot-baths impregnated with the flour of mustard, or else with a decoction of mugwort or wormwood; glysters of a warm temperature, and like injections for the vagina; emollient local baths, warm cataplasms applied around the pelvis and to the vulva; dry cupping, frequent blisters, the application of a few leeches to the ankles, legs, or superior and internal part of the thighs, but seldom or never to the vulva; small bleedings from the feet, &c. As regards the foot-baths, I should recommend them to be made with a sufficient quantity of water, to allow the legs of the patient to be immersed as far as the knees, for when the feet only are covered, they are more frequently injurious than useful.

If, on the contrary, symptoms of uterine congestion manifest themselves in a young woman, whose appearance indicates a strong constitution, these topical remedies will only augment them. It is necessary, then, in such a case to have recourse to warm and frequent baths, a vegetable diet, and that sparingly, moderate exercise without fatigue, and, lastly, to take small quantities of blood from the arm, to the extent of one or two pallets, (a pallet contains about eight ounces).

A cause, which frequently prevents the establishment of the menstruation, is masturbation; besides the preventive means in these cases usually adopted, it is essential to calm the physical disposition of the patient, by removing every cause of excitation, and to appease the existing irritation by the administra-

tion of narcotics, and these principally by the rectum.

Whatever should be the remedies we think of exhibiting in this disease, it is essential to employ them only at the conjectur epoch, or twenty-four hours before it, in the intervals of which we must confine ourselves to general palliatives.

The choice of local means is far from being indifferent. Nothing is more fantastical, and, if I may be allowed the expression, capricious than the menstrual function; we find it excited by foot-baths in some women, again in others we find them suppress it. The application of warmth, exercise, either on horseback or in a carriage, and a multitude of other remedies will at times be beneficial, depending on the different states of the individuals, as to the effect these produce, for neither temperament nor constitution has any thing to do with it. There is in every female a peculiar idiosyncrasy, adapted to the performance of this function, which it is necessary to examine and regard with cautiousness in those women who have already menstruated; and in those who have not yet experienced this, the medical man must still be more reserved as to the remdies he employs.

3rd. *Difficult menstruation.*—When the menses have once been regularly established, they are not always exempt from irregularity. There are many women, who signalise the periodical return by insufferable pains, which come on some hours previous to, and continue some hours after, the menstrual appearance, sometimes, however, only during the period of the discharge; but, again, they sometimes will continue two or three days after its termination. Almost always these menstrual pains are hereditary, and, by questioning those women, who labour under this affection, they will in general tell you, that there have been many in the family who have suffered previously in the same way, and have died from disease of the uterine organ. This circumstance, then, requires some serious attention; we easily can conceive that the uterus, which has been the seat of similar congestion, at monthly intervals, for the space of 20 or 30 years, is more predisposed than another to consecutive alterations; and I have had occasion to witness this fact in numerous instances. If, during the interval of menstruation, by vaginal examination, we explore these parts, we find the neck, but more frequently the body, of the uterus engorged, increased in volume, and the seat of sub-inflammation; if the disease has already extended thus far, above all things it is necessary to subdue it on the principles I will name to you by and by.

If, on the contrary, we find the uterus healthy the woman must not be abandoned to her sufferings, according to the doctrines of those practitioners, who imagine it to be the effect of a peculiar natural idiosyncrasy of the constitution. It is certainly difficult to obtain a cure, but the least we can always do is to render some alleviation. The object of our study here must be principally the constitution, not only for vague speculation, but in order to guide us in our treatment for its modification.

These pains, in the majority of cases, are purely nervous, indicated by the globus hystericus, the patient experiences spasms, and strong voluptual desires, but the coitus, far from being agreeable, excites and irritates the nerves; if an injection be thrown up the vagina, it is immediately expelled, the pulse is small, contracted, and vibrating; there is subsultus tendinum, and the whole frame starts at the slightest emotion. Two or three days, then, before the menstrual epoch, we must endeavour, if possible, to lessen this nervous state of irritability by the use of narcotics, and especially by the administration of the tincture of opium in small quantities by injection, and it is necessary to follow this up during the menstrual intervals. Should the patient be purely nervous, cold-baths, warm injections by the rectum, and narcotics sometimes prove beneficial, but at other times they are injurious. On which account we should carefully examine the idiosyncrasy of every patient. In lymphatic females, who have a delicate and flaccid skin, we should prescribe bitter tonics, cold baths, good nourishment, some narcotics, and, if required during menstruation, small bleedings. In plethoric women, on the contrary, the preference should be given to warm-baths, and the patient allowed to remain in them for some time, a vegetable diet, reduced to a fourth, or even by degrees to two-thirds of the accustomed quantity, very moderate exercise, emollient liquids, which may be taken bountifully, but an entire exclusion from coffee and spirituous liquors are necessary; lastly, 24 or 48 hours after the menses appear, we should take blood from the arm to the extent of a pallet, and repeat it in fifteen days if necessary.

The menses once commenced nothing more is required than to encourage their discharge. But it will sometimes happen, after a few hours, or a day subsequent to their appearance, they suddenly cease, although they may have been accustomed to continue for a much longer period; should the uterus be healthy, it is necessary to re-produce them, if possible, in 24 or 48 hours after their disappearance; but if this organ be diseased other means must be pursued, for when I have attempted to solicit their return in these cases, nineteen times out of twenty, my attempts have failed, and at the same time have greatly increased the sufferings of the patients, so that I always now leave them to the effect of nature; merely take a small quantity of blood from the arm, which I repeat in the course of five days, and prescribe, according to the temperament of the individual, the emollient or tonic decoction.

At other times affections of this organ do not so suddenly check this discharge but allow it pass off only in very small quantities,

Should we then in such a case endeavour to favour the flow of this secretion? in many I have with success, but again in others, in attempting this, I have increased the congestion. There are as many arguments for as against this hypothesis, neither have I come to a determination to which I should give the preference. Nevertheless, should they be completely arrested, there are good reasons why we should not endeavour to reproduce them. On the one hand, most probably the means we employ would be useless, while, on the other hand, they may produce serious consequences, by adding greatly to the congestion.

Again, sometimes we have an immoderate discharge of this secretion. I have stated that corpulent women have ordinarily a very scanty flow; whilst, on the contrary, it is more abundant in the meagre, who can be tracked, as it were, during the two first days; since, in spite of all their customary precautions, the blood escapes, and they are obliged to stay in bed, and exist for some time afterwards in a state of great debility. Baths, when in a state of health, moderate exercise, and a scanty vegetable diet, are the best means to moderate this excessive discharge; but should the patient be feeble and nervous, a generous diet is then necessary, with narcotics. In neither case it is not necessary to omit small bleedings from the arm, and repeat them during the intervals of menstruation if there be need.

4th. *Cessation of the Menses.*—The time at which the cessation of the menses takes place is generally between the age of forty and fifty; these cyphers are said to represent the two extremes. I have seen many cases in which it has terminated at the age of thirty-five. I know a woman, aged forty-two, who has been exempt altogether from this sanguine discharge since the age of fourteen; and at the present time I have three patients, one 54, the other 56, and the third 64, who are still menstruating, these being of an ordinary temperament, and enjoying perfect health.

In the majority of females the menstrual cessation is announced many months, or even many years previously, by some derangement in the secretion, it being sometimes more, at other times less abundant, or returns only at irregular periods. The uterus modifies itself by degrees, till at length it does not any longer admit a free exit to this discharge, still, however, for some time, the blood every month flows as customary to the uterine organs, constituting one of the principal causes of congestion. Nevertheless you must not imagine, though it is generally stated so in medical schools, that diseases of this organ more frequently take place at this epoch than at another. This great axiom in physiology, which holds good here as in other parts, the more an organ is exercised, the more liable it is to disease, and it is from the twenty-fifth to the thirty-fifth year that the sexual organs are most employed, and also it is between these periods that their diseases are most frequent. We have in this hospital, in St. Augustin Ward, a great number of affections of the uterus, and amongst them who are thus attacked, you will not find three that have attained the age of forty.

Nevertheless, in some women, affections caused by uterine congestion commence at the epoch termed critical. In many instances, the venereal orgasm is experienced for the first time with violence, and in these cases nineteen times in twenty, the irritation of the womb must be considered as the cause, as in the same manner the most distant irritation of the bladder in the male produces frequent erections. Hence also the pains, indeterminate flushes, nervous affections, headaches, palpitations, leucorrhœa, and frequent floodings; these symptoms declare themselves more especially in large towns. In the country, women are engaged in laborious occupations, and lose, in the perspiration induced by toil, the fluids they no longer evacuate by menstruation.

When symptoms of this description appear, we must subdue them without delay, in following the principles already explained. We must not endeavour, therefore, to increase the scanty discharge, by determining the blood towards the uterus, thereby certain of producing congestion of this organ, but in one or two days after its cessation, we must supply its place by small bleedings from the arm. The pains it is necessary to combat by baths, narcotic glysters, and emollient injections. If the women be the prey of excessive venereal desires, it is to be borne in mind, that this orgasm, produced in the first instance by irritation, might afterwards contribute to its increase; it is necessary, therefore, that they avoid with care a perfect abstinence, as well as an excessive abuse; coition in moderation may then be permitted with advantage. Lastly, if the discharge assumes the character of flooding, recourse must be had to the means pointed out against this accident.

Metrorrhagia, or Flooding.—I must first beg you to bear in mind that it is my intention to speak of floodings, as being either the cause or effect of the affections of the uterus. I shall omit the description of floodings produced by pregnancy and parturition, as belonging to the province of the accoucheur.

Flooding may appear in females who have still their monthly courses, also in those in whom this discharge has ceased to exist; this latter is very common, thus five, ten, fifteen years after the critical epoch, old women even are sometimes seized with a sudden metrorrhagia, and they consequently imagine that their menses have returned. It is therefore necessary not to confound these attacks of metrorrhagia with a copious menstrual discharge; true flooding has not the periodical regularity which distinguishes the menstrual flux. Thus when one appears which lasts fifteen days, perhaps more or less, shortly

afterwards it disappears spontaneously, either for ever, or may return at indefinite periods. Sometimes the menses will make their appearance first, last one or two days, and the flooding commences the following morning, continues about ten days, and will of itself cease in twenty-four hours, but soon afterwards return again; at other times the flooding precedes the menses, stops for a short time, and afterwards allows them to continue their accustomed course.

When the floodings are abundant, and continue for many years, it becomes constitutional, and it would be imprudent to endeavour to check it all at once, for there would be cause to fear the appearance of serious symptoms manifesting themselves in other organs, and principally the lungs, whose sympathies are so intimately connected with the genital organs. The practitioner should direct his attention more particularly to this region, after the cure of a metrorrhagia of long standing. At the commencement of these symptoms, it is necessary to lessen speedily the sanguineous system, and form a seton at the internal part of the thigh; should the symptoms be intense, one on each thigh may be applied with advantage, to replace the seat of the irritation which existed in the pelvis.

A woman living in the Rue Saint Louis, aged 28, never having borne children, for the last twelve years suffered from a flooding, which always appeared previous to the menses. The first time that I attempted to suppress it, peritonitis supervened; on the second, in spite of reducing the sanguineous system by bloodletting, peripneumonia declared itself, and the third time a meningitis. These symptoms always yield, as if by enchantment, on the application of leeches to the vulva. Another female in the Rue St. Martin has for the last six years experienced a similar flooding, which was kept up by an engorgement of the uterus; one bleeding from the arm suppressed the discharge, but headach combined with other unpleasant symptoms supervened, and was only relieved by a return of the flooding.

A young female in the Rue Grillon, having tubercles in the lungs, was subject to abundant flooding; I was particularly careful in not suppressing it entirely, endeavouring only to moderate the discharge, but as soon as the chest threatened to become affected in an increased degree, I endeavoured to re-excite the blood towards the uterus. By these simple means I prolonged the existence of her life for three years, the phthisis during the time remaining stationary. She went afterwards into the country; the medical man, to whose care she was confided, hastened to arrest the uterine hæmorrhage, to which he attributed her weakness, and a few months afterwards she was conducted to the tomb.

Is uterine hæmorrhage essentially a disease, as a great number of medical men imagine? For a long time since I have been in the habit of stating in my lectures that metrorrhagia is to the womb that which hæmoptysis is to the lungs; and since the latter symptom exists rarely without organic alteration of the pulmonary tissue, so in like manner uterine hæmorrhage of long duration indicates almost always an organic alteration of the uterus. I do not intend to say that this is always the case, since in medical science there is no rule without exception, but I have not found the contrary in the immense number of females I have had occasion to examine. That metrorrhagia exists without local alteration, is possible, and I do not deny it, but I must declare I have not witnessed a single example. The causes of metrorrhagia are various; sometimes it will result from the presence of polypi, of which I shall speak hereafter, at other times from a slight or serious inflammation of the body or neck of the uterus, or from more or less extensive excoriations of these parts, which escape notice by exploration of the finger, and are not discovered without the introduction of the speculum, also from a vaginal inflammation; or, lastly, from every cause of irritation seated within the pelvis, which determines the blood towards the viscera of this cavity. Uterine hæmorrhage, treated as a symptom, may be momentarily arrested by local application; but to put an end to it entirely, it is necessary to discover and remove the exciting cause.

After what has been said, then, the practitioner perceives three distinct causes which must modify his treatment in uterine hæmorrhagia. The principal affection is either curable, and the flooding can be arrested without danger, or else the flooding is combined with some serious disease of another organ, which its suppression would inevitably aggravate; or, finally, it depends on an incurable affection of the uterus itself. I will now treat on this subject successively under three heads.

1st. We have already seen that sudden suppression of a metrorrhagia may produce serious consequences, though not any organic affection may be perceived in the patient. It is therefore necessary to adopt preparatory measures, even when the flooding is not comparatively of long standing; thus we should commence by a general bleeding, at most to the extent of one or two pallets. Bosquillon never omitted this precaution, even when the patient, had pallid lips small pulse, and appeared bloodless: and frequently you find the strength of the patient revigorate instead of diminish under its influence; the woman at the same time should be kept in a state of quietude, and allowed to drink either of the decoction or syrup of great comfrey; the next morning the bleeding should be repeated, if the patient's strength can bear it; after these two bleedings we may have recourse to local means, such as astringent and refrigerant lotions: the pelvis should be raised, and as a last resort, if the hæmorrhage be considerable, the vagina plugged with lint,

one of the most certain means of suppressing its flow. When at length the hæmorrhage is checked, the exciting cause must be treated, for a cure of the latter prevents to a certainty a return of the former.

The indications are the same when the flooding is of long duration, and has become constitutionary, but preparatory measures in this case should be adopted a long time previous, in order to prepare the system to dispense with by degrees this unnatural evacuation. We must endeavour for months to modify the constitution of the patient; we must bring into use every hygienic resource, exercise, diet, sometimes tonic and substantial, at others vegetable and scanty, depending on the state and constitution of the patient; drinks, sometimes emollient and sometimes astringent, and particularly from time to time general bleedings: by the aid of such general means, the hæmorrhage will diminish by degrees, first, in intensity, and afterwards in frequency, and we shall then arrive at the possibility of arresting it altogether without danger.

2ndly. If when there is flooding there exists some organic affection, the same means may be employed; moderate the abundance of discharge, by the general rule indicated, but carefully avoid local remedies that would suppress it all at once.

3rdly. There remains to be described those cases, where the flooding is combined with an incurable affection of the uterus. Hence, in the majority of cases, the hæmorrhage, unless it be excessive, becomes beneficial to the patient, by diminishing the engorgement and mitigating the excruciating pains. If it be arrested either spontaneously or artificially the pains remain tormenting, and every symptom becomes aggravated. The disorganisation, heretofore slight, goes on with such frightful rapidity, evidently pointing out the necessity of caution. The hæmorrhage frequently increases the sufferings, constituting then a sign of increased plethora, which must be reduced by general means, especially by revulsive bleedings.

I have only as yet described hæmorrhages, whose abundance, though considerable, nevertheless does not proceed to such an extent as to threaten the life of the individual. If, however, the hæmorrhage declares itself formidable, doubtless every other consideration ought to yield before the urgent necessity of warding off the impending danger. In addition to revulsive bleeding, we should then have recourse to most active local remedies, such as cold and astringent injections, or have recourse to the plugging of the vagina without delay.

I shall not here enter into a lengthened description of this operation, but merely point out its most important points.

If the vagina is free, it is necessary to plug it only to the extent of an inch; on the contrary, if it be filled by morbid growths, we must make compression on the vulva by the hand, or apply appropriate bandages.

The chief object of these precautions is not to irritate by these means either the diseased tissue or uterine neck, which we know acquire a sensibility in proportion as they become diseased; we also well know the influence of foreign bodies, when in contact with the uterus, in the production of these floodings. The clot, which forms itself between the apparatus and the uterine neck, will serve as a plug much less irritating. When the case requires the hæmorrhage to be moderated, but not suddenly and entirely checked, the dressings should be removed at the expiration of one or two hours.

Leucorrhœa.—White as well as red discharges have also been frequently considered as essential diseases. They may without doubt proceed solely from the vagina, and propagated in this canal may extend to the uterus, constituting *a utero-vaginal deflexion;* but at the expiration of a time, more or less—sometimes very short, the catarrh, which at first was the principal affection, becomes a secondary symptom, frequently also follows a contrary state, commencing by an engorgement of the uterine neck.

The discharge, which commences by an inflammation of the mucous membrane of the vagina, does not always, after its cessation, leave this tissue in the same condition. At its commencement there is only simple injection of the vessels, with more or less swelling; at a later period supervene infiltration, induration, ulcerations of the vagina and neck (an observation which has been thought new, though published thirty years since by Viguerie); and, lastly, vegetations. Therefore, you must readily conceive the importance of examining with care the vagina, the neck, and body of the uterus in cases of leucorrhœa, and the essential modifications which the treatment ought to undergo.

I shall not repeat that which may be found in every work on the causes of white discharges; I shall therefore only mention, that I have frequently seen them produced by foot-stoves (chaufferettes), and by coffee, which frequently produces their immediate reappearance in some females.

It is well known that a slight white discharge frequently appears the second or third day after the menstrual epoch. I met with a very curious and rare case, that occurred in a woman labouring under an engorgement of the uterus. Five, ten, fifteen, or twenty days after menstruating, certain symptoms declared themselves, as if they were about to return; shortly afterwards, she would suffer from a serous discharge, which would flow in such abundance, as to require napkins to the part, and so acrid as to irritate the external labia and the skin of the internal and superior region of the thighs, as to cause smarting and lacerating pains, and at the expiration of two days entirely disappear, but leave a slight

sensation of weight within the pelvis. Is this a case that was originally designated dropsy of the uterus? At different periods I examined the uterus, both per vaginam, per rectum, et per hypogastrium, without ever ascertaining an increase of its volume, putting aside its engorgement. Lastly, in order to ascertain more correctly the presence of a collection of fluid in its interior, I introduced an elastic gum catheter into the cavity of this organ, without ever detecting any thing in it. This serous flux is then the production of a sudden exhalation from its internal surface.

Leucorrhœa—Is it or is it not contagious? —Is it or is it not venereal? Questions difficult to be resolved, and on which medical men still differ in opinion. I believe that leucorrhœa may communicate a venereal disease, and still more so when it is accompanied with slight ulcerations of the vagina or urethra; they more frequently occur than is imagined, since their existence can only be ascertained by the aid of a magnifying glass.

I will now proceed to the treatment of this affection.—When the discharge is recent, and is induced by an acute inflammation, recourse must be had to antiphlogistics, mucilaginous beverage, vegetable diet, and a bleeding more or less copious in proportion to the abundance of the menses. I never apply leeches to the vicinity of the pelvis in any acute disease, except in peritonitis: tepid and emollient injections into the vagina should be subjoined, and care taken to elevate this region, so as to allow them to be continued for some time, forming a sort of bath. When the inflammatory symptoms are calmed, counter-irritants may be given, such as bals. copaiba, or cubebs, in order to complete the cure, which is generally effected in a few days.

If the discharge be chronic, counter-irritants will still succeed in arresting it, especially if there does not exist an alteration of tissue, which of course would tend to keep up the disease; if the mucous membrane be indurated, we should apply by friction some of the ointment of the hydriodate of potash combined with mercurial in equal proportions, both on the hypogastrium and superior and internal part of the thighs. A piece of lint, besmeared with mercurial ointment, may be introduced into the vagina, if the female can bear its presence; and, lastly, recourse should be had to injections of various compositions.

During a long time surgeons feared the introduction of injections into the cavity of the uterus, when this organ participated in the catarrh: nevertheless, Hippocrates did not hesitate to give this advice; and Viguerie, at the termination of the last century, reproduced this practice.

It is necessary, however, to adopt certain precautions, such as to inject, in the first place, cold water only, having recourse afterwards to astringent decoctions or solutions, the strength of which may gradually be increased by a few drops of some concentrated acid. A hollow gum catheter, introduced with care, will answer for the injection of the required fluid into this cavity. By this means you may frequently succeed in subduing discharges refractory to all other remedies. They frequently suppress the discharge at its onset, in the same manner as in man, or else act more slowly, requiring twenty or thirty days before they manifest their benefit; sometimes, however, they will alter inflammation from its chronic to its active stage. The treatment must be therefore modified according to circumstances, twenty or thirty days being necessary for its complete cure in both instances. If the discharge be kept up by chronic ulcerations, vegetations, or engorgement of the uterus, it is only by removing these causes that you can eradicate the discharge.

Nevertheless, in two particular instances, it is necessary to proceed with the greatest caution. When the leucorrhœa is of long duration it becomes habitual, consequently constitutional. Sometimes it is impossible, and even imprudent to attempt, to check it, especially if the patient be debilitated, and has at the same time a tendency to scrofula, and still more so if advanced in age. In other cases it is necessary previously to substitute another discharge in its place

The intermittent discharges require also the same precautions as flooding for their suppression. It is unnecessary for me to repeat again what has been already stated on this subject; nevertheless, in studying attentively the temperament, if it be found that these discharges have followed the suppression of some habitual evacuation, or the repression of some exanthemata it is possible to obtain a cure, without inconvenience to the general health, by establishing an artificial drain.

6th. *Hysteria.*—According to the opinion of many medical men, hysteria is considered only as a nervous affection, and consequently does not come under the consideration of the surgeon; but experience belies this too exclusive idea; for if, sometimes, the disease be nervous, it more frequently results from a slight irritation or inflammation of the uterus. I have frequently been called to attend hysterical females, in the greater number of whom the uterus has appeared to me on examination to be endowed with great sensibility, and in a state of turgescence, accompanied with hypertrophy, the neck having the form and dimensions which it presents when two months advanced in pregnancy. In some instances the slight inflammation of the womb, which I have just indicated, has been clearly demonstrated by the autopsies. Hence the antiphlogistic treatment is necessary; thus, after general bleeding, I am in the habit of precribing baths, emollient ejections, and narcotic glysters: when these means fail, I slightly cauterise the abdomen. At the time we were blockaded in Metz, in the year 1813, a young female had every two or three days fits of hysteria, which resisted all anti-

phlogistic means and yielded to cauterisation; besides it is well known that hysteria sometimes follows the abuse of, as well as the privation of, coitus. These exciting causes deserve great attention; as a general rule it is extremely important to pursue the treatment with perseverance one month, or even more if required; should, in these cases, the patient be obstinate you must be obstinate also, and success will be your frequent reward.

A CASE OF GELATINIFORM SOFTENING WITH PERFORATION OF THE STOMACH.

BY ANDREW BLAKE, M.D.,

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Miss ——, aged 19 years, of a robust make though of a pale and waxen complexion, was suddenly attacked on the 25th of last December with severe pain in the region of the stomach, accompanied with nausea and vomiting. I was requested to see her at 9 o'clock on the same night, and, on enquiry, I found that she had suffered for more than eighteen months from severe fits of gastrodynia, which generally terminated in vomiting; the frequency of these attacks appeared to depend very much on her mode of living, and the regularity of the bowels, the latter required constant attention, as when constipation obtained the fits returned perhaps twice a-week, but, by the observance of proper precautions, she sometimes passed a fortnight and even a month without experiencing one, and when living in the country they were still less frequent. It did not appear that fulness of the stomach had any effect in inducing them, as the pain often came on a short time before the hour of dinner.

On questioning the friends of the patients concerning the probable cause and nature of her then existing attack, they told me it commenced about 3 o'clock that day, immediately on having made an effort to prevent herself from falling back on a sofa, a person, who was sitting on it, having pulled her backwards, and that the moment she fell she complained of excruciating pain in the stomach, and called for warm brandy and water, from which she was in the habit of deriving relief on previous occasions, slight vomiting succeeded, but was not followed by any alleviation of pain; this circumstance, and the bowels having been confined during the two preceding days, induced her sister to give her a solution of salts, which, however, had not the desired effect. On examination I found the abdomen painfully distended, tympanitic, and highly sensitive to the application of pressure. Constant acute pain was also experienced in the region of the stomach, which she described as extending from that viscus to the whole of the abdomen. The skin was hot; the pulse rapid and small; the countenance anxious to a degree; and the tongue morbidly red and dry, causing excessive thirst. The patient, at the same time, stated that, although the salts she had taken had not operated, she felt as if they were soon likely to have that effect.

Conceiving, from all the circumstances of the case, that no time ought to be lost in instituting active means for her relief, I immediately determined on abstraction of blood from the arm, together with the administration of emollient and laxative enemata, as well as the constant application of warm fomentations to the abdomen. The removal of about 22 ounces of blood induced slight syncope, and was followed by apparent relief, the pain having diminished very considerably, and the abdomen, although it continued tense and enlarged, bore pressure much better; therefore, as the disposition to vomit had ceased, the pain mitigated, and the patient felt a sensation as if the bowels were about to be relieved. I left her at eleven o'clock, with directions to persevere in the use of the enemata and fomentations, according to circumstances; I also directed that, as soon as the bowels had been freely acted upon, she should take calomel and opium regularly. Not having heard any thing from her during the night I entertained hopes of finding her still better at my morning visit, but my anticipations were not realised, she was materially worse; the abdomen had continued to enlarge, and the pain became more acute, accompanied with urgent and incessant thirst, the rapidity of the pulse had likewise returned, and the anxiety of the countenance had become more striking, and, although there had been no recurrence of vomiting, the bowels had not been satisfactorily relieved; in fact, the evacuations consisted of little more than the enemata. I ought also to state, that the blood which had been drawn exhibited no marks indicative of inflammation, either by the buffy

coat or the cupped appearance. These discouraging circumstances rendered it necessary to repeat to the friends of the patient my unfavourable opinion as to the result of the case, after which I prescribed the immediate application of leeches to the abdomen, the repetition of the enemata, and the administration of calomel and opium, with effervescing medicines, together with the use of the warm bath. On my return, in the course of the day, I learned that none of the remedies had had the slightest effect in relieving the symptoms; on the contrary, the restlessness and pain continued to increase, and terminated in death about noon, scarcely 21 hours from the commencement of the fatal attack.

The rapid course of this case, without any satisfactory assignable cause, induced me to press on the friends of the deceased the propriety of permitting a post-mortem examination to be made, to which they at length consented; and Mr. G. M. White, surgeon of this town, having kindly offered his services on the occasion, we proceeded to the chamber where the body lay, accompanied by the brother of the deceased, a male friend of the family, and a medical pupil.

The inspection was made on the day following the fatal event. The abdomen appeared exceedingly tense and swollen, and a quantity of frothy fluid continually escaped from the nose and mouth. The body externally was unusually plump, and, on cutting through the parietes of the abdomen, the cellular texture contained at least an inch and a half of dense fat; when the peritoneum was punctured a vast volume of fœtid air escaped, attended with a hissing noise, which continued for some seconds, and permitted the abdomen to collapse and resume its ordinary size. Having exposed the abdominal viscera, our first attention was naturally directed towards the stomach, as having been so long the seat of suffering; but, on a superficial glance, that organ presented nothing which struck us or induced us to apprehend that disease existed in its coats: it was natural in its colour, though undistended by air, while the intestines generally were inflated; we in consequenee commenced our minute investigation by an examination of the whole of the intestinal tube; and although this was done with great care, we could not discover any trace of disease, save some slight vascular injection of the colon; we had at first conceived, from some black matter, apparently vitiated bile, having attached itself to the inside of the ilium, and shown through its coats, that disease should be found in that intestine; we were, however, soon convinced this was not the fact. In examining the viscera of the pelvis, which were particularly healthy, we were surprised to detect a large quantity of yellowish whey-like fluid in that cavity, as well as in the lumbar regions of the abdomen, which, on further examination, was found to have issued from an aperture in the stomach; on returning to make a more minute investigation of the state of that organ, we perceived at its pyloric extremity several adhesions formed between it and the left margin of the liver, which, although they were not absolutely of recent formation, could not have been of long standing, and, on raising and throwing forward the stomach, so as to obtain a view of its posterior surface, which was done with great care, we were struck with the appearance of a round hole, about the size of a shilling, situated in its splenic portion, and presenting an appearance as if a piece had been cut out of it by means of a punch; the edges of this opening seemed exceedingly thin, but exhibited no traces of the ulcerative process. On removing the stomach from its situation, and laying it open, its internal coats, though not changed in colour, were attenuated in the greatest possible degree; and, in the vicinity of the opening already alluded to, the texture was so softened as to afford little more resistance to the fingers than an ordinary cobweb.

The liver was unusually small, but healthy in its parenchyma. The kidneys and spleen were natural, while the pancreas was nearly double its common size, though not apparently diseased in its structure.

Such were the principal phenomena which this post-mortem examination presented; and I have no doubt, were not similar occurrences to be found on record, the veracity of their details would be called in question, more particularly when compared with the acuteness of the symptoms which were displayed during the latter moments of life, together with the rapid termination of the complaint. I allude to the absence of almost all traces of active recent inflammation.

Andral mentions cases of this kind as having occurred in persons who were to all appearance but slightly indisposed, and who were only subject at intervals to pretty severe pains in the epigastrium, with rather difficult digestion, but who, in other respects, seemed in tolerable health at the moment they were suddenly attacked with all the symptoms of *acute peritonitis*, and died in less than twenty-four hours.

On examination after death in these cases, a sero-purulent effusion was found in the peritoneum, and near the middle of the body of the stomach was detected an ulcer of the breadth of a franc piece. I need make no comment on the similarity of such cases to the one which I have just related. M. Cruveilhier gives this disease the name of "ramollissement gelatiforme," or gelatiniform softening of the stomach or intestines, and remarks, that before touching their parietes one would often take them to be quite sound, as they may be modified only in respect to their consistence. This author also states having witnessed its prevalence epidemically amongst children at Limoges, and M. Sestier observed it in the hospital Des Enfans Trouvés, while Andral remarked it particularly in old people, in which latter case the appetite failed, there was a sensation of weight and uneasiness or pain at the stomach, the tongue became red, the strength declined, and all this was attended with extreme emaciation*, and terminated in death, without showing decided symptoms of a serious affection of any organ up to the last moments of life. On dissection nothing was found but more or less softening of the mucous membranes of the stomach, with or without injection of its tissues.

Dilatation of the veins, which run between the coats of the great extremity of the stomach, being visible is, by some, said to be indicative of the presence of this state, but we did not observe any such phenomenon.

Although cases of this nature, from the importance of the organs involved, appear to be in almost every instance beyond the powers of medicine, it would be at least satisfactory to be in possession of distinct diagnostic symptoms, by which we could distinguish this affection from pure inflammation of the abdominal contents, which it so nearly simulates, and I regret that I do not feel myself competent to solve this difficulty. Death, in the instance I have related, appears to me to have been induced by the excessive irritation consequent to the escape of air and fluid into the cavity of the peritoneum, by which such acute pain was caused, as was incompatible with the functions of the nervous system, on the same principle as death is sometimes the consequence of great operations or extensive burns, without having any visible traces of organic lesion sufficient to account for the event. It has also been a question, whether the perforation of the stomach or intestines takes place during life, or is produced after death by putrefaction, or by the solvent action of the gastric juice, as was the opinion of the celebrated John Hunter. The writings of Camarer and Baillard have thrown considerable light on this subject, and led me to venture the conclusion, that ramollissement and perforation are effected by the action of disease during life, and that even the latter may exist for some short time without giving exit to the contents of the stomach, provided the opening be kept in close contact with some other viscus, or part of the abdomen; but, as soon as this conservative arrangement of nature is interfered with by any sudden effort, such as that made by my patient in her endeavour to prevent her fall backwards, the contents of the stomach are at once forced into the cavity of the peritoneum, inducing that extreme pain and tympanitic distension which have been described.

The very short duration of the acute stage in the case forming the subject of this paper, not twenty-one hours, together with the consideration of the circular form of the opening in the stomach, as well as of the attenuated state of the coats in its immediate vicinity, all concur in warranting the conclusion that the perforation was not the effect of laceration, as it could not have assumed the round shape, and have manifested such loss of substance in the short space of time already mentioned.

Nottingham, April, 1834.

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* This was the reverse in my case. Query, How could such a degree of obesity, as I have described, be compatible with so much disease of the principal assimilating organ of the body?

OBSERVATIONS ON THE EFFECT OF BARBADOES NAPHTHA, IN CASES OF MORTIFICATION.

BY DR. WILKINSON, OF BATH.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—It is well known to professional gentlemen, that when any part of the animal body has from disease been deprived of its principle of vitality, or, in common words, in a state of mortification, there is always an effort exercised by the proximate living parts to liberate themselves of the mass deprived of its organic structure. Amongst many of the remedial means, charcoal in fine powder has been frequently employed in many instances with evident good effect, arising from its arresting, by its chemical agency, the decomposition of the substance with which it is in contact.

When mortification is extensive, it is then requisite that such a substance should be employed, as will not only prevent the contaminating result of decomposition, but will also stimulate and protect the living part immediately in contact.

These beneficial and highly important results have lately been ascertained, by practitioners of the first eminence, to have been derived from the local application of Barbadoes naphtha, after the failure of the usual remedies; the distressing symptoms of this alarming disease were soon alleviated,—the offensive fœtor quickly corrected,—and healthy granulations produced.

I have in a previous paper attempted to demonstrate that the seat of most constitutional diseases is in the absorbent vessels, and that carbon distributed through them, in many morbid affections, produces the most beneficial effects: I believe the only substance in nature which contains carbon in a large proportion, and in a liquid form, is the bituminous product from a mineral spring, called the "pottery," in the island of Barbadoes, (a specimen of which may be seen in the Museum of the Royal Institution, London;) from analysis, eight ounces yield seven ounces of carbon in its purest state, and in such a degree of exility, as to produce those active combinations, we never observe from the employment of common charcoal. In all organic arrangements, carbon constitutes an important part, and probably its peculiar property of counteracting all morbid decompositions may be connected with some varied proportion of this active principle:—thus, in the process of respiration, carbon is evolved as a balance to what may be taken in food; and when the usual proportion varies, some derangement of the animal functions is indicated:—thus it was remarked by Dr. Davy, the extraordinary diminution of carbonic acid in the expired air of those who were attacked with cholera morbus.

I have been induced to submit these additional observations to the public, in consequence of the great beneficial results from the external application of Barbadoes naphtha in cases of extensive mortification.

The productive results of organic matter, decomposing slowly and gradually, are materially different from those arising from rapid destructive processes; thus the gentle effusion of naphtha, or the green rock oil of Barbadoes, from subterranean vegetable deposits, possesses properties which cannot be traced in any of the artificial products of coal or wood, and hence the substitution of common tar should be studiously avoided, as we are not in possession of any chemical means by which the same combination of carbon and hydrogen can be effected, and upon which so materially depend its medicinal powers.

OBSERVATIONS ON MOTHERS' MARKS.

BY R. U. WEST, ESQ., SURGEON, HOGSTHORPE, ALFORD, LINCOLNSHIRE.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—I beg to forward you for insertion in your valuable Journal, if you should consider it worthy, the following case, which is rather a singular one, inasmuch as it would seem in some degree corroborative of the *popular* doctrine of *mothers' marks.*

A child was born about four years ago, with the fore and middle fingers of its right hand curiously deformed. They were much larger than the other fingers, hanging considerably beyond them, and were joined together as far as their extremities. The nails, planted side by side at the end of the united fingers, resembled in size and appearance the toe-nails of an adult male. The fingers were simply *webbed* together, but formed a

mass of considerable thickness, and not only was the hand rendered disgustingly unseemly, but it would have been utterly useless to the child, as long as it remained furnished with such an appendage. At the request of the mother, a few weeks ago, I amputated this monstrous production in the continuity of the metacarpal bones, so that the hand might in that part be bounded by a straight line, extending from near the extremity of the metacarpal bone of the ring-finger to the thumb. Very little blood was lost during the operation, and there were no arteries to tie. The wound readily united by the first intention, and is now quite well. I measured the monstrosity after it was taken off. Length from the metacarpo-phalangian articulation to the extremity of the middle finger, four inches; girth at the nails, five inches; at the first phalangian articulation, five inches and a half; thickness from the inside of the same joint to the knuckle, one inch and a half; breadth across the end of the two united fingers, two inches; of the nail of the middle finger, three-quarters of an inch; and this, it will be remembered, on the hand of a child only four years old. The bones are thicker than naturally they ought to have been, and the mass itself is formed by an increased deposition of *fat* around them; there is nothing of the nature of nævus about it. The mother says that, when she was pregnant, one of her other children had the fore and middle fingers of its right hand much hurt by their being jammed between a door and door-post. In great agitation she took the child on her knee, and held its injured fingers for some time *pressed together* in her hand. To this circumstance she attributes her child's misfortune.

The above is a much more plausible case for the believers in the influence of maternal impressions on the fœtus, than another which I met with a short time since. A woman consulted me about a nævus in her infant's face, which was situated close to the inner canthus of one of its eyes, and was daily increasing in size. She had had a fright, she said, when pregnant, from seeing a child horribly marked in the same place. "And your infant was born with this mark?" "Oh, no, sir, it did not appear till it was more than a week old!" The notion of impressions being conveyed to the fœtus by nerves in the funis, or by the funis at all, must be abandoned after this. The influence, if influence there be, must have a more mysterious mode of travelling, even than that afforded by a few scarcely demonstrable nerves *.

CASE OF HYDATIDS OF THE UTERUS.

BY ROGER TURNER, MEMBER OF THE ROYAL COLLEGE OF SURGEONS IN LONDON.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—I beg to transmit for insertion in your widely extended Journal, the following case of hydatids of the uterus, should you consider it worthy of a corner in your pages.

Mrs. Burnett, aged 52, of spare habit and debilitated constitution, had borne several children, and menstruated regularly until within ten months of my first seeing her, at which time the catamenia became irregular, appearing at more frequent intervals and in less quantities, and ceased four months since, when her health gradually declined, the appetite became impaired, the abdomen enlarged, the legs anasarcous, was troubled with frequent pains in the lumbar region, with occasional discharges of coagula per vaginam; in consequence of the great severity of the pains, followed by a copious and sudden increase of the discharge, I was sent for in haste the 8th of May. On arriving at her house, I was informed by the attendants she had been in that state for two hours, and had had during that time tolerably strong bearing-down pains, resembling labour; pulse 110; a hard and frequent cough; abdomen as large as in the last month of pregnancy; bowels constipated. I introduced my index and middle fingers, and found the os uteri rigidly contracted, but in every effort of coughing there was a sudden gush of watery fluid, as in the escape of the liquor amnii in the first stage of labour. The hæmorrhage having abated, I prescribed an opiate, and medicines to regulate the bowels, and left, desiring to be sent for on the first occurrence of the flooding. The opiate allayed the cough, produced some comfortable sleep,

* It has been said, that nerves have been demonstrated in the umbilical cord.

and she remained in *statu quo* until the 11th, when the symptoms again returning with increased violence, a messenger was sent to me, but, before I could arrive, large coagula, with a great quantity of hydatids, had been expelled (sufficient to fill a large sized wash-hand basin and a half), accompanied by a profuse hæmorrhage, which had completely saturated the bed-clothes. I immediately gave half a drachm of secale cornutum in infusion, which increased the uterine efforts, but failed in expelling more hydatids; the genital fissures being in a lax state, I readily introduced my hand into the vagina, but the os uteri was so little dilated, I could barely pass the middle finger into the uterus; and, after considerable time, having managed to scoop away an additional quantity of hydatids, the pains and hæmorrhage ceased. I gave a full dose of opium, and, waiting upwards of an hour, there being no returns of the pains or hæmorrhage, and my patient disposed to sleep, I left her, directing to be sent for as before.

13th. No return of the more urgent symptoms; complains of pain in the head; bowels constipated, which I attributed to the opiate; cough, though somewhat better, still continues troublesome, and a constant escape of a colourless limpid fluid on every effort in coughing; the enlargement of the abdomen and legs had subsided.

15th. Was up, and enabled to walk about the room with a staff. Bowels open; cough and pains in the head less; a stillicidium of the fluid in the erect posture, though very trifling in quantity.

17th. Continues improving; is down stairs, although still weak; cough and headach have left her; appetite better.

21st. No bad symptoms have followed, and she appears now to be quite recovered.

Broughton, Stockbridge.

BRISTOL INFIRMARY.

[We have been requested by the surgeons of the Bristol Infirmary to insert the following *corrected* memorial, transmitted by them to Henry Warburton, Esq., M.P., with which we comply.—Eds.]

"*To the Chairman and Committee on Medical Education, &c., &c.*

"Gentlemen,—In addition to the answers to the questions contained in your circular, we beg leave to subjoin the following statement, to which we respectfully call your attention, as connected with the subject which must form no inconsiderable portion of your inquiries, namely, *medical education.*

"In the year 1735, Bristol projected, and in 1736 carried into effect, the scheme of a hospital, supported entirely by voluntary contributions. Its foundation is believed to be nearly coeval with, if not to have preceded, that of the hospitals in London, and of similar institutions in Scotland and Ireland; royal, endowed, and chartered foundations only excepted. This institution now contains from 200 to 220 in-patients—out-patients, from 5,000 to 6,000. Average number of casualties, about 1,200 annually.

"The whole range of building is uniform and extensive, having been re-erected within these few years; furnished with baths, warm air, and other modern conveniences; and has attached to it a spacious garden, as a promenade for convalescents; in a word, no expense has been spared which could contribute to the comfort and recovery of the inmates.

"This institution is also enriched with a valuable and daily-increasing museum, a library, a lecturing theatre, and excellent accommodation for examinations and dissections; in the latter of which our students are almost daily engaged, under the able superintendence of the house-surgeon.

"The ordinary disbursements are annually from 5,000*l.* to 6,000*l.*; and there has been lately expended, in providing accommodation for the out-patients, about 3,000*l.* in a supplementary building.

"It may not be amiss here to recount the advantages which the city of Bristol possesses for a great medical establishment. With a population equal to that of most of the capitals of Europe, with a large and well regulated hospital, and also a medical school, the student here may learn not only the principles and practice of medicine and surgery, but also witness, on a great scale, the nature of most of the diseases and accidents which afflict mankind.

"With the above statement before you, gentlemen, it will, perhaps, be a matter of surprise, that there could have existed any doubt of the propriety of conceding to us the ability to qualify any students for examination; yet the fact is, that it is only since the 25th Nov., 1831, that we have been '*recognised*' by the College of Surgeons; and even then partially, as our dressing apprentices of *five* years' standing are at present under a peremptory *obligation* of *walking*, as it is termed, some one or other of the London hospitals, for a period of six months. On this subject it is remarkable, that the regulation of the College should only require a *walking* attendance of twelve months in a London hospital from young men who never before may have been within the walls of any hospital, while our apprentices have not only witnessed the practice of the Bristol Infirmary, but have been constantly employed as *dressing* pupils, and in the charge of casualties, for a period of *five* years.

"This representation, we presume, entitles the Bristol Infirmary to be justly considered a hospital of the first class. Even in the metropolis there are not above four or five that exceed it, either in size or importance, as a school for scientific and practical surgery; and none surpass it as to the regulations established by its governors for the education of the students: it may be asserted that no hospital in the kingdom affords greater opportunities for the acquirement of medical and surgical knowledge. On this subject the surgeons are desirous of the fullest investigation; and, as some proof, they beg to refer to every one of their students who have attended in London, who will confirm the fact from their own experience and observation. Besides, it is well known, that students, who have received their medical education at this Infirmary, have acquitted themselves with marked ability as candidates for their diplomas, when under examination at the College of Surgeons and Apothecaries' Hall.

"For these and many other reasons, the surgeons of the Bristol Infirmary have ever considered the following regulation of the Council of the Royal College of Surgeons as oppressive and unjust; but they are willing to believe founded on an erroneous view of the opportunities the Bristol Infirmary affords of cultivating medical science. Pupils and apprentices, when candidates for the diploma, must bring proof—

"'Of having attended, during twelve months, the surgical practice of a recognised hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or for six months in any one of such hospitals, and twelve months in any recognised provincial hospital.'

"The surgeons of the Bristol Infirmary are of opinion that the above regulation of the Royal College of Surgeons,—which requires an attendance of six months, as a walking pupil, at one of the hospitals in London, in addition to an attendance during one or more years at a recognised provincial hospital, as a necessary condition for obtaining the diploma of the College, is highly objectionable; and for the following reasons:

"1st. Because it is unnecessary. A student may spend the prescribed time quite as profitably in attendance at a recognised provincial hospital, as upon those in London. In fact, with the exception of four or five of the metropolitan hospitals, the recognised provincial hospitals are upon a larger scale than those of the metropolis.

"2nd. Because it is injurious to the morals of students. It is a notorious fact that students, after a residence of only a few months in the capital, frequently fall into practices of dissipation and immorality foreign to their previous habits, and ruinous to their future usefulness, respectability, and happiness.

"3rd. Because it has a tendency to render provincial education less efficient than it would otherwise be. It has often been observed that students neglect to make a proper use of the advantages afforded to them in their attendance at a recognised provincial hospital, from a notion that the full prosecution of their studies may be delayed until their residence in London, where, they imagine, the opportunities of acquiring professional knowledge will be more worthy of their attention; and, in consequence, they crowd into that brief period a far greater number of pursuits than their time, or their previously-formed habits and inclinations, will enable them to follow with any prospect of advantage.

"4th. Because it occasions a very considerable increase in the pecuniary expenditure of the student, without advantages in any de-

gree correspondent to the extent of the outlay.

"Lastly. Because it implies an invidious distinction between the surgeons of the recognised provincial hospitals and those of the metropolitan institutions, a distinction which cannot be supported by a fair comparative estimate of their respective attainments and capabilities.

"In addition, we beg to draw your attention to the circumstance, that not only has the time prescribed for provincial study been of late considerably lengthened, with a corresponding augmentation of expense, but the number of branches of science which must be attended to has also been greatly increased.

"Gentlemen, we will take up your time no longer than to submit to you that we require redress; and to repeat that the Bristol Infirmary has a fair claim, in every point of view, for admittance into the first class of hospitals in the United Kingdom.

"We have the honour to be
"Gentlemen,
"Your most obedient servants,
"Richard Smith,
"William Hetling,
"Richard Lowe,
"Henry Daniel,
"Nathaniel Smith.
"*The Surgeons of the Bristol Infirmary.*

"*Bristol Infirmary Consultation Room, April 22nd*, 1834.

"*To* Henry Warburton, Esq., M.P., *&c. &c., Chairman of the Committee on Med. Education, House of Commons, London.*"

Foreign Medicine.

ACADEMIE DE MEDECINE.

Sitting, April 1st, 1834.

President—M. Lisfranc.

Discussions on Congenital Luxations of the Femur.

M. Capuron stated that M. Breschet, on congenital luxations of the femur, has said, that the cotyloid cavity was in general effaced, which depends on the epoch at which these luxations are examined. If the subject has arrived at puberty, the cavity may have become obliterated; but is this the case a short time after birth? I have, said this gentleman, recently been consulted about a girl 11 years of age, affected with this disease. M. Dupuytren had examined it, and discovered the nature of the lesion. I questioned the mother as to the circumstances of her accouchement; she told me that the buttocks of the infant presented at birth, and, to favour her delivery, the sage-femme had applied, on the groins of the infant, her fore-fingers, bent in the form of hooks. We may conceive that such a manœuvre can act directly on the ileo-femoral articulation, displace the head of the femur from its cavity, and stretch and distend the capsule. In this case, was not the supposed congenital luxation produced by the midwife? I know a young lady, 20 years of age, the mother of whom I attended in her confinement. This was a similar presentation, and she was delivered without the employment of any manœuvre. As soon as the child commenced to walk, I recognised, not precisely a luxation, but a difficulty to proceed—a kind of claudication, which caused her progression to resemble that of a duck. The mother had a similar deformity, and, upon inquiry, I found she was born in a similar position. I think it, then, right to call the attention of midwives to this species of accouchment in its relations with congenital luxations of the femur.

M. Breschet replied, that, in every dissection to the present day, congenital luxation of the femur always presented itself under invariable characters — total absence of the cotyloid cavity, of the neck, and even of the head of the femur, or, at best, a rudimentary state of all these parts. We can consult the figures given by *Palletta*; and I have myself examined these luxations at different ages, and even a very short time after birth; and the manner in which the trochanter major moves on the os ilium has fully convinced me of the absence of the head and neck of the femur, and consequently of the cotyloid cavity. I deny not, however, the facts advanced by M. Capuron; his views appear to me very judicious, but they have not the advantage of demonstration, and it is of the highest importance that obstetricians should verify them.

M. H. Cloquet.—M. Capuron confounds congenital luxation with that produced accidentally by the manœuvres of midwives. I have seen in an aged female, in consequence

of spontaneous luxation of the femur, the cotyloid cavity obliterated, and the head of the femur diminished half its volume; we must not mistake this for congenital luxation.

M. Velpeau.—All surgeons are aware that in old accidental luxations the cotyloid cavity is more or less in a state of obliteration, and that the head of the femur is somewhat deformed. This is not the most important point in the question raised by M. Capuron, and the object is to know if these luxations, called congenital, take place really in the uterus, or from the mechanism used in delivery; and the question reduces itself to this—are children attacked with congenital luxation found to have had a breech presentation? For my part I regard as very probable the opinion of M. Capuron.

M. Breschet reverted to the characters of congenital luxations that M. Velpeau had wrongly compared to those produced accidentally; in the latter, the cotyloid cavity is greatly decreased, though traces of it are always found; in the former, there is neither head nor neck of the femur, nor any cavity.

M. Moreau.—I should say, that to the extent of my knowledge those infants, born with breech presentations are all as straight, and walk as well as others. If by some ill-directed manœuvre a luxation has been produced, I should believe that it depended less on the presentation than on a certain predisposition in the infant, in the same way that we must have recourse to predisposition, in order to explain how a fall on the trochanter major produces in many infants only slight pain, and in others causes a spontaneous luxation of the femur. Besides, the facts brought forward by M. Capuron do not appear to me very decisive; at least that of the young lady who walked, as he stated, like a duck; it is a progression more or less common to all women, and a considerable width in this young lady's pelvis would sufficiently explain its being carried to any extent, the neck of the femur projecting directly outwards.

After a short reply from M. Capuron, the discussion terminated.

Secondary Small-pox.

M. Bouillaud.—As in several of our former sittings we have taken into consideration the occurrence of small-pox after vaccination, and as the fact has been doubted by several members, I think it right to inform the Academy that I have at this present time under my care, at la Charité, a young man who has very perfect cicatrices of vaccination, and who is nevertheless attacked with confluent variola. I should wish that a member of the vaccine commission should be desired to visit this patient, and give some account of the case to the Academy.

M. Grinelle mentions a young girl who had small-pox at the age of six months whilst at nurse; very distinct cicatrices have remained all over the body, and now she is attacked with well-characterised symptoms of distinct variola.

M. Cornac knows a lady who, after inoculation at the age of eight years, had the usual symptoms of this disease, notwithstanding which, at the age of fourteen, she was attacked with a confluent species, which has left dreadful traces of its ravages.

M. Salmade.—I have myself noticed similar cases; authors are full of them, and it is so well known, that it cannot be necessary to bring forward additional facts for its support.

M. Bouillaud.—The importance of my communication does not lie there; we had seen cases of secondary small-pox, but their severity was not acknowledged, and they were even distinguished by the term of varioloid diseases; however I have already mentioned a fatal case of secondary variola, and the patient now under my care is so severely attacked that death may probably ensue.

MM. Lens and Cornac were desired to visit M. Bouillaud's patient, and communicate their report to the Academy.

White Oxide of Antimony in Pneumonia.

Some of the Parisian physicians have lately lauded the white oxide of antimony as a most efficacious remedy in pneumonia. "For females and young subjects," says one of our contemporaries, on the authority of M. Trousseau, "we may commence by giving twenty grains of the white oxide; if for adults or old people thirty grains. The dose may be increased by one-half on the next day; and this should be continued until the febrile symptoms are entirely removed, or even rather a few days longer. The dose should now be dimi-

nished gradually in proportion as the patient takes aliment."

M. Bouillaud, one of the ablest professors in Paris, observed, at the commencement of his clinical lectures, last month—

"The white oxide of antimony, so vaunted of late to combat acute pulmonary affections, has been experimented upon with the greatest care in his clinic; it was administered pure, and washed as recommended; its physiological and pathological effects were completely null; it only acted as an inert powder either given internally or mixed with the blood. The circulation, which was said to be arrested by its administration, had not been at all influenced: it was dissolved like sugar, and did not produce diarrhœa or vomiting. Placed in immediate contact with the blood, it did not impede coagulation, but when it was not pure, and only by the alkali which it contained."

Here is a vast diversity of opinion on the effects of the same medicine, which can only be accounted for by the adulteration of the article. We remember, some years since, when antimonial powder was pronounced inert, after repeated trials in one of our largest hospitals; but there is good reason to believe that an impure medicine was tried. There is one thing important with regard to the exhibition of antimony to children, which is, the danger of exciting inflammation and ramollissement of the stomach, which, at this age, is generally irritated by improper food. We have known death produced in this manner by tartarised antimony in pneumonia; and most practitioners prescribe ipecacuanha in that disease.

Digitaline.

M. Lancelot, apothecary at Chatillon, has succeeded in obtaining the active principle of digitalis, which he has named *digitaline*, and which has analogous effects as the former. It is white, acrid, and very soluble.

ELECTION FOR ASSISTANT SURGEON AT ST. THOMAS'S HOSPITAL.

An election for the above named medical officer took place on Wednesday week last, at St. Thomas's Hospital, when Mr. J. F. South, of Upper Stamford-street, was duly elected Assistant-Surgeon to the Institution.

THE

London Medical & Surgical Journal

Saturday, May 10, 1834.

COLLEGE OF PHYSICIANS—VINDICIÆ MEDICÆ.

The case of the College of Physicians is now laid before the Parliamentary Committee, and the inquiry into the state of that Corporation is, we may venture to say, concluded. After the examination of the President and many of the Fellows, no further information as to its principles and practice remains to be collected; and, although the tribunal was not precisely that which the College desired, we readily believe, for we should be sorry it were otherwise, that every thing which could be said in its defence has been fully and impartially heard and reported.

Some recent publications have recalled our attention to the present position of the College. The latest of these it is our intention to notice before we close this article. In the meantime, at the hazard of repeating some observations already to be found in the pages of this Journal, we shall make a few remarks upon the history of the College, and the not improbable intentions of its founders.

How different has sad experience shown that history to be, from the consequences which might have reasonably been, perhaps had been, anticipated by a sober-minded legislator at the date of the charter! The charter incorporates the six distinguished physicians named in it, together with *omnes homines ejusdem facultatis de et in civitate prædictâ*, and gives the Corporation the most ample powers of control over the whole medical affairs of the metropolis and its vicinity. Such, in few words, is the whole charter; and nothing

can be more comprehensive in its designation of members, or more extensive in its powers.

Are we wrong in attributing too refined a policy to the advisers of Henry VIII., when we say that in giving such a charter they acted designedly and deliberately, upon the reasonable principle that medical men were fittest to legislate for their own profession; and that they accordingly did invest them with the power of framing laws for their government from time to time, adapted to the varying condition of society? It cannot, at least, be denied, that the charter was broad enough to comprise within the Corporation every legitimate practitioner of medicine at all future times; and that, under its lawful powers, the College of Physicians might have been the one Corporation of the whole Faculty of Medicine in the kingdom. No person can assert that we have strained the construction of the charter: it appears to us impossible to read it without feeling the force of our observations upon the glorious opportunity there was once presented of making it the *Magna Charta* of the profession.

A spirit of a very different kind very soon influenced the Corporation. The spirit of selfish monopoly prevailed; and the struggle, down to the times of Lord Kenyon, has been to limit the Corporation within the narrowest possible boundaries. The first consequences of this abuse of the charter may be traced in the elevation of pure apothecaries to general practitioners. The scanty supply of licensed practitioners admitted by the College, and their attempt to monopolise the whole practice of the metropolis, were the true grounds of that decision of the House of Lords, which has ultimately reduced the influence of the Corporation to zero in the republic of medicine, and made the empire pass to the Hall at Blackfriars' Bridge.

In the time of Lord Mansfield an effort was made by the Licentiates to open the College, by disputing the legality of one of its elections, because the Licentiates had not been allowed to vote. In this form of the question, the technical objection, that a Licentiate, being admitted merely to practise, was not actually a Fellow, prevailed: but doubts were thrown out, and a strong opinion expressed by the Court that he had *a right* to claim admittance to the Fellowship; and that his total exclusion by the then by-laws was illegal. The *right* was not tried at the period. The College took the hint, and, by the advice of counsel, determined what was the smallest possible opening to be conceded to the Licentiates short of total exclusion, in order to satisfy the *reasonableness* of the law. When the question of right was at length fairly raised, the prejudices of Lord Kenyon, who loved to contradict Lord Mansfield, and again reduce the common law to its meagre subtleties, prevailed; and it was held that the President's privilege of introducing an odd Licentiate now and then, to be exercised according to his caprice, and a like power to the Fellows, which has never been exercised at all, satisfied the scruples of the law in favour of liberty. The subsequent history of the College would be a repetition of its history within the last few years. We think we have accounted sufficiently for its total loss of all influence in medical affairs. Whatever difficulty there may be in restraining the other bodies which have risen upon its ruins, it can offer no impediment to the reconstruction of the Profession upon the basis it has so shamefully deserted.

The pamphlet which has led us to

make these observations is from the pen of Sir George Tuthill. With a happy imitation of Milton, Mackintosh, and Southey, the learned knight has adopted the imposing title of *Vindiciæ Medicæ*, which, for the sake of the unlearned, he has translated into *A Defence of the College of Physicians*. It is dedicated to Sir Henry Halford. Our reasons for always reading a preface or a dedication may be found at large in D'Israeli's *Curiosities of Literature*. Our readers, we hope, have a like taste, and may, perhaps, have a fancy to see how congenial spirits greet each other. Take, for example, then, the preface before us:—

"Dear Sir Henry,—May I beg you to accept this defence of the College, both as a tribute of duty and as a token of regard? There is no one who is more devoted to the interests of the College than yourself, *nor is there any one who has contributed more largely to its fame*. But you so much excel all others *in that kind of writing which you have undertaken to adorn*, that I should have felt an invincible reluctance to submit myself to your judgment, had I not known that a rare facility in detecting the errors of others is usually combined with an indulgent disposition to forgive them, and that by the expression of sentiments, which may claim a near kindred to your own, I may confirm the friendship with which you honour me.

"I remain," &c. &c. &c.

This dedication unwittingly discloses two most important facts;—first, that Sir Henry Halford is the most distinguished member the College has ever had! and, secondly, that the excellent author of the pamphlet has endeavoured to produce a piece of composition worthy of the eminent body, whose president is renowned for the graceful elegance of his classical essays, whether the same essays be in Latin or in English. We pretend not to judge of either of these serious matters. In that which is within our province and the scope of our common capacities, we venture to entertain an opinion, and we have accordingly the hardihood to pronounce that the pamphlet in question is but a dull repetition of the dull contents of a certain anonymous pamphlet, lately published in defence of the College, and reviewed in this Journal. The eminent writer takes the fifteen sections of the petition of the Licentiates as so many texts, which he undertakes categorically to answer and refute. We are tempted to quote the first of these sections, and a portion of the answer to it, as a specimen of the whole.

I. "That the Charter of the Royal College of Physicians of London was granted by Henry VIII., *for the advancement of medical science*, and for the protection of the public against the temerity of wicked men, and the practice of the ignorant." If there be a position in the petition out of the reach of controversy, we should say it was this. Far otherwise thinks "the profound, sad and discreet, groundly learned, and deeply studied in physic," pamphleteer, who observes in

"Answer. This first paragraph of the petition involves a *subtle inference*, which makes no part of the charter." He then sets forth the whole charter; whence he plainly concludes that it is not, and never has been, the object of the College to favour "the advancement of medical science." The "answers" to the other allegations of the petition consist in general of wholesale transcripts from the decisions of the judges, many years ago, in the two cases we have alluded to. How utterly impertinent to the real question at issue these decisions are it is scarcely necessary to point out. The real question

is, whether the College has put a *judicious* interpretation on its charter, and not whether its by-laws were not exactly so unreasonable, as to call for the interference of the Court of King's Bench fifty years ago, an immense stretch in the age of the world. We find no original composition of the learned writer worth mentioning till we come to his comment on the eighth section, which avers the usurpation of all corporate powers by the Fellows. In reply to this allegation we have, in the first place, an essay upon the utility of the division of the College into two orders.

"Can it for a moment be contended that because a man has been properly admitted a Licentiate of the College, he is *ipso facto* qualified to be elected its president? Must no man be permitted to serve the people in parliament who is not fit to be a minister of the crown, and to guide the vessel of the state in every storm and in every danger? In all bodies of men, associated for their own government and for the government of others, is it not shown to be useful, by experience and by universal consent, to *select* a council, in whom the wisdom of direction is presumed to reside?" In this choice passage it is assumed that every *Fellow is* qualified to be elected president; that the president *et hoc genus omne* are as ministers of the crown, and the rabble of Licentiates as mere members of parliament; and that the odour of *self-elected* vestries, and all other self-elected governing bodies is particularly sweet. But, in the second place, in reply to the allegation that Licentiates are excluded from corporate offices, we are treated with a legal dissertation on equivocation, and a serious charge of suppressing a portion of the truth is, with unparalleled effrontery, imputed to the respectable petitioners. It is true, says the pamphleteer, that a Licentiate is excluded, *so long as he remains in the order of Licentiates, but he does not necessarily remain in that order; Licentiates are elected into the Fellowship, and become thereby eligible to every office which the College contains.* Such is the *suppressio veri* upon which is built this foul and calumnious imputation! and with such a specimen of the critical acumen of the learned pamphleteer we shall conclude our brief review of the most worthless pamphlet the present crisis has produced, which nothing but the respectable name attached to it should induce us to notice.

SIR EVERARD HOME'S LECTURES ON COMPARATIVE ANATOMY.

This elaborate work is now on sale at the very reduced price of eight guineas, small paper, published at eighteen guineas; and twelve guineas, large paper, published at twenty-six guineas. Upwards of seven hundred copies (out of the edition of one thousand) having been disposed of at the original price, it is presumed that an early application will be necessary to secure copies upon the terms now offered. Vols. III. to VI. may be had to complete sets, at half price. Every public library ought to have a copy of the best national work on this interesting branch of science.

French Hospital Reports.

HÔPITAL DE LA PITIE.

Pericarditis with sero-sanguinolent effusion —Death—Necropsy—False Membranes, without material alteration of the Pericardium.

A man, aged 50, was admitted on the 1st of April, complaining of pain in the præcordial region, and a little towards the left lateral wall of the chest. He applied, without medical aid, fifteen leeches, which relieved the pain. He stated that he never had rheumatism.

Auscultation indicated no anormal sign; percussion afforded a dull sound in the præcordial region, and at first there was a slight

bruit de râpe, which daily became more manifest. There was great debility, heat of skin, thirst, want of appetite, and frequent pulse. He was bled largely on the first day, which was repeated in a few days, as the action of the heart had continued.

8th. The symptoms were continued, and two blisters applied to the legs.

12th. Less debility; more loquacious; delirium; startings of the tendons; tongue dry and fuliginous; *bruit de râpe* is manifest; pulsations of the heart dull and profound; pulse small and contracted. Death on the 13th, at night.

Autopsy, thirty-six hours after death.—The lungs were sound; the left adhered slightly to the chest; heart natural; pericardium covered throughout its extent with false membrane of a line in thickness. This membrane was red and rugous, and easily detached from the pericardium with the scalpel; and this last was perfectly sound inferiorly. In the interior of the cavity of the pericardium, there was a great quantity of sero-sanguinolent fluid. All the cavities of the heart were natural. A polypiform concretion occupied the interior of the aorta from its origin to its bifurcation, and extended into its divisions.

The cerebral membranes were strongly injected and adherent to the brain. The cortical substance was also injected. There was a small quantity of serosity in the ventricles.

The intestines and other organs were natural.

M. Rostan formed an accurate diagnosis during life; his conclusion was pericarditis and effusion.—*Lancette Francaise, Gazette des Hôpitaux Civil et Militaire.*

Vaginitis, with Profuse and Fœtid Discharge, Limpid and Uncoloured, occasioned by a piece of Sponge in the Vulvo-Uterine canal.

BY M. J. J. CAZENAVE, M.D., BORDEAUX.

A midwife conducted to me a young delicate person, of a lymphatic temperament, who complained of a very abundant vaginal discharge, which was limpid and uncoloured, but very fœtid. In reply to my questions she stated that her discharge was of four or five days' duration, about which time she yielded to the solicitations of a gentleman. She experienced great pain in the neck of the uterus after coition, which was almost immediately followed by the vaginal discharge.

She refused to submit to examination. She was ordered astringent and disinfecting injections of chloruret of sodium.

She called next day, and stated, that having used the bidet that morning (*les cuises etant très ecartées et la vulve entr' ouverte*) she observed that a soft substance escaped, giving out the odour of putrified animal matter, which was a piece of sponge that had been introduced immediately ante coitum, *pour s'opposer la fecondation*. From this moment the discharge and its bad odour ceased.—*Bull. de Bordeaux.*

HÔTEL DIEU.

Baron Dupuytren's Clinic—Syphilitic Ulcer of the Upper Lip, resembling a Malignant Pustule.

Elizabeth Hénin, aged 26, of good constitution, admitted the 9th of April, with an ulceration on the left side of the upper lip, into St. Agnes' Ward, under M. Dupuytren. At first view this ulcer had all the appearances of malignant pustule; as, however, its progress was slow, emollients alone were applied; gradually the affection assumed a syphilitic aspect.

The patient was immediately submitted to an anti-veneral treatment. Infusion of sarsaparilla with sudorific syrup; corrosive sublimate, gr. $\frac{1}{8}$; guaiacum, gr. iij; opium, gr. $\frac{1}{4}$; of which she took one pill three times a-day. Under this treatment she gradually improved.

Fracture of the Inferior Extremity of each Radius from a Fall on the Palms of the Hands—Imperfect consolidation on the Right Side—Apparatus employed on the Left.

A. B, a woman, 58 years of age, a water-carrier, came into this hospital the 14th of March last, with fracture of both radii; that of the right side cured with imperfect consolidation, that of the left more recent. Fifteen months since she was admitted into another hospital for the first accident; when she left it, she was unable to carry her arm to her head, and since then the limb has become nearly useless.

By passing the hand along the external

edge of the fore-arm, a depression is found on a level with the old fracture, evidently owing to a depression of the fragments of the radius; the hand is thrown a little inwards, and the inferior extremity of the ulna is remarkably prominent under the skin. Both accidents were produced by falls on the palms of the hands; in the first, she was going down stairs, carrying two buckets of water; in the second, also going down stairs, but without any load. This was on the 13th of March, at eight o'clock in the evening; she accidentally trod on a rat, which caused her to slip, and in attempting to save herself, fell on the palms of her hands; the radius was fractured near its inferior extremity; a severe pain was produced, and the motions of pronation and supination were thereby rendered impossible. On her admission to the Hôtel Dieu the nature of the accident was immediately recognised, and a proper apparatus being this time applied, the fracture is rapidly uniting; these cases, remarked M. Dupuytren, generally get well after five and twenty or thirty days.

Sprain—Erysipelas on both sides of the Face, and Abortion.

Marie Hugo, aged 22, admitted in the Hôtel Dieu on the 8th of April, with sprain of the left ankle-joint; this had been nearly cured by the general treatment, when erysipelas broke out on both sides of the face; this was treated by blistering, emetics, and purgatives; the patient had escaped these accidents, when suddenly abortion took place; she had concealed her pregnancy, which was of six months' duration. Notwithstanding these complications, the patient is now in a fair state of recovery.

This case illustrates the obstetric axiom that external injury of any kind may induce abortion.

Oblique Fracture of the Tibia, with Tardy Consolidation.

A washerwoman, aged 69, was admitted on the 4th of February, with oblique fracture of the left tibia; the usual means were adopted, without the anticipated success. M. Dupuytren, in order to remedy the projection of the upper fragment of the tibia, has applied graduated compresses, under the former apparatus, to the internal surface of the tibia and inter-osseous space, over these he laid two thin wooden splints. This treatment will probably be successful; since its application the patient has been perfectly easy.

British Hospital Reports.

ST. GEORGE'S HOSPITAL.

Stricture.

It will be remembered that, in a former number, when speaking of those cases of stricture in Egremont Ward, under the care of Mr. Brodie, we noticed one, the symptoms of which were of a bad character, and had been present for some time. Of this case we subjoin the following report:—

Joshua Maskall, a pale, unhealthy-looking man, was admitted into Egremont Ward, under the care of Mr. Brodie, for severe stricture at the posterior part of the canal, accompanied with a highly irritable and inflamed state of the lining membrane of the urethra. The prepuce was also abnormally elongated, from a vicious habit contracted in early youth. The patient took a variety of medicines at various times to keep down the irritation caused by the introduction of the catheter or bougie at various times; but nothing was found to subdue this so well as perfect repose. There were numerous false passages in the urethra, and one of these, which had been originally caused by an abscess, was fistulous, and opened into the perinæum. Mr. Brodie introduced a bougie very carefully into the bladder, and let it remain in for twenty-four hours. This, however, was followed by great swelling of the glans penis and cellular membrane of the parts; and Mr. Brodie observed, that although at first it might seem like a loss of time to keep the man in bed, and do but little or nothing for him, yet this was highly necessary in a case like this, where the constitution was very much shaken, and the general health greatly impaired; and the good effects to be seen from this treatment were visible in the general improvement of the patient's health, and the altered state of his urine, from a highly loaded and impure condition to one of an equally healthy character.

March 6. He has taken the saline draught of the hospital every six hours, and takes beef-tea and arrow-root for his diet, and his two ounces of port wine were ordered to be increased to eight ounces every day. He looks worse than at the last report, and the urine passes entirely through the fistulous opening; the swelling of the glans penis has entirely subsided.

April 21. He has continued much the same since the last report; he continues to take his beef-tea and wine, and cascarilla draughts with carbonate of ammonia three times in the day. His general state of health remains much the same as at the last report.

We saw him again one week afterwards, but little change had occurred; an instrument could be passed with somewhat more of ease into the bladder; and, as the local disease was somewhat improved, and his general constitutional health appeared to suffer from re-

maining in the hospital, he was ordered to be made an out-patient for the space of one month, and, at the end of that time, to present himself again for admission.

Ann Bennett was admitted into Drummond Ward in March, under the care of Mr. Brodie, with pain in the right knee. From what she states it appears that some years since she had inflammation of the knee-joint, and for which she was an in-patient in the Middlesex Hospital for a twelvemonth, under the care of Sir Charles Bell, who treated the case with an issue on each side of the knee, and she went out perfectly cured. Many of the symptoms have, however, again returned, and she has, by the advice of some professional man, been rubbing in the tartar emetic ointment, as the joint is now completely covered with pustules. Mr. Brodie, upon hearing the above account, and examining the shape and size of the two knees together, was of opinion that there was nothing of any material consequence affecting the knee at present, and was inclined to believe that the pain was more of an hysterical character than any thing else. In order to confirm this view, the various tests of proof were resorted to as usual in such cases, but nothing seemed to alter the original complexion of the case, and Mr. Brodie still remained at a loss to know whether the case was one of original disease or not. The girl could not bend the knee without great pain, and whether it was moved or at rest, the pain is referred to a line across the knee, nearly even with the inferior border of the patella. Pressure of the articulating surfaces of the condyles together gives no pain, nor is any great uneasiness experienced when the patella is pressed upon. The girl has an hysterical look, and it was suspected that she was pregnant, but this we believe is doubtful.

28th. She has had some increase of pain in the joint for some days past, which has been relieved by the application of a cold saturnine lotion to the part. The pustular eruption, caused by the tartar emetic ointment, has nearly entirely subsided, with the exception of one hard, dry scab, which has not separated. Mr. Brodie significantly asked what could be the reason this did not come off. The house-surgeon replied that it might be from the cold lotion, which was known to prevent the healing of leech-bites. Mr. Brodie ordered a poultice to be applied to aid its separation, and with reference to the application of the tartar emetic ointment, he thought that it was a bad thing; he had known one person lose his limb, and another very nearly lose it, from the tartar emetic ointment causing a large ulcer, which spread rapidly, and assumed a very unhealthy appearance. He thought the sulphuric acid liniment* was a much better application. The tincture of iodine was a very good application for the purpose of making an eschar; if the skin was touched for several days in succession with a camel's hair brush dipped in the tincture of iodine, the skin would be raised into a blister, which might easily be kept open.

The girl was ordered to take some camphor mixture with the syrupus croci for a short time, in the course of which all her bad symptoms and pains subsided, without the aid of any other medicine whatever, and in a few days afterwards she was discharged.

ROYAL COLLEGE OF SURGEONS.

NAMES of Candidates who received Diplomas during the month of April, 1834.

Samuel D. Chippingdale	Poplar.
Thomas H. Muloch	Canada.
Richard Thomas	St. Just, Cornwall.
Edward James Parry	Shrewsbury.
Thomas Mentin	May, Tyrone.
Charles Dodd	Northampton.
John Foote	Tavistock-st. Covent-garden
Alexander M'Nab	St. Martin's-lane.
Henry Lococke Tovey	Bermondsey.
William Peter Cullen	Sheerness
Henry Freeth	Lincoln's-Inn-Fields.
James Acton Booth	Witham, Lancashire.
William Harvey	Taunton.
Philip Wynter Wagstaff	Leighton-Buzzard.
John James Powell	Gt. Russell-st. Bloomsbury.
Thomas Abraham	Grundisburgh.
Edwin Smith	Cirencester.
Thomas Mills Beaumont	———
Frederick Lewis	London.
John Roberts	Bombay.
David Morgan	Llandiloes.
Edward Murray	South Collingham, Notts.
Charles Anderton	Wigan.
James Henry Wells	Cheltenham.
Theodore Hands Mogridge	Sidmouth.
Henry White	Mauritius.
Peter Martin	Reigate.
Henry Barnett	Blackheath.
Jacob Sproule	Carrrick Annulthing.
Richard Hargraves Brett	Sussex-pl. Old Kent-road.
Robert Binks Jordison	Stockton.

* This liniment may be made according to either of the two following formulæ:—

℞. Olei olivar., ℥iss,
Acid. sulph. fort., ℥ss. Misce.

℞. Olei olivar., ℥iss,
Acid. sulph. fort., ℥j.,
Olei terebinth., ℥ss. Misce.

Thomas Cooper	Stourbridge.
John Lowes Clark	Devonport.
James Nathaniel Derriman	Plymouth.
Thomas Garnett	Cumberland.
Frederick James Chapple	Plymouth.
Charles Nathaniel Phillips	Haverfordwest.
Edwin Skeate	Bath.
William Lockhart	Liverpool.
George Fayrer	——
Charles Hitchcock	Swindon, Wilts
John Haddon	Eastry, Kent.
Henry Cummack	York.
Thomas Charles Cade	Spondon, Derby.
Daniel Kitchen Tyeman	Keppel-street, Russell-sq.
Thomas Bancks	Brierly, Staffordshire.
William Trenor	Dublin.
Lawrence Spencer	Preston.

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, May 1st.

Cornelius Haynes Butler	Ingatestone.
Thomas Cobb	Malton.
John Talbot Cartwright	Brierly Hill.
William Johnson Crisp	Trostenden.
John Hayton	Sunderland.
Richard Winpenny	Market Weighton.

BOOKS.

The Dublin Journal of Medical and Chemical Science, including the latest Discoveries in Medicine, Surgery, Chemistry, and the Collateral Sciences. No. XIV., May. Dublin: Hodges and Smith.

Horæ Phrenologicæ: being three Phrenological Essays,—1st. On Morality; 2nd. On the best Means of obtaining Happiness; 3rd. On Veneration. By JOHN EPPS, M.D., &c., &c. 12mo. pp. 96. London: 1834. Palmer.

CORRESPONDENTS.

Mr. Stanton.—The experiment is not likely to succeed.

Oxon.—Assertion is not proof.

A. B. C.—There will be a radical change in the medical polity of the United Kingdom.

An Old Practitioner.—There will be an Obstetric Board in London. We agree with our correspondent: there should have been one two hundred years ago.

Avicenna.—It is probable that there will be a National Medical Board, composed of three sections,—one for England, Ireland, and Scotland. The Imperial Parliament recognises Great Britain and Ireland as one country; and thinks the time for partial legislation has gone to the tomb of all the Capulets.

A Friend to Humanity.—There cannot be a second opinion that Mr. Warburton is one of the best friends of the public and the medical profession. He will be the mover of a legislative enactment which will never be forgotten to the latest posterity.

An Observer.—We heard Mr. Green's evidence; it was what it ought to be, that of an eminent surgeon and a gentleman. We were delighted with his inculcation of the necessity of good moral conduct in medical practitioners. He defended ethics, though some who never knew the meaning of the term have styled it folly.

METEOROLOGICAL JOURNAL.

MONTH. May, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
1		59	61	49	29·43	29·58	74	75	S.S.E.	S.	Cloudy	Fine	Fine
2		59	63	53	29·63	29·67	75	74	S.S.E.	S.S.E.	Fine	——	——
3		60	72	58	29·73	29·75	74	71	S.W.	S.	——	——	——
4		66	72	53	29·70	29·70	70	66	S.S.E.	S.W.	——	——	——
5		63	64	52	29.67	29·80	66	70	S.	S.W.	Rain	Rain	——
6		61	67	53	30·04	30·10	69	67	S.W.	S.	Fine	Fine	——
7		65	71	57	30·15	30·12	64	67	S.W.	S.W.	——	——	——

50, *High Holborn.* WILLIAM HARRIS and Co.

ALL Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 120. SATURDAY, MAY 17, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECT. LXXXIX., DELIVERED APRIL 17, 1833.

GENTLEMEN,—*Amaurosis, or gutta serena,* is an obscurity or loss of vision, arising from a more or less insensible state of the retina. Either the retina, the optic nerve, or the brain, may be the part first and principally affected. The expression *gutta serena* is only applied to cases of total blindness, plainly derived from the circumstance of the pupil having no opacity in it, and seemingly being clear, though the patient is blind.

The symptoms of amaurosis are of two kinds; first, those which the *surgeon* notices in the *form, colour, texture, consistence, vascularity,* and *mobility* of the *different parts* of the *organ,* or in the general health of the patient; secondly, those which the *patient* himself experiences, as *impaired* or *deranged vision,* headach, *vertigo,* peculiar sensations in the eye, &c.

The first symptom, gentlemen, and one that never fails to be present, is the patient's want of a proper control over the eye affected, the pupils of the two eyes not being directed harmoniously to the objects looked at; and hence there is something staring and vacant in the patient's countenance. This symptom may indeed exist at first only in a very slight degree; but, in some cases, it amounts to an actual squinting, or strabismus, while, in others, such is the want of control over the eye, that it is either affected with oscillation or stands quite motionless in the orbit. Then, gentlemen, I may observe to you, that the motions of the eyelids, as well as those of the eyes, are likewise not unfrequently interrupted; sometimes the levator of the upper eyelid being palsied; and sometimes the orbicularis palpebrarum.

The eye may also form a greater prominence than the other, or be otherwise changed in its shape. Its colour is seldom that exhibited in the healthy state, the sclerotica being yellowish, bluish, or ash-coloured, and often streaked with varicose vessels; while no symptom of amaurosis is more to be depended upon, than an increase or diminution in the natural firmness of the eyeball.

Another usual symptom is a *sluggish and limited motion of the pupil,* generally attended with *dilatation,* but occasionally with *contraction* of that aperture. The early and incomplete stages of amaurosis are, indeed, rarely accompanied by a widely dilated pupil; but after the perception of light has become further weakened or extinct, the opening is commonly expanded and quite motionless.

But, gentlemen, you will sometimes meet with cases in which the *pupil of a completely amaurotic eye will move briskly,* according to the degree of light acting upon the opposite or sound eye; though, if the amaurotic eye alone were exposed to its influence, the pupil of it would remain perfectly motionless and greatly dilated. Hence it is a rule in surgery, always to close and cover the sound eye during the examination of the state of the iris and pupil of an eye suspected to be amaurotic.

Gentlemen, you may also meet with examples still more curious, in which, though the patient is totally blind, both pupils vary in diameter, according to the changing degrees of light, exactly as they do in the perfect state of the eyes.

Besides the motions of the iris, which must be examined in each eye separately, and with the opposite eye excluded from the light, the shape and situation of the pupil should be noticed, and the inclination of the iris considered, for sometimes the pupil is irregularly dilated, and sometimes moved towards a particular point of the circumference of the iris, while this membrane itself may either bulge out towards the cornea, or sink back, so as to present a concave appearance.

When amaurosis is an effect of hydrocephalus in a young subject, the pupil may exhibit its natural black hue; but in elderly

subjects, amaurosis is almost constantly accompanied either by some degree of glaucoma, or a dull glassy or horny appearance in the pupil.

The want of control over the eye, the inability to direct the pupils harmoniously, the change in the shape and consistence of the eye, the sluggish motion and dilatation of the pupil, subject to the exceptions specified, the alteration in the shape and position, and the glaucomatous or hornlike colour of the pupil, are then, gentlemen, the chief things which you will be able to examine by the evidence of your own senses in cases of amaurosis.

Now, the symptoms or effects, of which the patient alone is conscious, are, first, *impaired vision*, the progress and degree of which vary in different cases; for, in some instances, the patient becomes suddenly and permanently blind, while, in others, the sight diminishes in a very slow and gradual manner, without ever terminating in total blindness.

Hence the distinctions of *complete* and *incomplete* amaurosis. Frequently, in the commencement of the disease, the failure of sight is only occasional, or for a short time, or periodical, assuming the form of *night blindness* or *day blindness*, or coming on after any great exertion of the eyes. A few lines of a printed book may perhaps be read, after which the letters appear completely confused.

The failure of sight may extend to the whole field of vision, or only to a part of it. Thus more or less of the page of a book may not be visible (visus interruptus); or only the half of objects may be seen (hemiopia). Sometimes objects can be seen only when placed exactly in one particular direction (visus obliquus). To some amaurotic patients all objects seem disfigured, crooked, enlarged, diminished, or even inverted (visus defiguratus).

Then another common sign of amaurosis, which the patient experiences, is what are termed *ocular spectra*, as *sensations of flashes of light* in the eye (photopsia), or of insects or cobwebs flying about before the eye (muscæ volitantes); or of colours which are not before the eye. *Double vision* is also another frequent effect of the disease in its early stage. As the complaint advances, however, vision is obscured by one uniform cloud or network.

In the early periods, the patient has sometimes an unwonted sensibility to light, which even gives him pain; while, in other more usual cases, he always courts it from the very beginning. Pain in the eyes, head, and face, is another important symptom in amaurosis, denoting the probability of the existence of a slow inflammation of the retina, or of organic disease within the cranium itself; for, gentlemen, you should be aware, that many of the causes of the incurable forms of amaurosis act on the nervous structure of the eye from within the skull. Such are collections of fluid in the ventricles of the brain in hydrocephalus; disease or tumours of the brain situated near that part of it where the optic nerve is connected with the base of the brain; while other swellings or diseases may affect the optic nerve in its course either within the cranium, or in the orbit.

Gentlemen, you already know, that loss of sensibility in the retina, and a complete annihilation of its functions may be the effect, or accompaniment of other diseases of the eye; as, for instance, of the severe varieties of ophthalmy affecting the interior texture of the eye, glaucoma, hydrophthalmy, melanosis, and fungus hæmatodes. These examples, in which the retina suffers, in common with other textures, are named according to the primary disease, or to their most prominent symptoms; and when we use the term *amaurosis*, we commonly understand a case in which the retina, or nervous apparatus of sight, is the part of the eye first affected.

Immoderate exertion of the eye in the various occupations of life, more especially on small objects, and in persons either of plethoric constitutions, or intemperate habits, producing a determination of blood to the head, may be set down as frequent causes of a slow inflammation of the retina, ending in an alteration of its texture, and in impairment or abolition of its functions. Hence printers, watchmakers, engravers, tailors, and other classes of workmen, whose eyes are employed on minute objects and needlework are frequently afflicted with amaurosis.

Amaurosis, gentlemen, is sometimes divided into *functional* and *organic*, the first implying the interruption of the functions of the retina, independently of any organic disease. Whether such case really occur has sometimes been disputed; but, if we admit that amaurosis may arise from sympathy of the eyes with disease or irritation in distant parts, we must, I believe, admit the *doctrine of functional amaurosis*. Thus you will meet with cases of amaurosis from gastric disorder, from the presence of worms in the bowels, from the irritation of dentition, and from that of a carious tooth. You will see the disease arise from a wound of the scalp, caries of the skull, disease of the antrum, abscesses about the face, the suppression of the menses, or the effect of particular aliments in persons of peculiar idiosyncrasies.

With respect to the prognosis, the functional amaurosis must leave a greater hope of cure than the organic. A suddenly formed amaurosis is generally less unfavourable than one, that has developed itself slowly. Complete inveterate amaurosis, attended with organic change of the retina, or optic nerve, may be deemed incurable. The distorted appearance of objects in the earlys tage is always a bad omen, because indicative of disease in the brain. With respect to the liability of amaurosis to be mistaken for incipent cataract, the difference will be explained when I speak of the latter disease. Amaurosis may be combined with glaucoma, or with cataract.

With regard to the *treatment of amaurosis*, I may say, gentlemen, that no directions can be of any value, unless founded on a correct view of the causes of the disease, or supported by successful experience. No doubt much of the difficulty of curing amaurosis arises from our being frequently ignorant of its causes; to their being in many instances various, complicated, and incapable of removal; or, if removable, to the impossibility of obviating the effects left on the retina.

When you find amaurosis attended by signs of determination of blood to the head, such as headach, vertigo, flushed countenance, and arterial throbbings of the temples; that the pulse is full, and the subject young and plethoric, you should employ general and local blood-letting, and purgatives, and put the patient on a very low diet. If the case be altogether dependent upon vascular distension, these means, conjoined with rest of the organ, will probably effect a cure. If along with vascular fulness there be effusion, depletion will be the most likely means of relief, and the best preparation of the patient for other remedies, more especially for the use of mercury.

When functional amaurosis depends upon disorder of the chylopoietic viscera, habitual costiveness, and an increased flow of blood to the head, purgatives, assisted by bleeding, are found to answer better in this country than nauseating doses of tartrate of antimony, so highly praised on the Continent. You may give the blue pill at night, and a mild saline aperient mixture in the morning; and, after having continued this treatment for some time, tonics may be prescribed with advantage, as sulphuric acid, bark, and steel medicines.

It cannot be doubted, that many examples of amaurosis depend upon the effects of chronic inflammation on the retina, or upon a slow and gradually-produced deposition of lymph in various situations affecting the immediate organ of vision. Now, for the diminution and removal of such effects, we know of no medicine that is at all equal to mercury. I fully agree with some other practitioners, that the right treatment of most cases of amaurosis turns upon two points, viz.—the employment of ordinary antiphlogistic means, and letting these be quickly conjoined with, or followed up by, the use of mercury. Here it acts in the same way as it does in iritis; and, in order to give it a fair trial, the system must be kept under its influence for a month or six weeks. The influence should also be such as is indicated by a moderate degree of salivation. Perhaps, I may say, with respect to nine out of every ten cases of amaurosis, that, if they will not yield to a combination of antiphlogistic and mercurial treatment, they will yield to nothing that has yet been discovered.

You ought, indeed, to modify such treatment according to circumstances. Thus, if your patient were of weak frame, and apparently affected with more gastric than cerebral disorder, you would employ, perhaps, local bleeding, rather than venesection; and moderate doses of the blue pill, or compound calomel pill, with saline medicines, in preference to the active exhibition of calomel, or the free use of mercurial ointment.

In some cases, you would avail yourselves of the assistance of counter-irritation, as a blister or seton applied to the nape of the neck or temple.

The plan of treating amaurotic eyes by stimulating them with electricity, or other applications, and by giving tonics at first, is found to be generally unsuccessful. The idea of amaurosis being connected with debility may be set down as most erroneous. The only exceptions to this remark may be the amaurosis from suckling, and from profuse loss of blood. If a delicate female were to lose, first, her health, and then become amaurotic from suckling a hearty child, of course the best plan would be to wean it, and give her tonics and a light nutritious diet, with a small quantity of wine daily.

The case termed *hemeralopia*, or *night blindness*, is an incomplete and periodical amaurosis, exemplifying also, according to my judgment, the reality of functional cases. The patient enjoys good vision all the day; but, after twilight, he becomes blind. No sooner, however, does the sun rise, than the affection of the optic nerve and retina goes off, and the patient then sees very well again. Now, gentlemen, unless you happen to be destined for the tropics, you are not likely to meet with any cases of hemeralopia; for, in this climate, they are rare, and, when they do occur, are only relapses in persons who have been previously affected in hot countries. This curious variety of amaurosis is easily cured by applying blisters to the temples, and having recourse to mild antiphlogistic treatment.

Nyctalopia, signifying blindness during the day and vision by night, is described by writers, but is so rare, that few surgeons have ever seen an example of it. Larrey records a case of it in an old man, one of the galley-slaves at Brest, who had been shut up in a dark subterraneous dungeon for thirty-three years. When released he could only see in the shade of night, and was completely blind during the day. Ramazzini also mentions an epidemic day-blindness, which, in his time, attacked boys in Italy, about ten years of age. But, though we do not meet with nyctalopia in England as an original disease, you know very well, gentlemen, that great intolerance of daylight is one of the common effects of scrofulous ophthalmy. You must all likewise have heard of the *photophobia*, or aversion to light, exemplified in the *albino*. Day blindness is also noticed as a symptom of *mydriasis*, or a simple preternatural dilatation of the pupil. Patients with incipient cataracts, we know, see very little in the brightness of day, but much better in the evening, when the light is diminished and the pupil expanded.

A Cataract, gentlemen, is usually defined

to be a weakness, or interruption of sight, produced by opacity either of the crystalline lens, its capsule, or the fluid of Morgagni. Occasionally, however, the term is used in a more comprehensive sense, implying every perceptible obstacle to vision situated between the vitreous humour and the uvea and pupil.

When the disease is seated in the lens, its capsule, or the fluid of Morgagni, it is called *true cataract;* but, when it consists of opaque matter deposited in front of the lens, it is denominated a *false cataract.* You have, then, lenticular, capsular, and capsulo-lenticular cataracts. The Morgagnian may be dismissed from present consideration, its separate existence not being generally credited.

Cataracts are also distinguished into *idiopathic*, or such as arise from internal, but generally unknown, causes,—and into *accidental*, which originate from external violence, or active inflammation. In general, the idiopathic sooner or later affects both eyes; but an accidental cataract is frequently confined to the organ that has been injured.

The symptoms of a cataract are of the following description:—1st. All objects, especially white ones, seem to the patient as if covered with a mist, a circumstance that generally precedes any visible opacity behind the pupil. 2nd. The decline of vision bears an exact proportion to the degree of opacity. 3rd. The opacity is almost always first noticed in the centre of the pupil, the examples in which it first presents itself at the circumference being much less frequent. 4th. When the iris is light coloured, the more opaque the cataract is, the more plainly will you see a blackish ring at the edge of the pupil; and such a ring is particularly conspicuous when the cataract is soft and large, as it then propels the margin of the uvea forwards. 5th. As a cataract generally begins at the central point behind the pupil, such objects as are placed directly in front of the eye are most difficultly seen, even in the early stage of the disease; but those which are on one side may yet be discerned, particularly if the light be not strong, which would make the pupil too diminutive to let the rays pass through the thinner transparent edge of the lens. 6th. What I have just observed, gentlemen, will enable you to understand, why patients, having an opacity in the centre of the lens, are sometimes completely blind in a strong light, though they may enjoy a useful degree of vision in the shade, or in moderately dark places. 7th. The eyesight of patients affected with incipient cataract may be materially assisted with convex glasses, because objects are magnified by them. 8th. To patients in this state, the flame of a candle seems obscured in a white misty halo, which always becomes broader the further the patient is from the light. When the cataract is more advanced the flame cannot be discerned, but merely the place of the light. 9th. The mobility of the iris is not affected.

In amaurosis, the horn-like or glaucomatous appearance is more deeply seated in the eye than the opacity of a cataract, and is somewhat concave. It is frequently of a greenish colour, while the opacity of cataract is usually greyish, white, or amber coloured. The decline of vision, also, is not in a ratio to the opacity, and the patient may be entirely blind, with little appearance of defect in the eye. The pupil is likewise generally dilated and motionless, with its pupillary margin somewhat irregular. The temporary increase or decrease of blindness, a circumstance so common in patients with incomplete amaurosis, depends upon circumstances, which depress or excite the system, and not, as in cases of cataract, upon the degree of light, and the corresponding alterations in the size of the pupil.

The misty halo seen by amaurotic patients round the flame of a candle is not like a whitish cloud, as in cases of cataract, but exhibits all the colours of the rainbow. To amaurotic patients spectacles are of no service; and objects situated on one side are not better seen by such persons, than those which are directly in front of the eye. Neither is there any temporary increase of the power of vision obtained by the use of belladonna, as in cataract.

Whiteness denotes either dissolved lens a or a capsular cataract; a grey colour, a lenticular cataract; an amber colour, or dark grey, a firm lens; and light grey, a soft one. If the whole extent of the pupil is uniformly opaque, the cataract is probably one of the lens; if the opacity is streaked or speckled, it is likely to be one of the capsule. If the opaque streaks radiate from a centre, the posterior layer of the capsule is probably affected. If the form of the opacity is convex, either the anterior capsule or the lens is the seat of it; if concave, the posterior part of the capsule. With the light concentrated on the pupil by means of a double convex glass, all these particulars may be ascertained. I believe that the size of a cataract is a better criterion of its consistence than its colour is; and, at all events, gentlemen, you will generally find, that the smaller the lens is, and the darker its colour, the more solid its substance will be; while the larger and more protuberant it is against the iris, the greater is the probability of its being soft.

A cataract of the lens itself, as I have already explained, is termed a *lenticular cataract*, which may vary much in its consistence. Thus, such a cataract may be *hard*, as it is often found to be in elderly persons, with an amber colour, the tint being deeper in proportion as the cataract is firmer.

A lenticular cataract may be *soft*, that is to say, of a cheesy, gelatinous, or even milky consistence. Soft cataracts are more bulky than hard ones, so that they project nearly into the pupil. Hence, sight is more considerably interrupted than when the cataract is hard, and the power of distinguishing colours frequently quite abolished. The capsular cataract has a smooth and glistening surface, with

streaks upon it, and it lies close to the edge of the pupil.

When the lens is present, you rarely meet with a capsular cataract unaccompanied by a lenticular one; but an opaque lens may be removed, or taken away by absorption, and a capsular cataract may be left. In this case, as the opacity is merely a thin layer of the capsule, the cataract makes no projection against the iris, and the anterior chamber is not lessened by the advance of the iris towards the cornea.

Gentlemen, another fact worthy of your attention is, that you never have a hard cataract in a child. In adults you meet with both hard and soft ones; but, in young subjects, never with the hard kind.

Cataracts may occur in every period of life, and children are sometimes born with them, in which event they are termed *congenital*. They are most frequent, however, in elderly persons. In the generality of examples, the disease arises without any manifest cause, or any thing wrong in the state of the rest of the eye, or of the constitution at large. The capsulo-lenticular cataract is alleged to form very commonly under circumstances denoting a determination of blood to the head and the eye, accompanied by uneasy sensations in those parts; but generally we cannot refer the origin of a cataract to any particular causes. There is an exception with respect to cataracts following a wound of the lens, or its capsule. Experience proves that the slightest prick of these parts will lead to their opacity, or rather, I should say, that the capsule inflames, and becomes opaque, and the lens itself is afterwards absorbed, so that the result is, in fact, a capsular cataract.

A cataract is termed *simple* when accompanied by no other disease of the eye likely to impair its functions, or with no particular constitutional disease; *complicated*, when joined with other diseases of the eye, as adhesion of the crystalline capsule to the iris, amaurosis, or a gouty, rheumatic, or syphilitic state of the system.

Glaucoma and amaurosis are the worst complications. The circumstances denoting glaucoma have already been explained. If, in addition to a sluggish or immoveable iris, you find that the patient is totally incapable of distinguishing the least glimpse of light, you may certainly infer, that the cataract is combined with amaurosis.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XXI.

Painters' Colic—Effect of Metallic Poisons on the Nervous System—Nature of Neuroses—Symptoms of the Lead Colic—Abdominal and Cerebral Symptoms—Convulsions, Coma, Blindness—Paralysis—Slight Fatality of the Disease—Researches of Thomson on the Poison of Lead—Symptoms of the Disease in Animals—Effect on the Generative System—Similarity of the Symptoms to those of the Human Subject.

GENTLEMEN,—A great deal of our time has been already occupied with the diseases of the digestive system, in fact, much more than I originally intended; the only apology I have to make for this, is the deep and paramount importance of the subject. Before I quit this part of the course there are yet one or two subjects to which I shall briefly allude, namely, peritonitis and painters' colic. With respect to the first of these diseases I shall say but very little, the ordinary form of peritonitis is a disease so well known and so fully treated of in books, that it would be only a waste of time for me to go over it; and with respect to peritonitis from perforation, all the original information I could communicate on this part of the subject, may be seen in one of my published clinical lectures, and in the article on *peritonitis from perforation*, in the London Cyclopædia of Practical Medicine. The ordinary form of peritonitis has been described in this work by Dr. M'Adam, the disease from perforation by myself. I shall therefore pass over this subject, and proceed to the consideration of a very interesting disease, painters' colic.

This disease is called painters' colic, from the circumstance of house-painters being extremely liable to it from coming into frequent contact with the poison of lead. Its synonyms are numerous, dry colic, Saturnine colic, rachialgia metallica, Devonshire colic, &c., &c.

Painters' colic is an example of the effects of a metallic poison on the nervous system There are certain metals which produce a powerful effect on the system, not by means of their corrosive properties or by any direct action on the surface to which they are applied, but by a peculiar impression made upon the nervous system. Thus we find that mercury under certain circumstances will give rise to a very singular nervous disease; arsenic may be introduced into the system in such a way as to produce symptoms of nervous lesion; copper exercises a similar morbid influence, and the effects of lead are uni-

versally known. I do not mean to say that all these metals produce similar effects on the economy, for this is not the case, but there is one point of agreement between them, that all may produce symptoms which are called nervous or neurotic, and the diseases thus produced are classed among the neuroses. What is the meaning of this term neurosis? *A lesion of nervous function, more or less complete, occurring independently of any demonstrable organic change.* A neurosis, then, is an alteration in the functions of the nerves of organic and animal life, the nature of which alteration we cannot understand, neither can it be demonstrated by the knife, nor by any examination of the state of the nervous tissue. In other words, a person will die with the symptoms of a neurosis, and when you come to examine the body, you will be unable to detect, in the minute ramifications of the nerves, the trunks, or the nervous centres, any appreciable lesion.

Diseases of this description have been divided into two classes,—active and passive neuroses. Active neuroses signify an increase or exaltation in the nervous function; passive neuroses are those in which there is a diminution of nervous energy; in both there is an absence of perceptible organic change. Take, for instance, an example from the nerves of animal life: a case of convulsions, independent of organic disease, is an example of the active neurosis; a case of paralysis, under similar circumstances, is an example of the passive. In the former, there is an exaltation of the nervous function, which is reflected upon the muscular system; in the latter, there is a diminution, producing a partial or total loss of the power of motion. It has been asserted by eminent physiologists, that passive neurosis can only exist in the organs of the life of relation, because the functions of the ganglionic system, which presides over organic life, cease only at the death of the individual. But there may be such a thing as semi-paralysis of the organs to which the ganglionic nerves are distributed, and hence we may have passive neuroses of the system of organic as well as of animal life. We get a good idea of these neurotic affections, by taking some of the most remarkable instances of this kind. Hydrophobia is a remarkable instance of excessive lesion of the nervous function without any known organic change; so is tetanus, and so are some forms of apoplexy, convulsions, and mania. Here we have violent irritations of the nervous system, in which there is no perceptible organic change, and where the only information we derive from pathological anatomy is of a negative character, telling us what these diseases are not, and leaving us, as to their actual nature, as much in the dark as ever. We find by dissection that hydrophobia and tetanus, and hysteria, and convulsions, and apoplexy, are not caused by inflammation of the brain or spinal marrow, and that is all. Hydrophobia, tetanus, convulsions, and hysteria, are instances of active neurosis; paralysis and apoplexy, without any known cerebral disease, are looked upon as examples of the passive kind, because they present either a diminution or abolition of the nervous function.

In the present state of medical science we must admit this division of the affections of the nervous system into diseases with and without perceptible organic lesion. I grant that it is very difficult, when we come to consider alterations in the functions of parts, to conceive how such changes could be effected without molecular alteration, or that the brain could be deranged in its functions, without some change of this kind. We are, however, compelled to consider such functional alterations of the nerves as changes with which we are unable to connect any process of hardening, or softening, or anomia, or congestion, or, in fact, any *known* pathological condition. Rostan is of opinion that all diseases are organic, that is to say, that they are produced by some molecular change, and this, he says, should be the basis of medicine. Unfortunately for medicine it has been given so many bases, that it sometimes knows not what leg to stand on.

But to return to our subject. Painters' colic is an example of a neurosis, that is to say, it is a lesion of the nervous function, unconnected with any known pathological alteration. It presents commonly two periods, the first exhibiting the phenomena of active, the second of passive, neurosis; or, in other words, the signs of exaltation of the nervous function precede those of depression. In the majority of cases, we find the first stage of this affection characterised by violent spasm, pain and convulsions, symptoms indicative of active nervous lesion, whereas in the second stage we have paralysis, the diagnostic mark of the passive kind. This is the order in which the phenomena of painters' colic are generally met with, but in some cases the first stage is either very imperfectly shadowed out, or even entirely wanting; the paralysis comes on in an insidious manner, and without being ushered in by any symptoms of exaltation of the nervous function.

In this country the most common victims to this disease are painters, who are much in the habit of working in white lead, and when you are connected with the management of any public medical institution (as I hope you will all be), you will often have to treat cases of this description. In Dublin and all large cities, it is an exceedingly common affection, and the patients are for the most part house-painters. Next to these, the persons who are most subject to it are plumbers, and those who are employed in the melting of lead.

When the poisonous particles of lead enter the system in a highly volatilised state, its morbid effects are more certain and extensive. Every house-painter will tell you that the kind of work which is most likely to produce

a deleterious effect, is painting "the *dead white*," or, as it has been termed, *statuary white*. In doing this they use white lead combined with a large proportion of oil of turpentine, and, in order to produce the intended effect, they are in the habit of excluding the air as much as possible. By means of the turpentine and the warm temperature of a close room, the lead is volatilised, and in this state appears to have an extraordinary power of impregnating the system. Some of the very worst cases of painters' colic are produced in this way. Painting in the open air, even where the same preparation is employed, is comparatively harmless. A poor fellow, who was for a considerable time under my care, assured me that he had escaped for twenty years, and was convinced that he would have enjoyed a much longer immunity, had he not been put to work at the statuary white in a close room.

With respect to plumbers, it is now ascertained that this disease is of comparatively rare occurrence among them, and the reason of this is that they generally work in the open air, or in well ventilated apartments, and have now but little to do with the actual manufacture of lead. The kind of lead which they generally use, sheet and pipe lead, is furnished from the manufactories, and their occupation principally consists in the moulding and soldering of it. We very seldom now see a plumber labouring under colic.

Painters' colic may be observed under a great variety of forms, but for the convenience of studying the disease, we may divide these varieties into four classes. In the first we have the phenomena of simple colic, without any obvious or marked symptoms of bilious, gastric, or cerebral derangement. In the second variety, the disease assumes a more decided character; the colic is complicated with symptoms of fever of a gastric character, the pain in the belly is more acute, the constipation more obstinate, there is pain and difficulty in going to stool, nausea and vomiting, with occasional headach, dyspnœa, and sense of constriction about the præcordia, the belly is hard and retracted, and there is often pain in passing urine. In the third variety we have a more formidable array of symptoms. The functions of the brain and spinal marrow are deranged, there are wandering pains in the extremities, and the patient has frequent attacks of violent convulsions, resembling those of epilepsy. He also labours under the abdominal symptoms, but in this stage they are not so well marked, or so distinct as in the former; the lesions of the functions of the cerebro-spinal system begin now to exhibit a greater degree of preponderance, and claim the principal share of the attention of a symptomatologist. In the fourth variety there is paralysis, without being preceded by the ordinary symptoms of abdominal or cerebral derangement. A medical friend of mine met with a case of this kind not long since. He was called to visit a child who had lost the use of his limbs. He went and found the child lying in bed perfectly quiet and easy, his intellect sound, and his spirits good, but labouring under complete paralysis of all his limbs. He inquired minutely into the history of the case, and made a most scrutinising examination, but, from all he could see or learn, there was not the slightest ground to suspect disease of the brain or spinal cord. There had never been any symptoms of colic. He was puzzled with the case, and tried one thing after another without benefit. At length he found out that the child's father was a painter by trade, and this led him to suspect that the symptoms might have some connexion with the poison of lead. He inquired, and was told by the mother, that a quantity of white paint had latterly been kept in the room, and that it was impossible to keep the child from it. He instantly had the paint removed, a free current of air admitted into the room, and by the use of purgatives, assisted by stimulating frictions, the child recovered.

The following is the order of symptoms generally observed in this disease. First, we have the precursory, denoted by pain and sensation of weight about the epigastrium, a weak, small pulse, general languor and weakness of the muscular system, want of appetite, cold, clammy skin, a tremulous and coated tongue. At this period there is sometimes diarrhœa. Then comes some exciting cause, exposure to cold or wet, excess in eating or drinking, and the disease sets in with more or less intensity. The patient is attacked with dreadful pain in the belly, which differs from the pain of inflammation in this, that, so far from being increased by pressure, it is in most cases relieved. In fact, so decided is the relief produced in this way, that there is a case on record in which the patient used to get the greatest ease by making one of his fellow-workmen stand upon his belly. This relief from pressure is very generally observed in colicky affections. Indeed, so general is it, that you will hear it frequently stated, that all cases of colic are relieved by pressure. This, however, is not invariably true; for I have seen cases where the patients could not bear pressure, and where it required a careful examination to distinguish the symptoms from those of inflammation. The pain is of a twisting kind, and felt about the umbilicus; and, in connexion with this, there is scanty urine, with more or less pain in passing it, obstinate constipation, and a tense, hard, retracted state of the belly, from the violent contraction of its muscles. The upper portion of the belly is sometimes more retracted than the lower, and the pulsations of the abdominal aorta are unusually distinct. The pain remits, and then becomes exacerbated, and the patient's countenance is expressive of acute suffering. In that form of the disease, where there is a complication of gastric or bilious symptoms, the patient has a semi-

jaundiced look, a hot, moist skin, quick pulse, foul tongue, vomiting, hiccup, thirst, and epigastric tenderness.

In the third form, the chief force of the poison seems to be directed against the brain and spinal cord. There is vertigo, headach, stupor, and sometimes delirium; the patient has fits resembling those of epilepsy, but of longer duration, and violent convulsions, which sometimes continue with unabated intensity for twelve or even twenty-four hours. You will see those unfortunate creatures rolling and twisting in every form, sometimes doubled forwards, sometimes in a state of perfect opisthotonos, sometimes moving their limbs with the convulsive action of an epileptic, and foaming at the mouth. In addition to this, it is stated in the descriptions of this disease, that the patient loses his sight and becomes amaurotic; this I can confirm, for I have seen it more than once. It is a curious fact, too, that this blindness may come on before the other cerebral symptoms are developed. I recollect a case in which one of the first symptoms was blindness. The patient happened one evening to be indulging himself in whiskey punch, and was in a fair way of getting comfortably drunk, when, unfortunately, he found that all of a sudden he could see neither single nor double. He groped about in a very disconsolate state for his glass, but not finding it, and finding at the same time that he had lost his sight, he came to the hospital next morning, and shortly after his admission had a violent attack of convulsions. In cases of this kind I have generally found the pupils contracted. The patients toss about in bed, and are frequently found lying with their heads turned towards the foot of the bed. In some cases the breathing has been stertorous for a length of time, and the head fixed, but the fingers and hands were flexible. I have seen cases in which the coma disappeared, and was followed by perfect blindness, lasting for two or three days, and then yielding to treatment.

These symptoms, striking and extraordinary as they are, do not seem to depend on the same state of the brain as cases of other diseases which are accompanied by sanguineous determination to that organ. The reason I make this assertion is, that many of the most violent nervous symptoms, including profound coma, subside under the use of a stimulant treatment. I think we may look upon these symptoms as similar to what are termed the symptoms of the *nervous apoplexy* of the ancients. A case of this kind, which occurred in the Meath Hospital, is deserving of notice from the singular effect produced by treatment. The patient was in a state of profound coma, but the head was cool, and the arteries had no inordinate pulsation. If this was a case which presented the other symptoms of apoplexy, I would have prescribed bleeding, leeches, and cold applications. But I reasoned thus—Here is a case in which there is no evidence of the existence of inflammatory action. Opium has been found to relieve the abdominal symptoms of the disease,—may it not also relieve the cerebral? I ordered the patient to have a free dose of laudanum in camphor mixture. In a few hours he awoke, sat up in his bed, and next morning we found the symptoms of coma had completely disappeared. In two other cases of a similar kind, I have given opium and carbonate of ammonia with the most favourable result.

Dr. Clutterbuck mentions a peculiar symptom of this disease,—a kind of gouty inflammation attacking the great toe and followed by relief. I have not seen this. He states that the first joint of the great toe becomes red, hot, painful, and swollen, and that this remits by day and returns again at night. I have never seen this, nor have I ever seen those hard tubercles on the tendons in various parts of the body, which some authors have described.

After these symptoms we come to a new class, namely, the passive, characterised by paralysis of the muscles of animal life. It is remarkable that this paralysis seems to be principally a paralysis of motion, and that the power of sensation is seldom or never impaired. Generally speaking, the upper are more subject to paralysis than the lower extremities, and the right than the left arm. The latter circumstance is explained by assuming that the direct influence of the poison is more applied to the right arm. The paralysis of the arm is also frequently partial; the extensors lose their power, but the flexors do not in so great a degree. You will see a patient with his arm hanging by his side as if it were dead, but if you give him anything to hold he can grasp it firmly. I have known painters continuing to work with a semi-paralysed arm. There is also an atrophied condition of the affected part, and this sometimes comes on with such rapidity, that, in the space of a week or ten days, the affected limb will be scarcely half as bulky as the corresponding one. We cannot account for this remarkable emaciation on the principle of loss of motion alone, for the short space of time in which it occurs in many instances is opposed to our entertaining such an opinion, and we must look for some other explanation. On this point science affords us no satisfactory information.

This disease, notwithstanding all its terrible array of symptoms, is very seldom fatal. Hence the uncertainty which long prevailed as to its pathological nature. In the great majority of cases, where a dissection was made, the patients died of some other disease, which either occurred during its course, or had preceded it. All that appears to be established at present is, that there is no known organic change of the nervous system connected with this disease, that it occurs in all its forms without the co-existence of organic lesion,

and that its exciting cause is the poison of lead.

It was formerly supposed that all the preparations of lead, whether applied externally or used internally, were capable of producing colic, but this doctrine is at present considered very questionable. It was thought that metallic lead and all its salts were capable of causing the disease, but the morbid influence of this metal is now restricted by the best chemists and pathologists chiefly to its carbonate. This opinion I believe was first put forward by Dr. A. T. Thomson, the author of the London Dispensatory, in an interesting paper published by him in the tenth volume of the Medico-Chirurgical Transactions. The object of this paper is to prove that, of all the preparations of lead employed in pharmaceutical and other purposes, the carbonate is that which is chiefly poisonous, and that the acetate and sub-acetate are comparatively harmless.

You have all, I am convinced, heard of cases of colic produced by the external use of the acetate of lead, and you will see some cases in proof of this opinion in Darwin's Zoonomia and other writings. There is a case on record of a woman, who having poulticed her ankle with this preparation, for the cure of a sprain, got colic and fell into a state of marasmus. I know of a deplorable case of burn affecting the abdominal integuments, which was treated with a solution of the acetate of lead. After using it for a fortnight or more, symptoms of colic came on, which not being recognised the lead wash was continued, and the woman died in great agony. Dr. Thomson explains all this in a very satisfactory way. He shows that the solution of acetate of lead, when exposed to the air, attracts a quantity of carbonic acid, and is thus converted into a carbonate; of this I have very little doubt, for you will find that, by exposing a solution of the acetate of lead to the full influence of the air, the carbonate will be gradually deposited in the shape of a white powder. In the same way we can understand why it is that a solution of the acetate of lead, added to fermenting poultices, may be converted into a carbonate by the carbonic acid which is evolved. It is also a fact, that the acetate can be used internally for a long time without producing any thing like deleterious effects. I have given it for weeks together in full doses without its having been ever followed by colic, or any symptoms characteristic of the absorption of a poisonous matter. There are cases on record where as much as six drachms of this salt have been taken internally without producing any sensible morbid effect. As far as my experience goes, all those cases, in which the medical use of the acetate of lead has been attended with disagreeable symptoms, were cases in which it had been used as an external application. There were two cases in the Meath Hospital in which this medicine was used externally, in which colic and other indications of poisonous absorption took place, but not a single one in which its internal employment had been injurious. An excellent practical rule is laid down by Dr. Thomson, that, where you wish to employ the acetate of lead internally, you should take care to combine it with diluted acetic acid. Of the two combinations of lead with acetic acid, the sub-acetate is most liable to be decomposed and converted into a carbonate, so that, if you prevent this by mixing with the sub-acetate, or acetate, a certain quantity of distilled vinegar, there will be little or no chance of unpleasant symptoms being produced, even where the medicine is given in very considerable doses. We are, therefore, I think, justified in concluding that it is the carbonate of lead which is productive of poisonous effects, and that where bad symptoms have resulted from the use of the acetate it was in consequence of its being converted into a carbonate. I must, however, remark, that it has not been sufficiently proved as yet that the use of the acetate is *perfectly safe*.

It is an interesting fact, that many of the lower classes of animals are subject to this disease. Burserius was one of the first authors who directed the attention of medical men to this singular occurrence. I have got from my father an abstract of some observations made by him on this subject, during a visit to the lead hills in Scotland. He found that in the pastures among these hills, and in their immediate vicinity, cows, horses, sheep, dogs, and even poultry were subject to colic from lead. The symptoms, also, in these animals were observed by him to bear a very close analogy to those of the human subject. Thus, for instance, in cows there was obstinate constipation with suppression of urine, the poor animals seemed to suffer from violent twisting pain of the belly, and sometimes were thrown into a state of furious excitement, running wildly across the country. He learned also that during that period it was calculated that at least one-tenth of the cows in this situation had died of the effects of the poisonous absorption of lead. One of the most ordinary precursory symptoms was the animal becoming what is called hide-bound, this was followed by obstinate costiveness, and there was much apparent suffering, with panting, starting, and slavering from the mouth. Where the cerebral symptoms were most prominent the signs of abdominal irritation were by no means distinct, and this, as I have remarked, is the case in the human subject. In some, who had the head affected and ran wildly through the country, the secretion of milk was stopped, and this accords too with the effect of lead on the human female. Another remarkable circumstance is, that animals, living in the vicinity of these lead hills, have exceedingly difficult labours. Sheep are subject to epileptic convulsions and paralysis; dogs have the head principally affected, they run across the country slavering at the mouth, as if in a state of hydrophobia, but they do not bite, and are in

all respects perfectly harmless. In barn-door fowl the generative function was injured, and the hens reared or brought there ceased to lay eggs.

There is one fact mentioned in these observations, which tends to confirm the opinion of Dr. A. T. Thomson, that the poisonous effects of lead are produced chiefly by the carbonate. A distance of very few miles from the valley renders animals quite free from any liability to the disease, but if they should happen to stray into the immediate neighbourhood, and particularly into a portion of low ground, flooded during the winter months by a river, which runs along the valley from the mines, and which, in all probability, leaves behind an efflorescence of the carbonate of lead, they are very liable to be affected with colic. It is said, also, that the poison is produced by the volatilisation of lead in the smelting houses, the vapours of which are carried down the valley and through the neighbouring parts. Be this as it may, the Gaelic name of the valley signifies, the *poisonous vale*, and, as it is very probable that this name had been given in consequence of the deleterious qualities of the place long before the establishment of lead works, it tends strongly to favour the opinion that it is the water which contains the poison.

The mode of cure employed by the shepherds in this place is to give strong purgative injections, and remove the cattle from the influence of the poison, by sending them to new and healthy pastures. In this way they frequently recover, and if we look to the cause of the disease, its symptoms, or mode of cure, we shall observe a striking analogy between it and the colic from lead in the human subject. I shall conclude this subject at my next lecture, and then go on to diseases of the chest.

LECTURES

ON THE

PHYSICAL EDUCATION AND DISEASES OF INFANTS AND CHILDREN,

BY DR. RYAN,

At the Westminster Dispensary, 1833.

LECTURE XVIII.

Comparative Mortality among Infants in ancient and modern times—Evils and benefits of Foundling Hospitals—Mortality of Infants in different countries.

Gentlemen,—Among the numerous discoveries in medicine, there is nothing which can be more pleasing to the physician and the philanthropist, than the great diminution in the mortality of children. The vast destruction of infants excited the attention of many illustrious philosophers of different ages, whose opinions finally triumphed over ignorance and prejudices, and whose precepts have so materially protected human life. Besides the numerous writers on the management and diseases of children already quoted, there are a few among the moderns, who eminently deserve honourable mention—Dr. Watt, of Glasgow, Sir Gilbert Blane, Bart., Dr. Underwood, Dr. John Clarke, Mr. Milne, Dr. Caspar, MM. Gardien, Leroy, Capuron, and Villermé, Mr. Roberton, of Manchester, and Dr. Bisset Hawkins.

These remarks having been premised, I shall now proceed to give an account of the comparative mortality among infants in ancient and modern times.

In ancient ages it was a custom in many nations to destroy all delicate infants. The barbarous and unnatural crime of infanticide was common until the establishment of Christianity, which taught that every human being, whether strong or weak, was a fellow-creature, an heir to the same high destiny, and entitled to care, protection, and support. Infanticide could not exist under this unequalled system of religion, and wherever it extended its benign influence, the destruction of human life was no longer allowable. In pagan countries the most revolting modes of child murder were practised. The ancient Persians buried their weak and delicate offspring alive. The laws of many of the Grecian states enforced infanticide, as it was held that the number of children should be limited, and that those who arrived at the adult age might not produce degenerate citizens. The ancient Carthaginians, Phœnicians, and Chinese, were notorious for the barbarous treatment and murder of their children. This horrible practice prevailed within a recent period in India, until abolished by the Marquis Wellesley, Mr. Duncan, and Colonel Walker. It is stated by a modern writer, that in the provinces of Cutch and Guzerat 3000 children were sacrificed annually.—(Buchanan's Researches in Asia.)

As civilisation advanced, asylums were established for the sick poor, for lying-in women, and for foundlings, and these have most materially diminished the mortality of infants, as will appear by the statistical reports I shall submit to your consideration.

I cannot at all agree with Malthus, Beck, Hawkins, Roberton, and others, that the utility of foundling hospitals "under any system of indiscriminate admission, is highly questionable. It will presently be seen that they have done very little towards the *preservation of infant life*; and it is certain that the facilities which they afford corrupt maternal instinct, and offer a premium to seduction. Altogether we have reason to congratulate ourselves that England contains so few, and that the only one in Great Britain (of whose existence we are aware) subsists under limits which counteract abuses.

"The Foundling Hospital of London deserves priority of mention, not merely on account of its excellent economy, and the good health of its inmates, but from its standing

alone in the principle of rejecting secret or indiscriminate entries. It acted originally on the same system as other foundling hospitals, but has happily changed it, to introduce examination of the mother's previous character, and a special application on her part. So far is this difficulty from encouraging infanticide, that the crime is rare in London; and far from being unfavourable to the preservation of infants, in scarcely any situation is their death so probable as in the hospitals where they are admitted clandestinely."—(Hawkins, Elements of Medical Statistics.)

Now, it appears to me that of all our charitable institutions there are none more humane than foundling hospitals, which afford protection and care to helpless infants, and show a benevolent tenderness towards the feelings of those distressed creatures who are compelled by poverty or by shame to avail themselves of the benefits of such institutions for their offspring. At the Paris hospital, no observation is made, no impertinent or unfeeling question is asked; the infants are received in silence, are reared with care to maturity, and provided for, unless circumstances enable the parents to claim them, when they are cheerfully restored. Such asylums prevent infanticide, and I may mention a corroborative circumstance, that so frequent was this crime some years ago in Dublin, near the site of the Foundling Hospital, before the erection of that institution, that the place was called "Murderer's Lane." Now the crime of child murder is seldom heard of in the Irish metropolis, because all children presented at the hospital, whether born in the city or in the country, are received without any questions being asked. The indiscriminate admission of infants is therefore a blessing and not an evil, and is an effectual preventive to the unnatural crime of infanticide. Here, then, is a positive proof of the justness of my opinion.

The indiscriminate admission of illegitimate or abandoned children into foundling hospitals, does not appear to me to be so highly questionable as the above authors imagine. Religion and humanity are opposed to the sacrifice of human life; and the admirable spirit of Christianity, which led to the establishment of such institutions in most civilised countries, is a proof of the validity of my conclusion. I should like to be informed what would become of illegitimate children in those countries where there are no poor laws for their support, and, in reality, for the encouragement of immorality, were there not indiscriminate admissions into foundling hospitals? In France and Ireland where there are no poor laws, there are indiscriminate admissions, and it remains to be proved whether the crime of infanticide is more common in either of these countries than in this; nor is the number of illegitimate children greater, nor, in the opinion of many, so great. In this section of the nation there is not indiscriminate admission into the Foundling Hospital, but there is indiscriminate support allowed by the poor laws, "and it is certain that the facilities, which they afford, corrupt maternal instinct, and offer a premium to seduction." It cannot be denied that any man in this part of the kingdom, of whatever rank or calling, may have an order of affiliation awarded against him, on the oath of the most abandoned and profligate female, though it is proved by several witnesses, that she might have more properly accused any one of many individuals. Is this not offering as great a premium to immorality as foundling hospitals?

I therefore cannot perceive, so far as morality is concerned, that we have just reason to congratulate ourselves on having so few foundling hospitals, or on "the Foundling Hospital of London standing alone in the principle of rejecting *secret* or *indiscriminate* entries." There is no occasion for either, as both are encouraged to the fullest extent by our poor laws. Neither is there the slightest necessity "for examination of the mother's previous character" at the police offices. If there is not indiscriminate admission of infants at the Foundling Hospital of London, there is indiscriminate protection afforded to them, by the reputed fathers, or workhouses and parishes, and a preponderating majority of mothers will, from natural affection, prefer rearing their children, when allowed the means of support, to parting with them for the advantages of any asylum. In Ireland where there is no means of support afforded by law to the poor, maternal affection must yield to dire necessity; and the children of the indigent, as well as those that are illegitimate or abandoned, are indiscriminately received at the Foundling Hospital, sooner than allowed to perish, with the charitable intention of preventing the abandonment of infants, and the unnatural crime of infanticide, which is rarely heard of in that part of the United Kingdom. I am gratified to admit that child-murder is rare, or, to speak more correctly, comparatively rare in London; but the reason is that there is no motive to lead to its commission, except shame, which is, perhaps, equally powerful in all civilised countries. Lastly, I very much question whether the mortality is equal or greater in foundling hospitals in which there is indiscriminate admissions, than in those in which there is not. It is not fair to draw conclusions from the mortality in institutions which are managed so differently. In some the offspring of the most diseased and profligate are admitted, while in others those only of moral individuals. As to the mortality in such establishments, compared to that of society, I believe there is, in general, very little if any difference. It appears by the result of an investigation made by Dr. Coombe at the British Lying-in Hospital, and published by Dr. Underwood, that several women who had borne three children had lost two; those who had four, three; five, four; six, five; seven, six; eight, seven; nine, eight; ten, nine;

eleven, eight and ten; twelve, ten and eleven; fourteen, eleven; and several of the mothers of the different numbers had lost them all. Dr. Merriman instituted a similar inquiry at the Westminster General Dispensary, and the result was similar; and he adds, "there was scarcely an instance of any woman who had preserved all her children, if she had borne more than three." The cause of this immense mortality is mismanagement of diet, clothing, &c., as already described under the head of Etiology of Infantile Diseases. The mortality is much less in foundling hospitals, as will appear hereafter.

It is impossible to ascertain the absolute mortality in London and Westminster, where imperfect registries are preserved; as, according to Mr. Rickman, the compiler of the Population Returns, there is a deficiency of 8000 burials annually, on account of the exclusion of dissenters, who are interred in cemeteries of their own, of whom no account is given by the worshipful company of parish clerks. The comparative mortality can only be supposed from imperfect data.

The defect of accurate bills of mortality is about to be remedied by an act now before Parliament (May, 1834), for an accurate registry of all the births, marriages, and deaths, in England and Wales; and a General Statistical Society has lately been formed in London for the same object.

Though the existing records are imperfect, yet it is pleasing to observe that the mortality of infants and children is wonderfully diminished during the last century, and that the general mortality is very nearly the same in all parts of Europe. This fact clearly establishes the inference, that the practice of the healing art is not so different in this kingdom and continental nations as has been too generally supposed.

I shall now refer to the bills of mortality, inaccurate as they avowedly are, in proof of the preceding statements.

On referring to a table of the bills of mortality for forty years, from 1760 to 1799, inclusive, taken from the Annual Register, the number of burials was 836,285 of subjects, of which 281,408 died before they attained two years of age, and 113,393 died before they reached the age of ten years. According to this account, nearly a fourth die under two years of age, and of the survivors about a fifth in the succeeding eight years. The mortality in the British Lying-in Hospital, London, in 1750, was 1 in 15; in 1780, 1 in 44; and from 1789 to 1798, 1 in 77. In Paris, in 1750, the deaths were 1 in 15. In the Edinburgh Lying-in Hospital, from Sep. 26, 1826, to Sep. 29, 1828, there were born 289 males, and 281 females, of which 12 died and 29 were still-born. In Prussia, the still-births are 1 in 32, and in Hanover about 1 in 30.

In 1780, the deaths between the age of five and ten years at Warrington, Chester, and Carlisle, in 10,000 inhabitants, were 14⅓, 13, and 12, omitting small fractions. In the Blue-coat Hospital of Manchester, the deaths between 6 and 14 years of age were 1 in 520, annually. At the Ackworth School, superintended by the Society of Friends, the mortality was 1 in 400, annually. It is a remarkable fact, the Ackworth Foundling Hospital was attended by Dr. Buchan, who, in his "Domestic Medicine," and another work, was chiefly instrumental in eradicating the prejudices and anile errors in the management of the rearing of children. Humanity is very deeply indebted to him, though he is seldom, scarcely ever, quoted in this country; while he is considered entitled to great praise by the best French and German authors on the physical education of children. He however attempt an impossibility when he professed to make medicine no mystery.

According to Dr. Casper, of Berlin, the proportion of still-born infants in London and Vienna is 1 in 24, Paris and Dresden 1 in 19, Hamburg 1 in 15. (Beiträge, &c.) It is scarcely necessary to observe, that the proportion of still-births and abortions is greatest among unmarried women. Such infants are the fruits of vicious generation and of miserable, dispirited mothers.

The mortality in Paris was very great from 1771 to 1777; of 39,951 infants, 21,985 died during the first month, 3491 during the remainder of the first year, and at the end of 1777 only 4711 were alive. From 1789 to 1813, 109,650 were admitted into the Foundling Hospital, and only 39,330 died. (Fodere.) From 1786 to 1789 the mortality amongst infants in Paris was, according to Gardien, 90 in 100; and since the year 11 (1805) to the year 13 (1807), 64 in 100. The mortality at Vienna, in 1806, was 61 in 100, and in 1807, 58 in 100.

In the Foundling Hospital of Vienna from 1783 to 1793, the mortality was 1 in 2 before the fifth year, and in 1810, 1 in 4⅓.

At Stockholm, in 1822, 525 infants were admitted, of which 101 died—about 19¼ per cent; 15 died the first month, 6 the second, 19 the third, 15 the fourth, 10 the fifth, and 3 the seventh.

At the Petersburg Foundling Hospital in 1787, the admissions were, on an average, 10 a-day, the deaths 100 a month, or 3650 admissions and 1,200 deaths.

In the hospital at Moscow, for twenty years subsequent to 1786, 37,000 infants were received, of whom 35,000 died. In 1811 the admissions were 2517, the deaths 1033. In 1812, the admissions were 2699, deaths 1348. (Hermann. Mem. de l'Acad. des Sciences de Petersbourg. T. ix. 1824.)

At Archangel, in 1812, the foundlings were 417, the deaths 377.

In Spain, the mortality among infants and children far exceeds the proportion of births.

At Lisbon, one birth in three is illegitimate, and at Oporto one in two.

The mortality at Florence is 1 in 10, at

Naples, 1 in 5, at Palermo 72 in 100. (Bulletino Universali di Scienze, &c. No. 52. 1825.)

In Paris, the number of foundlings admitted in 1829 was 1000: of these 251 died within the first few days, 235 on the road to the nurses in the country, and, at the end of the first year, only one half were alive.

The mortality in the London Foundling Hospital, for twenty years ending in 1827, from the period of admission to the age of 14 years, was 25 per cent. (Hawkins on Medical Statistics, 1829.)

During twenty-one years ending in 1796, 10,272 children were admitted into the Infirmary of the Dublin Foundling Hospital, and 45 only recovered. Of the gross number 1,201 were affected with syphilis; but, of late years, no more than 1 in 30 labour under that disease. This mortality led to a parliamentary inquiry; a new system of management was introduced; and wet-nurses were employed instead of dry-nursing or spoon-diet. From June 1805 to June 1806, 2168 infants were admitted, and the deaths were only 486. From 1800 to 1811 the number presented by distressed parents was 11,111, and 14,974 abandoned infants were received.

The number of abandoned children in Paris in 1827 was 8084. (Annuaire pour l'An, 1829.)

The mortality in the Dublin Foundling Hospital from 1781 to 1791 was immense, and would appear incredible had it not been attested by the records of the Irish House of Commons for the latter year. During this period of ten years 19,420 were admitted, of whom 17,420 were dead or unaccounted for; and that of 2180 admitted during the year 1790, only 187 were then alive. In a statement of a committee of the same house, reported May 8th, 1797, that within the quarter ending the 25th of the preceding March, 540 children were admitted into the hospital, of whom 450 died. That from the 25th March to the 13th April (nineteen days), 116 infants were admitted, of which number 112 died. That within the last six years 12,786 children were admitted, of whom 12,651 died, leaving 135 alive. In the Princely Hospital of Vienna about one in nineteen were preserved. In Moscow, 37,607 children were admitted in the course of twenty years—only 1020 were sent out. The mortality in the London workhouses used to be equally great.

In the year 1827, the Parisian Foundling Hospital was said to be in the most efficient operation. On these statements, Mr. Roberton, of Manchester, from whose work they are cited, observes,—"No perversion of benevolence was ever half so monstrous as the support of such establishments. They are a disgrace to any country; and, by the licentiousness which they foster, inflict upon it a just and fearful punishment."

This sweeping condemnation of Foundling Hospitals appears to me to be unjust. The mortality arose from mismanagement, want of parental care, dry-nursing, small-pox, and many other causes which no longer exist. It has been shown in the preceding account of the mortality of children, that the deaths are comparatively few in Foundling Hospitals at present, in consequence of the better management of physical education, the employment of wet-nurses, the abandonment of hand-feeding, the superior ventilation and cleanliness of the institutions referred to, and many other changes founded on reason and science.

It is worthy of remark that the Dublin is the only Foundling Hospital in the United Kingdom, which receives any infant, abandoned or left at its doors, without inquiry. In 1815, it was thus spoken of by Dr. John Clarke. "All newly-born children on being presented are indiscriminately admitted, without any recommendation, and are often then in a dying state. When this is not the case, the infants are sent into the country to be nursed with no superintendence, so that the diseases of early infancy cannot be observed. The writer has great pleasure in bearing his testimony to the neatness, cleanliness, good order, and general arrangement of the Foundling Hospital in Dublin."

The number of children in the Foundling Hospital of London is generally about 310, and 130 in the country. They are received at any age under twelve months, and are immediately sent to wet-nurses in the neighbouring counties. The nurses receive a premium on rearing the children to a certain age, and when ill they have regular medical attendance. The children remain five years in the country, are educated on their return, and supported in the Hospital until the age of fourteen or fifteen, when they are apprenticed or sent to service. Their appearance is healthful, and, during a period of twenty years to December 1827, the mortality from the period of admission to fourteen years of age was twenty-five per cent.—(Dr. Hawkins, op. cit.) Children are not admitted without inquiry into the condition of their parents, and those that are illegitimate are supported by the parishes or poor laws, which do not exist in Ireland. Hence the numerical difference between the London and Dublin Foundling Hospitals.

Mr. Roberton, of Manchester, in his valuable work on the Mortality and Physical Management of Children, published in 1828, gives an account of the Manchester Lying-In Hospital from April 1821 to 1825. During that period 2056 children died under the age of ten years, and of these 994 died in the first year,—of convulsions 332, of measles 299, infantile decline 260, small-pox 187, dentition 181, inflammation of the lungs 155, hooping-cough 150, water in the head 125, bowel complaints 85, croup 41, inflammation of the bowels 38, white swelling 33, cholera 21, consumption 18, fits 18, worm-fever 11, scarlatina 8, &c. I omit the diseases which were few in number.

He gives another accurate table, showing that of the above number—

146	died under	1 month
116	between	1 and 2
74	. .	2 and 3
201	. .	3 and 6
218	. .	6 and 9
193	. .	9 and 12
501	. .	1 and 2 years
246	. .	2 and 3
210	. .	3 and 5
157	. .	5 and 10

The mortality in Paris in 1828 was—889 boys and 852 girls died of convulsions, the greatest number in the first three months of life, and from the first to the fourth year; of dentition, 154 boys and 161 girls; of measles, 120 boys and 202 girls; of small-pox, 85 boys and 35 girls; of hooping-cough, 78 boys and 82 girls; of croup, 77 boys and 75 girls. The infants born dead or prematurely were 682 boys and 564 girls *; and those that died during the first three months were 215 boys and 298 girls.—(Rapport par le Conseil de Salubrite.)

The number of infants admitted in Paris in 1829 was 1000, of which 251 died within the first few days, and 235 more on the road to the nurses in the country. At the end of the first year one half only remained alive.

It appears that from 1815 to 1822, the number of foundlings admitted into the Belgian Hospitals was 3,080. In 1832 there were in the Province of Hainault alone 1,870, in that of Brabant 2,244; and in 1833 the total for the whole kingdom gives the enormous increase of 6,968 foundlings, and 2,337 abandoned infants, making 9,805, three times the average periods of Dutch dominion. The late revolution affords a sufficient explanation of the increase, as it is a well-known fact, that the number of illegitimate infants is much greater in every country after a civil war. This was often observed, as will appear from subsequent statements.

There is no Foundling Hospital in Edinburgh, as the opinion is maintained in that city, that such an institution would be injurious to morality. There are, however, two public institutions for the admission of boys from the age of seven to fourteen, Heriot's and Watson's Hospitals. The mortality in the first, from 1811 to 1828, was 1 in 235, and in the other 1 in 123.4. In the Orphan Hospital, which contains boys and girls, the deaths from 1815 to 1823, were in the proportion of 1 in 37.5.—(Edin. Med. and Surg. Journal, 1828, v. xxix.)

In Glasgow, from 1782 to 1788, the average annual mortality was one in 26.7, and of the deaths 53.48 per cent. were of children under ten; that is among every 1000 of the population there died annually 37.45, of whom 20.03 were under ten. From 1807 to 1812 the annual mortality was 1 in 40.8, and of deaths 55.43 per cent. were under ten; that is in every 1000 inhabitants 24.51 died annually, of whom 13.58 were under ten, so that the mortality among children had decreased, in the latter periods, two-thirds.

The mortality which occurs in the first months of life, according to Mr. Roberton, is the following:—In the Dublin Lying-in Hospital 1 infant in about 6½ die under 15 days old. In the Westminster Lying-in Hospital the mortality was less; of 1,400 infants 1 in 16 died before the end of two months *. In the Manchester Workhouse of 347, 53, or two-thirteenths died before the 35th day; under 8 days 22; in the next 7 days 10; from the 14th to the 22nd day 7; from the 22nd to the 29th 7; and 7 more by the 35th day.

Of 3894 deaths under the age of ten years, taken from the Chester, Northampton, and Warrington mortality bills, 400 died under 1 month.

218	between 1	and 2
139	2	3
282	3	6
317	6	9
347	9	12
1,303		

Dr. Underwood states that of 2,785 infants, who died during the first month, 1292, more than 46 in 100, expired the first day.

The following summary of all Mr. Roberton's tables shows the mortality at the different ages, under 10 years, in cities, smaller towns, village parishes, and agricultural parishes:—

1st. Cities and Large Towns.

	Under 2	2 & 5	5 & 10	Total under 10.
London . . . Liverpool . . Glasgow . . Manchester .	35.12	11.88	4.39	51.93

2nd. Smaller Towns and Cities.

Chester . . . Carlisle . . . Warrington Northampton	31.49	10.83	4.65	46.97

3rd. Village Parishes.

Spalding . . Lynn . . . . Eccles	35.36	7.01	3.54	45.90

4th. Agricultural Parishes.

Winwick . . Grappenhall Grt. Shefford Ackworth . . Holy Cross .	24.37	6.99	4.04	35.40
Grand Average Total	31.58	9.18	4.15	44.91

* Dr. Clark, of Dublin, has found the male head a little larger than that of the female.

* See Clarke and Bland's Reports Phil. Trans. vol. 71–76. As these reports were made many years ago, and indeed many others in this account, they cannot be relied on.

According to Susmilch's German tables the mortality is 43 per cent. for the country, 47.7 for small towns, and 50.2 for large cities. In France, according to Duvilard, it is 44.89 on the average of the kingdom. In England, for ten years before 1811, there died annually 1 in 47.30. In Wales 1 in 58.57.—(Milne on Annuities).

A CASE OF FATAL EFFUSION OF BLOOD INTO THE PERICARDIUM, WITH DISSECTION.

BY JAMES CARSON, M.D., LIVERPOOL.

The following case of a disease which is of rare occurrence, which is obscurely marked by the accompanying symptoms, and which can scarcely fail to produce unusual excitement by the unexpected fatal termination, seems highly deserving of being recorded.

Mr. W., a gentleman about 52 years of age, of a tall and robust form, clear complexion, subject occasionally to dyspeptic affections, though of very regular and temperate habits; of an active disposition, though his occupation was sedentary and confining; had been for twelve months affected with considerable anxiety of mind, in consequence of the doubtful issue of some building speculations. Towards the end of Lent, which he had rigidly observed according to the injunctions of the Catholic church, on 11th of March, a day exempted from the prohibitions respecting diet, he had eaten freely of beef-steaks with onion sauce. He was, at that meal, sparing as usual in the use of wine. On the evening of the following day he was engaged, in a fatiguing and rather anxious way, with the business of a club, of which he was treasurer. On his return from the club, about 11 o'clock at night, in company with two of his friends, when he had nearly reached his own house, he was seized with faintness and debility to such a degree, that without the assistance of the friends who accompanied him he would not have been able to have kept his feet. Soon after his arrival at his house he was visited by Mr. Bromilow, his medical attendant. He described himself as faint and exhausted; complained of an obtuse, heavy pain at the præcordia, and was affected with flatulent eructations. His respiration was free, his pulse 70, and regular, though weak. He had no affection of the head, or pain anywhere, excepting as described in the chest. His bowels had been opened that day. Mr. Bromilow ordered an antispasmodic draught, and left him with directions to take something warm and go to bed. He took the draught, and a weak glass of brandy and water. At three o'clock he sent for Mr. B. again, and, as the pain in the chest was not abated, he expressed a wish to be bled, which Mr. B. agreed to, more with the hope of satisfying his mind than from any great necessity for that measure being indicated by the symptoms. He lost a pint of blood. An opiate was then administered. At this visit Mr. B. examined the chest more minutely; he applied his ear to the different regions of the naked chest, but perceiving no unusual sound, or vibrations, concluded that the heart, lungs, and large vessels were in a sound state. At five o'clock A.M. I visited him; he felt cold, perspired gently, and chiefly complained of pain in the chest, which he described as wearisome and oppressive. It was not increased by taking a full inspiration. He had vomited a little in the course of the night, and had discharged some of the onion sauce he had taken the day preceding the attack. He was much troubled with flatulency, and belched frequently, but was not relieved by it so far as regarded the pain in the chest. His pulse was regular, the heat of the body natural, and respiration good. He had had no sleep.

From the information given by Mr. Bromilow, connected with my own observation, I considered that nothing could be indicated by the symptoms beyond an affection of the stomach, which is known to exhibit itself in such anomalous forms. He took four grains of calomel, and two of opium. We visited him again at half after eleven o'clock. He had had little sleep. The symptoms remained the same. He was ordered an aperient mixture, and we proposed to visit him again at seven o'clock. At this visit I replied to the anxious inquiries of the family—that we did not see any cause for alarm; that the complaint seemed to arise from indigestion; and that I had no doubt he would recover. At three o'clock in the afternoon he sent for Mr. Bromilow, as the pain still continued unabated, and wished to know if he might have anything to rub the part with. The bowels had not been opened, and he had had little or no sleep. A short time before seven o'clock, the hour at which we had proposed to visit him, and at which I was

prevented from attendance by an urgent call to a distant part of the country, Mr. W. was seized with what the family conceived to be a fit; and, a short time after the arrival of Mr. Bromilow, expired. In consequence of my unavoidable absence, other physicians were called in, and two arrived, but not until after the death of the patient. I applied for permission to open the body, which was granted. The body was examined twenty-four hours after death, by Mr. Bromilow, in my presence, and in that of my son, Dr. Carson, jun. The following were the appearances on dissection. Upon opening the chest, the lungs on both sides were perfectly sound and collapsed. But, notwithstanding the collapse, the chest was filled more than it usually is, when the lungs are sound. This indicated the existence of some foreign substance, or morbid enlargement of some of the organs. The pericardium was found accordingly to be immensely distended by some fluid, which, when this bag was opened, was found to be blood, partly liquid and partly coagulated: the quantity was not less than three pints. It was purely blood, without the admixture of any fluid indicating inflammatory action. The external surface of the heart, and internal surface of the pericardium, were examined carefully, but no ruptured vessels, from which the blood might have flowed, were discoverable on either of these surfaces. The heart itself was perfectly sound, the valves were in good condition, and no disease existed in any of the large vessels. The lungs were free from adhesions, and were every where sound. The other viscera were in a sound state. A great deal of care and time were expended in trying to discover the source from which the blood had flowed into the pericardium, but in vain: a slight ecchymosis was observed about the root of the pulmonary artery. Dr. Baillie, in his Morbid Anatomy, says, "Cases have occurred, though very rarely, in which a large quantity of blood has been accumulated in the cavity of the pericardium, but where no rupture could be discovered after the most diligent search, either in the heart itself, or in any of its vessels. This appears very wonderful, and not at all what any person would expect *à priori*. Two conjectures have occurred to me, to explain this phenomenon: 1st, that the blood-vessels on the surface of the heart have lost their compactness of tissue, so that the blood may have escaped by transudation. The other is, that the blood may have been poured out by the extremities of the small vessels, opening on the surface of that part chiefly of the pericardium forming the immediate cover of the heart, from their orifices having been to a very uncommon degree relaxed."

There is a case related by Dr. Alston, in the 6th vol. of the Edinburgh Medical Essays, in which the disease of the chest was of long standing. Three pints of blood, which was partly coagulated and partly mixed with lymph, were found in the pericardium. No ruptured vessel was discovered either on the outer surface of the heart, or the inner surface of the pericardium. Upon pressing the heart a bloody serum oozed out of a great many orifices on its surface, and principally near its base. No disease was discovered in the interior of the heart or large vessels. Dr. Baillie refers to two cases of extravasation of blood into the cavity of the pericardium, in which the source of the hæmorrhage could not, after the most careful examination, be discovered. In both these functional disease of the heart had been observed for some time previous to the death of the patient.—Vide Medical Observer, vol. x. p. 330. Memoirs of Medical Society, vol. i. p. 238.

Various opinions have been advanced respecting the sources from which, in the above cases, the blood was derived. One of the suppositions made by Dr. Baillie appears to me to approach the nearest to the truth, which is, that the blood had oozed out of the small vessels on the internal surface of the pericardium immediately covering the heart. It is probable, I think, that the oozing, particularly in the case now narrated, arose from the condition of the blood, and the relaxed state of the fibres. It would appear that the disease was general, and that the shivering, faintness, and depression of spirits were not the effects of the flow of blood into the pericardium, but that this last was, like the affections stated, the effect or symptom of the general disease,—that in fact there existed a morbid state of the whole system, similar to that which takes place in purpura, in some kinds of epistaxis, hæmatemesis, and in bleeding from the bowels in typhus fever. The pain in the chest was, in the first place, occasioned by the admission of

blood into a cavity not accustomed to the stimulus of that fluid. There is no reason to suppose that the action of the heart would be mechanically affected until the quantity of the blood was pretty considerable; for the blood would readily follow the dilatation of the pericardium, occasioned by the elasticity of the lungs, when the chambers of the heart had finished their contractions. No sound was perceived on carefully examining the chest. Indeed no sound could be excited, as no fluid was poured from one vessel into another. For as the auricles expand, as the ventricles contract, the change of place in the constituents of the fluid in the pericardium would be inconsiderable, and made with quietness.

There does not appear to be any symptom in this case that would have warranted the medical attendants in giving an unfavourable prognosis. As a matter of prudence, a less favourable one might have been made, but the same prudence would not permit the expression of a favourable prognosis in any case whatever.—*Liverpool Medical Journal.*

A CASE OF HYDROPHOBIA.

BY D. MACRORIE, M.D.,

Physician to the Liverpool Workhouse and Fever Hospital.

On the morning of the 1st instant, I was called out of bed to visit Mrs. S., of lymphatic nervous temperament, who had been supposed to be dying in the night. She complained chiefly of a difficulty in swallowing, with a sense of straitness, or closing up, of her throat. Her pulse at first was numbered at 130 to 140, and speedily became pretty steady at 120; respiration irregular, and interrupted at times with a sort of shudder, or sigh; tongue covered, chiefly in the centre and towards the basis, with an ash-coloured mucous coating; bowels had been moved two or three times in the course of the preceding day and night; she had thirst, but was afraid to drink; skin not warmer than natural; countenance expressive of anxiety and suspicion, with the eyes somewhat suffused, and constantly moving from one object to another. Said there was an unusual beating at her breast; and replied to inquiry, that she heard at times the sound as if of bells in her ears. She had slept little or none for three or four nights and days. On her daughter asking her to let me see her drink, she replied, that *she* could, as well as herself, show me the way, and declined. Finding that the family medical man had been in attendance for two or three days, I said, that his residence being but very little out of my way, I would call on him; and that we should send her some medicine, and visit her again together, very soon. She requested that the *medicine might not be in the form of a liquid, as she could not take it if it were.*

I found that the family medical attendant had been applied to, in consequence of a pain affecting the right side of her chest, in the neighbourhood of the mamma, which extended to the shoulder, and, subsequently, down the arm, which had seized her in a moment while weighing something in the shop. That for this, he had recommended a few leeches, some pulv. ipec. comp., with calomel. For a purgative saline mixture in the morning, which was constantly vomited, pills, composed of compound extract of colocynth with a little croton oil, were substituted. The following day, she having complained of a peculiar sense of pain behind the sternum, a blister had been applied there; and she had, likewise, a few doses of calomel and opium in the form of pills, as well as some compound spirits of lavender to drop on sugar, and take on account of flatulence, with which she thought she was much annoyed. I suggested the beginning immediately to give her, every hour, four grains of extract of hyoscyamus, with four grains of camphor, formed, by means of two or three drops of alcohol, into three pills; and that we should visit her in three or four hours, which was agreed to.

Hora, 11, A. M.—Says she feels rather better. Pulse irregular and intermittent. Respiration as before. Cannot bear any thing to approach her suddenly, "because it takes her breath." This symptom, it appeared, was observed first on the evening of the day before yesterday. A door leading to an adjoining apartment was noticed to have something hung carefully upon it, and on enquiring the reason for it, she said—the air that came from it "seemed to suffocate." I now left the bedside, and subsequently the room, for the purpose of ascertaining from her husband, whom I had not seen at the former visit, whether she

had not received some injury from a dog or cat. He replied, that she *had* been bitten by a young dog; but that it happened between three and four months ago. The nature of the case being now perfectly clear, the usually fatal tendency was pointed out to him, respecting which, however, he seemed, immediately from the inquiries, to be in a painful manner impressed. We deemed it prudent to suggest, that, if agreeable to him, the opinion of another physician be taken, in consultation. This he altogether declined, considering it, as he said, quite unnecessary.

When we returned to the bed-room, she was asked to take a drink; after hesitating, she at length consented to try, requesting she "might not be looked at." She took hold of the glass—which, according to her previous desire, contained but little fluid—in a snatching manner, and, having held it for some time in her hand, looking around her with much expression of suspicion, suddenly threw the liquid into her mouth, and, with a very peculiar convulsive effort, got into the œsophagus the greater part of it. For a few seconds afterwards, she was in a state of considerable agitation. Some slight incoherency, it was said, was yesterday observed; and though no allusion had ever been made in her hearing regarding the nature of the affliction with which she was assailed, she appeared to be despondent as to her recovery, unless some change speedily took place in her sensations. The bowels have just now acted. Evacuations of healthy appearance. Three doses of pills have been taken.

Contin. Pil. quâque horâ.

Applice quam primum Emplast. Cantharid. Nuchæ posterori; partè Nuchæ primo optime affrictu cum Liq. Ammoniæ curaturque postea pars excoriata. Unguento infra prescript.

℞. Morph. muriatis, gr. iv.,
Unguenti hydrarg. fort. ʒj. M.

Hora 3, P.M.—She is now sitting up by the bed-side. Action of the heart very irregular, and pulse intermittent. Respiration, however, more free from sudden sighing. Apprehension of fluids nearly the same; and refuses to attempt to swallow if observed by any one, though she is thirsty, and the tongue is coated and rather dry. Complains much of narrowing, or closing up, of the throat. Blistering of the neck not yet managed, the ammonia having been but imperfectly applied. It is now renewed, and has been done freely. She takes her pills pretty well, and expects they are to do her good.—Contin. pil.

Hora 7½, P.M.—Appears more tranquil. Dread of liquids, and of swallowing them, less than formerly. Says she went of her own accord this afternoon to the washing stand, and washed both hands and face in the basin. A short time previous to this visit, a messenger came to my house, to say that the blister had not risen, and that she appeared not so well. The following was in consequence directed to be rubbed on the part:—

℞. Ung. hydrarg. fort.
Emplast. cantharid., ana ʒss.
Morph. muriatis, gr. v. M.

The part is now vesicated, a portion of it being quite denuded of the cuticle. To be now dressed, therefore, with the muriate of morphium and mercurial ointment, formerly ordered.

To continue the pills every two hours only, a third part of a grain of the powder of digitalis being added to each dose, and a tablespoonful to be taken every fourth hour of the following mixture:—

℞. Liq. ammoniæ acetat. ʒij.
Antimon. tartariz. gr. ij.
Mist. camphoræ, gr. v. M.

Hora 10½, P.M.—She is more tranquil, and still less timid about attempting to swallow liquids, though she takes very little, and dwells over it before she makes the attempt, accomplishing it after all with a similar struggle. Pulse, &c., the same.

Contin. pil. et mist. rept. ung. morphiæ.

Aprilis 2.—A messenger came to me early in the morning, to say that she had had a tranquil night, and was better.

Hora 10, A. M.—A good night, having slept about five hours composedly, and when she awoke, she took toast and water more unreluctantly. She has also eaten some cake and a little toast, and drank about a breakfast-cupful and a half of coffee. Speaks quietly and rationally. Says she feels a great deal better—indeed appears so. Pulse, on my first entering the room, about 120, not very steady. Soon afterwards it seemed to fall to 72; and examining the action of the heart by the ear, it was found to consist of a sort of

double contraction of its cavities, or of an incomplete and complete contraction, with the latter of which the number last mentioned of the pulse synchronised. She says the sense of narrowing or filling up of the throat is diminished, and that she does not dread the use of liquids so much as she did. She can also now allow a person to approach her without sobbing or shuddering as formerly.

Contin. Pil. Mistur. et Ung. Hydrarg. cum Morphiæ muriat.

Hora 3, P.M.—About an hour after last visit, the sense of stricture in the throat, with increased dread of swallowing, returned with renewed severity. She is again in much agitation, and all the symptoms already described are much aggravated. She falls suddenly into an apparent state of coma, while propped up in bed—the eyes being turned completely upwards under the eye-lids—the breathing becoming stertorous, and in a few seconds she suddenly starts up, as if in a state of alarm, and talks, or mutters, something incoherently—dropping very soon into the same state. She then *picks at the tip of her tongue, as if to bring something from thence.* When spoken to, she answers abruptly—appears alarmed, and if asked to put out her tongue, she stares vacantly for a little, and then, as if with a convulsive effort, protrudes it with some violence. The face sometimes is suddenly suffused, and then as suddenly becomes pale. There is much restlessness, and she requires frequently to be raised up to the sitting posture. There is much expression of suspicion again exhibited in the countenance; there is shuddering from the approach of any one; nor can she bear the light from the window to fall upon her face; and her arm, when taken hold off, is felt to be affected at times with a sort of twitching, analogous, in some degree, to that which occurs in chorea. She takes the pills and mixture; and, at her own request, has had six leeches applied to her throat, which bled freely, by which she thinks she was a little relieved. No stool.

Eight leeches to be repeated;

Contin. Pil. et Mistura;

Exhibeatur enema domesticum.

Hora 11, P.M.—Bad symptoms all appear to be considerably augmented. She is now frequently incoherent; at times irritable; and he has increased struggle and agitation in attempting to swallow. Glyster brought away very little. Pulse 146—irregular—small, and more compressible.

Rep. Enema. Contin. Pil. Mistur. et Unguentum Nuchæ.

To have the vapour bath at as high a temperature, and to remain in it as long, as she can bear it.

Aprilis 3, *Hora* 10 A.M.—The vapour bath not being procured, a warm fluid one was substituted, which, however, it appeared she much resisted, and in the struggle *bit her sister's finger.* There is at present an almost incessant action with the lips, tongue, and throat, accompanied with the emission of a sound which, in some degree, reminds one of the *barking of a dog;* this, the attendants say, "was very violent in the night." Her mouth contains a good deal of a frothy mucus, which she keeps endeavouring to part with, and at times to pull out with her fingers. She had talked during the night of dogs. Much delirium, restlessness, and agitation, and her condition is altogether most deplorable. Pulse rapid, irregular, and much more feeble; skin more warm; attempts to swallow are now distressing—almost beyond the power of description. Glyster operated very well.

Intermitte pil. Contin. mistur.

R. hydrarg. cum creta ℈j.

Pulv. ipecac. gr. i.

Sacchari albi 3ss. M. et in chart. sex divide, quarum capt. i. tertia quâque horâ. The vapour bath again recommended to be used, if it could be accomplished.

Hora 4, P. M.—Symptoms now rapidly progressing, though the attendants say she has been more tranquil since taking the powders. Pulse very frequent, thready—at times imperceptible; respiration hurried, irregular; pupils small and contracted; eyes more glassy; constant delirium; much froth coming from the mouth. From this period she gradually sank; and at half-past eight expired, it was stated, "in a kind of convulsion."

Having made further inquiry into the circumstances attending the bite of the dog, I learned that about a month before Christmas last, a little pup, two months old, which appeared to be not quite in its usual state of health from teething, and had, in consequence,

got some medicine, snapped frequently at Mrs. S.'s hands while nursing it, and bit the thumb and three fingers, as well as one of her legs, near the ankle. That the dog died the following day. That, in two days more, small blisters formed on the injured parts of her hand, which required poulticing, and were very painful and troublesome for about a week longer. After this time, she was in her ordinary health, and for a few weeks previous to the occurrence of the fatal malady had been better than usual. I learned, likewise, that her daughter, an only child, and two other persons, had their hands snatched at by the same dog on the same day; but neither was the skin in them broken, nor did any vesications follow. It only remains for me, in conclusion, to add, that an autopsy, after having been consented to, was subsequently withheld, and thus was prohibited an opportunity of perhaps adding another to the proofs on record, of the obscurity in which is still involved, the pathology, as well as the practice, in this most appalling disease. It were perhaps unnecessary, therefore, to have given to the world a detail of this case, were it not for the very great and most decided amendment which took place in all the symptoms, during from twelve to twenty hours—an amendment so marked, indeed, as to encourage some temporary hope of ultimate recovery; and which consequently might perhaps throw a ray of light, however faint, upon the at present obscure path in which all have to tread, to whose unhappy lot it falls to have the management of so intractable a malady.—*Liverpool Medical Journal.*

Foreign Medicine.

ACADEMIE DE MEDECINE.

Sitting, April 1st, 1834.

President—M. Lisfranc.

New Researches on permanent Retraction of the Fingers.

BY M. GOYRAND, SURGEON TO THE HOSPITAL OF AIX.

M. Sanson opened the discussion by exposing the history of science on permanent retraction of the fingers. We have nothing to do here with that which might be owing to cicatrices, to anchylosis, or to paralysis of the extensors, but only with that affection which, before M. Dupuytren, was attributed to the contraction of tendons (*crispatura tendinum*), and that M. Dupuytren has since referred to retraction of the palmar fascia. The dissections made by M. Dupuytren, and the first operations by which he was successful, gave at first complete support to this theory; but, subsequently, a patient, in whom he had divided transversely the bridles of the palmar fascia, required, for a complete recovery, that other bridles should be divided along the anterior surface of the retracted fingers. In this fact there was something which escaped the theory of M. Dupuytren, and it is this new and unknown cause that M. Goyrand has attempted to investigate.

A man, 72 years of age, who had a very old contraction of the fingers, died in the Hospital of Aix. On dissection it was found that this retraction was owing to fibrous bands of a new formation passing from the palmar fascia to the sheaths of the tendons, from thence spreading over the lateral parts of the phalanges, and even from one phalang to the other.

M. Goyrand draws two conclusions from this fact; first, that retraction of the fingers is always produced by these bridles; secondly, that the latter are of new formation.

As to the first conclusion, the commission has thought it carried too far; M. Dupuytren's observations tend to disprove it. With regard to the second, it has been suspected, *à priori*, that these accidental bridles might very well be mere enlargements of bands existing in the normal state; and attentive dissections have proved the preciseness of this opinion.

[M. Sanson here exhibits to the Academy several beautiful dissections of hands in the normal state. Independent of the deep prolongations of the palmar fascia, several superficial ones may be noticed, which are sent off from it to the integuments of the hand, and to the sheaths of the tendons, even as far as the extremities of the fingers.]

M. Goyrand's memoir is not purely anatomical. It is well known that M. Dupuytren divides, transversely, first the skin, then the subjacent bands. M. Goyrand thinks that the transverse section of the skin becoming much wider when the fingers are

straightened, presents too extensive a surface for cicatrisation, thereby retarding a cure. He therefore proposes to make a longitudinal incision into the integuments, and a transverse section of the bands only.

Another fact, mentioned by him, adds something to the history of these retractions. It was generally believed that they affected the middle, ring, and little finger at most. M. Goyrand has seen a case where the thumb was in like manner attacked. Again, they were attributed to excessive manual labour. The person who was the subject of this report has for the last twenty years acted as writer in the administration of the Hospital of Aix.

The commission proposes to send the memoir to the committee of publication, and to inscribe the author's name on the list of candidates for the rank of corresponding member.

M. H. Cloquet mentions having observed a case of retraction of the fingers, the cause of which manifestly resided in the flexor muscles; the tendons, when the fingers were attempted to be straightened, became so prominent under the skin, that they might have been supposed to be luxated from their sheaths. It were therefore wrong to attribute these accidents always to the palmar fascia and its bands.

M. Barthélemy.—We often find a similar affection in horses, which seems to be confined to the fore limbs; this is a flexion of the foot, which is owing to a retraction of the flexor profundus or perforans.

Veterinary surgeons are in the habit of dividing the tendon opposite to the metacarpal bone,—immediately the foot is straightened; the two ends of the tendon unite at the proper distance, and the limb resumes its direction and all its former solidity. Several examples of it have been mentioned in the *Journal de Médecine Vétérinaire.* Some of the horses, thus operated on, work in the neighbourhood of the school: one of them is now at Charenton, in the employ of the administration of public coaches.

M. Sanson.—Veterinary surgeons are, then, more fortunate than we; for I have seen, in similar cases, section, and even excision, of the tendons, and doubtless others have witnessed the same operations, without any relief to the retraction of the fingers.

M. Dussuy states that he performed the operation named by M. Barthélemy on a horse, and that the shortening returned.

M. Velpeau.—We must carefully distinguish causes, in order to appreciate rightly their results. Formerly, the diseased was attributed to the retraction of tendons. M. Dupuytren has proved that this is a very uncommon case, but we should not on that account deny it; for, besides that M. Barthélemy has proved it in the horse, cases of it have been manifestly discovered in man. I would mention, as an example, the tendo-Achillis, the retraction of which M. Delpech has treated by section, but the permanent flexion of the fingers is more particularly produced by fibrous bands, and I completely agree with M. Goyrand on the subject. Last year I had under my care at La Pitié three patients with retraction of the fingers; two of them were so aged that I would not attempt the operation, but the third, a young man, 28 years of age, readily submitted to it; I made an incision into the integuments, then cut the fibrous band, and even dissected it out completely; underneath this band I could easily recognise, at the bottom of the wound, the palmar fascia remaining entire. I published this case with all its details at the time.

M. Sanson answers that the band, cut out by M. Velpeau, was a cutaneous prolongation of the fascia.

M. Martin Solon—what are called retractions of tendons are, properly speaking, merely muscular contractions: thus, I have under my care at Beaujon a woman, whose foot is extended on the leg by the action of the gastrocnemii muscles. When flexion of the foot is attempted these muscles, by their resistance, acquire an excessive hardness. I have used belladonna by friction, and this plan already has sensibly diminished the retraction.

The report of M. Goyrand, with his conclusions, were then put to the vote and adopted.

MM. Villermé and Gueneau de Mussy propose to send also the Report to the Commission for publication, as it contains historical details which are wanting in the Memoir. M. Lisfranc requests, if this motion be adopted, to add to the Report some mention of Sir Astley Cooper's researches on the subject, the which were even anterior to those of Dupuytren.

Both these propositions were adopted.

Re-appearance of Cholera in Paris.

We regret to state that the cholera has again made its appearance in Paris. The cases, as yet, have not been very numerous, but some of them have proved very severe.

The number of deaths from this disease during the four months of April, May, June, and July, in the year 1832, is worthy of notice.—It would appear from the results of official inquiries, that the total number of deaths from the cholera, in Paris, within the above four months, amounted to a forty-sixth part of the whole population. In furnished lodgings alone, 2342 were attacked, of whom 1033 fell victims to the disease; and by comparing the number of fatal cases, occurring in those quarters of the metropolis principally inhabited by individuals of easy circumstances, with those having taken place in the more dirty districts, it is found that the mortality exactly corresponds to the greater or less degree of insalubrity of the habitations. In some small streets, as many as thirty-one deaths have been known out of forty-one cases; and in many lodging-houses, from four to twelve have perished in a house. The mortality was principally observed among those wretches who indulge in debauchery, and all other kinds of vices.

The poisonous Effects of the Cyanuret of Potassium by Injection.

A man attacked with neuralgia of the trunk, after having had three injections, each composed of six grains of the cyanuret of potassium, in six ounces of water, the cyanuret being in a state of deliquescence, two of them administered cold, and the third warm, suffered from severe convulsions, and violent contractions of the limbs; his eyes, for some time, became fixed, and the pupils were dilated. After the effects went off he found himself much better, and was able to get out of bed, which for a twelvemonth he had been unable to effect. A fourth injection was administered, which contained the same quantity of the cyanuret of potassium, but this was more moist than the former, and from it he experienced neither pain nor unpleasant symptoms; receiving no benefit, thirty-six hours afterwards a fifth was administered, in which was the same dose of the cyanuret, but very dry, and taken from a bottle, which had not till then been uncorked, and exhaling but little odour. In the course of an hour afterwards he suffered from general convulsions, palpitations of the heart, slowness and difficulty of respiration, coldness of the limbs, dilatation of the pupils with the eyes fixed: he died.

This fact establishes a marked difference in the action between the cyanuret of potassium when dry and in a state of humidity, which is probably owing to a decomposition taking place in it when exposed to moisture. This opinion is held both by M. Orfila and M. Pelouge.

Hydrophobia cured by Bleeding and exhibition of strong Vinegar.

A case of this terrific disease is related in a Bourdeaux journal by M. Dubedat, jun., to have occured in a woman residing at the Commune de Villeton, near Tonneins, aged 32, of a bilio-sanguineous temperament, robust, and the mother of three children.

On the 23rd of April, the father of the narrator was sent for, as well as several other practitioners in the town, the friends believing her to be attacked with hydrophobia. On their arrival, the woman being in a state of calmness, stated to them, that on the 18th of March, when returning from work with her husband, a dog bit her in the left heel; the animal was said to be in a rabid state, had bitten several of its own species, and had since been killed; also all the animals that were bitten by it were ordered by the mayor to be served the same fate. On hearing this account of the animal she became much alarmed; the wound by this time had nearly cicatrised, and she endeavoured to soothe her mind by forgetting it. For the last eight days she has been in a constant state of excitement, made use of several curious expressions, so that her friends imagined her to have taken an unusual quantity of strong beverage; this irritation has increased every day, feels thirsty, but on seeing or touching water is much excited. The cicatrised part now became swollen, red, and itching. Every day the paroxysms increased, and at present she is unconscious when they make their approach, and has a strong inclination to bite. She had no sooner made this narration, which was confirmed by her husband, as well as several others, than a severe fit came on, general convulsion supervened, her eyes became glassy and wild, vio-

lent constriction of the larynx, suffocations, foaming at the mouth, delirium, screaming and howling, and was obliged to be tied down; pulse small and soft. The attack lasted four minutes. The practitioners, not having any doubt as to the nature of the disease, determined to employ copious bleedings and baths; the use of the strongest vinegar was also proposed during the accessions. Two pints of blood were drawn from the arm, when a state of perfect calm ensued. Some *tisane* (infusion of herbs) was offered to her, and had no sooner touched her lips than she fell back, and was seized with violent convulsions. A glass of the strongest vinegar which could be procured was then forcibly administered, and about three ounces of which was calculated to have been swallowed. The convulsion instantly ceased, twenty ounces of blood were again taken, and the attack did not return for two hours. As soon as the symptoms reappeared, another dose of vinegar was given, which proved as effectual as the first. The success of this treatment induced the practitioners to persevere strictly in the same course. The next day there was only one effort toward convulsion; after this she was able to drink, and no other symptoms returned; and in a week she resumed her daily occupations.

Clinical Remarks on Gun-shot Wounds.

BY M. SANSON.

All bodies propelled by means of fire-arms have two distinct powers of motion, one of impulsion, the other of rotation; the latter, which is common to them, with all other projectiles, is one of the most powerful causes of that deviation which is given to their course, when, after penetrating soft structures, they reach a bone that will not yield. The contusion attending gun-shot wounds presents three degrees of severity, in cases in which wounds have been produced, as well as in those in which no lesions of integuments can be found. 1st. The contusion may be slight, in which case resolution takes place readily, and the cure is rapid. 2nd. If it is more severe, the textures are injured, and, although its effects may not be at first evident, they become so as soon as inflammation is set up. 3rd. The injury to the tissues may be extensive, and evident at the time of the accident; and when inflammation supervenes, large eschars are formed, and the wound thus considerably increases. When the wound or contusion is accompanied with sanguineous effusions, a kind of fluctuation may be observed in the progress of these collections, which at one time increases, at others diminishes. A tumefaction often decreases by the rapid absorption of the serous particles of blood; a hard clot is thus formed, which can only be dissolved by a free afflux of the more fluid parts. In some cases the tumefaction remains, although none of these clots be present: this is owing to the death of the surrounding parts, which can no longer absorb the effused fluid.

Wounds complicated with contusion generally present the same phenomena as those of ordinary contusions; but, in those parts in which the skin covers a bony surface, their section may be as neat as that caused by a cutting instrument, and we may then obtain union by first intention.

If a contused wound is small, we have not unfrequently abundant sanguineous effusions, attended with phlebitis, erysipelas, or gangrenous inflammation. The presence of air in the cavities may give rise to these accidents, we should therefore attempt, if possible, to obtain resolution before we enlarge the wound.

Bullets or other projectiles act, then, in two different ways,—1st, by simple contusion; 2ndly, by their own peculiar rotatory motion. Cannon balls and spent bullets generally produce simple bruises; if they cause wounds it is by their rotatory motion, which destroys the parts.

Gun-shot wounds are black and dry; the eschars are owing to the attrition of the parts, and not to the heat of the ball; for if the elevation of temperature were such as to cause a burn, it would have produced fusion of the missile. The shape of the wound varies according to the figure and volume of the projectile, and of the part affected. It is always found, however, that when a ball passes through any part of the body, the wound through which it entered is shrivelled, depressed, and smaller than that through which it escapes, which is torn and pointing.

It is said that these wounds do not bleed;

this is true only when the parts traversed contain no vessels of great size: they certainly bleed less than wounds of the same parts made by cutting instruments. But if a large artery should be lacerated, fatal hæmorrhage is the immediate result. Sometimes a swollen state of the tissues, the formation of a slough, the presence of foreign bodies, may arrest the hæmorrhage. It may happen that the parts injured by the bullet should displace a large artery, which otherwise would have been wounded.

One symptom of gun-shot wounds is the stupor, either local or general, which is produced, but this is far from being constant. The surprise or fear of the person wounded produces this phenomenon rather than the pain which in most cases does not immediately supervene. By local stupor is meant that state of a limb in which it remains cold, livid, and motionless. General stupor is accompanied with disturbance of the intellectual and sensitive functions, or with syncope, with smallness and concentration of the pulse, coldness, discoloration, and lividity of the skin, insensibility, loss of motion.

Projectiles, when propelled with force, seldom produce any commotions; as, after a wound produced by them in this state, many persons have been known totally unconscious for some time after the reception of the injury. We have, in the Salle St. Jeanne, patients who have illustrated this remark. A cannon-ball may even carry off a leg, and the sufferer will experience the want of support only.

If, however, the motion of the projectile is less rapid, if the bones are comminuted, and the soft parts lacerated, the stupor, both local and general, supervene promptly. A cannon-ball may, when nearly spent, carry off a man, and project him twenty or thirty yards distant, in which case, there are cerebral commotion and general stupor.

Lastly, much loss of blood, cold, dampness, want of assistance, or fright, may bring on general stupor, without any cerebral commotion.

Balls and bullets often take a devious course. M. Sanson mentions two individuals who had received pistol balls, the muzzle of the pistol having been applied to the chest; the cavity of the thorax had not been penetrated, but the bullet had followed the external surface of the rib under the integuments, and had come out at a point exactly opposite that of its entrance. M. Larrey quotes the case of a soldier, who was wounded by a bullet in the centre of the forehead, near the longitudinal sinus, the course of which it followed to the occipital suture, producing the symptoms of compression. An elastic probe was introduced, and when the exact situation of the body was ascertained, it was removed by means of the trephine, and the patient soon recovered.

THE

London Medical & Surgical Journal

Saturday, May 17, 1834.

SALUBRITY OF LONDON.—POPULATION.

All writers on statistics, both in this country and abroad, admit that London is the most healthy capital in the world, as estimated by the average mortality of its population. It is impossible to observe its relative cleanliness and airiness, the domestic habits of the great bulk of its inhabitants, and their wholesome food, without feeling convinced that there are fewer causes of premature decay in operation within its limits than are to be found concentrated in most of the capitals of Europe. The comparative estimate of the number of deaths to the amount of population leads to the same result; and the advantage in favour of London, upon this calculation, seems too great to be materially reduced by any admissible error in the population returns. At the same time it is very true, that the Bills of Mortality are made up in a most unsatisfactory manner, as far as the Worshipful Company of Parish Clerks are concerned; and the principles upon which their correction is attempted are very arbitrary. In this regard the calculator, like a celebrated clerk of Mr. Pitt's, may prove any foregone conclusion he pleases.

Were, however, the numbers ascertained with the last exactness, we should still doubt the propriety of admitting them as legitimate evidence in the question of the relative salubrity of different cities. In London the constant influx of strangers is greater than in any other capital in the world. A large portion of its population, at any given day, will have departed, and made room for fresh arrivals, in the course of six months.—Add to these circumstances the facts, that of its inhabitants, but a small portion are born, and still fewer are nursed, in the metropolis, and that great numbers, as age or sickness approach, retire into the country in pursuit of health.—When we consider how materially these fluctuating causes affect the result, and that it is almost impossible to calculate the full extent of their influence, we are disposed to rest our conclusion in favour of the salubrity of London rather upon the superior economy of its inhabitants than upon numerical deductions.

Some of the pamphlets, published on behalf of the College of Physicians, have adverted to the inferior mortality of London, as evidence of the capacity and qualifications of its medical practitioners, and the idea has been seized upon by others with strange avidity. For our parts, as an argument in support of the present system of medical institutions, we consider it utterly unworthy of serious notice, and respect for truth will not allow us to be parties to a pious fraud in honour of the profession. The scavenger, the butcher, the baker, and the brewer have juster claims than all the fraternity of Galen, as the great supporters of human health;—and until we can ascertain the relative number of sick in London and Paris, the causes and nature of their diseases, and the cures of each kind, it were premature, as, we have no doubt, it would upon proper information turn out to be false, to infer that the practitioners of London were superior in medical skill to the faculty in Paris.

We cannot dismiss this subject without noticing Mr. Brougham's Bill for establishing a general register of births, deaths, and marriages. Much as we may appreciate its immense importance in a legal point of view, professional motives also call forth our admiration of this practicable piece of legislation. If carried into effect, as we sincerely hope it may be, it will supply the amplest information on every thing relating to the population of the kingdom. Under its operation for a few years we shall have data to solve some of the most interesting questions affecting a nation, with an accuracy hitherto unattainable on a large scale;—whilst, at the same time, we may isolate any particular district, and trace its deviations from the average.

The learned member entered into some curious calculations, in order to ascertain the expense of his proposed plan. He estimated births at three per cent on the whole population, deaths at two per cent, and marriages at one in one hundred and twenty-eight, whence he calculated the average number of registrations in the year at 810,000. There are about 16,000 parishes in England and Wales, in each of which there is a collector of taxes, an intelligent officer who is in constant communication with London. To this officer Mr. Brougham proposes to entrust the registration of births and deaths, at a small fee, sufficient to quicken him in the discharge of his duty, without burdening the country beyond the value of the object to be attained. By allowing him 5*s.* each upon the first ten entries in his book, and 2*s.* 6*d.* each for the next ten,

and 1*s.* each for every succeeding entry, the expense is estimated at 69,587*l.*; and this fund it is proposed to raise by a rate on each parish.

We observe the Treasury has assented to the practicability of the scheme of which we have given the outline. As far as we can form a judgment upon its feasibility, we shall rejoice at its adoption, as it seems to us well calculated to accomplish the great national object it has in view.

EDUCATION IN PRUSSIA.

THE organisation of the medical profession in Germany, and particularly in Prussia, has very frequently been alluded to by the periodical press.

In Prussia, our readers are well aware, that medicine, as one of the great branches of science, is under the especial control of a minister of the crown, assisted by a medical council. We much regret that the second part of M. Cousin's report to the French Minister of Education, upon German public instruction, is not yet published, as we have longed to condense, after so able an observer, an account of medical education and police in that country. In the meantime, we have now before us an admirable translation of that part which relates to the public provision for popular education in Prussia, from the able pen of Mrs. Austin *.

"Constituted as the government of this country is," observes Mrs. Austin in an excellent preface, "and accustomed as it is to receive its impulses from without (a state of things approved and consecrated by the national ways of thinking), it would be contrary to reason and experience to expect it to originate any great changes. This is not recognised, either by government or governed, as any part of its duty. It is to the public mind, therefore, that those who desire any change must address themselves."

This just observation is confirmed by the history of the origin and progress of every institution in the kingdom; and in nothing is its truth better illustrated than in the affairs of medicine.

There is such a thing, however, as a tyranny of system and of good intentions; and experience has shown the possibility of providing for the cultivation of the arts and sciences in the highest degree, under the direct patronage of government, and even of drilling a nation through certain forms of education, in the manner and measure of military exercises, where not a spark of genuine liberty is to be found. To what extent it is advisable, or the public mind in this country is prepared, to call for the interference of the legislature in the cause of national education, this is not the place to discuss. But we strongly recommend to the attentive consideration of every person awake to these important interests the perusal of Mrs. Austin's very valuable translation. And we earnestly hope she may be encouraged to favour us with a like account of the Universities of Prussia, and especially of the construction of its Medical Schools, in the control of which the policy of a direct interference of the state is not to be questioned.

LONDON UNIVERSITY.

AFTER having lately expressed our opinion, more in sorrow than in anger, upon the injudicious determination of the senate in urging its claims in regard to medicine, we shall merely add an ex-

* Report on the State of Public Instruction in Prussia. Translated by Sarah Austin. London: Wilson. 1834.

tract from a recent law lecture*, delivered by Professor Amos, from which it appears the conduct of the senate has been far from satisfactory in other respects.

"The Professor adverted to the recent discussion before the Privy Council, respecting the charter of the London University. He observed that the proceeding on the part of the petitioners exhibited a mixed character of ignorance and impudence; and he begged to enter his protest against being supposed to have had anything to do with the argument on constitutional points, and against any impression that the case of the University had received anything but gross injustice from the hands of its very *injudicious* and very *ill-informed* friends."

HEALTH OF THE METROPOLIS.

During the last few days diarrhœa has been unusually prevalent, and there is reason to apprehend, from the early appearance of this disease, that cholera may again visit us. Bowel complaints are common at the end of summer, or beginning of autumn, but are very rare in May. The disease now prevalent is preceded by indigestion, languor, and lassitude, sinking at the pit of the stomach, and great debility; in fact, the symptoms which preceded cholera in 1832 and 1833. Ordinary remedies arrest it, and the timely application is indispensable. Regularity of living, nutritious diet, and moderate mental and corporeal exertion are the best preventives. Vegetable food, more especially salads, lettuce, &c. ought to be used sparingly, if at all.

GREAT WESTERN CEMETERY, *Notting Hill, Kensington Gardens.*

This national work is now completed. The site comprises 52 acres, with woody plantations, gravel-walks, shrubs, gardens, bordered by an extensive range of trees. There could not be a fitter spot for a burial place, and this cemetery will, at no distant day, bear a close resemblance to that of Père la Chaise, near Paris. We wish it every success, and congratulate the public on the benefit the health of the metropolis will derive from a removal of the dead from its crowded churchyards.

* The Legal Examiner, May 14, No. 62.

Reports of Societies.

MEDICO-BOTANICAL SOCIETY OF LONDON.

Tuesday, May 13th, 1834.

Humphrey Gibbs, Esq. in the Chair.

Contagion a Nonentity.—New Nosology.

Dr. Tytler gave a most learned account of the ancient opinions on contagion, in which he adduced various proofs, both from the sacred and profane writers, in support of the opinion which prevailed in the early ages and at present in India, that an evil spirit, a pneuma, an air, was the cause of pestilential diseases. He selected many illustrations from the histories of India, Egypt, Asia, &c. in support of this doctrine. He denied that Hippocrates, Celsus, Galen, Avicenna, Rhazes, &c. had ever mentioned the word contagion, and believes it was introduced by the clergy at the Council of Trent, or some other council, for the purpose of deterring the emperor from entering the town. He quoted various texts of scripture to prove that grain was deteriorated previous to the appearance of pestilence, and mentioned numerous historical facts in support of the opinion that famine preceded pestilence. He cited the work of Dr. Mead, to show the identity between the morbid appearances in plague and Asiatic cholera. He denounced the doctrine of contagion as the bane of medicine, and forcibly delineated the horrors o quarantine on society. He ridiculed the opinion that Asiatic cholera was contagious, and stated that he was the first British medical officer, who had seen the disease in 1817, and traced it to the use of deteriorated rice. He felt as convinced as he was of his own existence, that Asiatic cholera was not contagious, or communicable from one individual to another, but that it was caused by deteriorated rice, which was consumed in every country where the disease had appeared. He quoted Mr. Goodman, a Jewish writer, who holds

that vegetable life is derived from the earth, and animal life from vegetable. He argued that deteriorated grain and other vegetable food were the causes of plague, yellow fever, cholera, typhus, &c. He quoted various medical and historical works in support of this opinion. He laid his nosology on the table, which he founded on this basis; and emphatically and eloquently pourtrayed the baneful influence of contagion and its infernal consequence, quarantine, on both humanity and medical science. He thought the subject of his nosology a legitimate one for the consideration of the Medico-Botanical Society, and trusted that it would be carefully and candidly examined. (*Loud cheers.*)

Dr. Sigmond complimented the learned Doctor on his great research and ability; but, though a non-contagionist, he could not assent to many of his conclusions. He fully agreed with Dr. Tytler, that cholera was not contagious; but he was of opinion, that many of the diseases, mentioned in his nosology, might arise from various causes besides deteriorated grain. He thought that small-pox, itch, and other diseases were decidedly contagious. He then gave an excellent account of the plagues, mentioned by classic and medical authors, and agreed with Dr. Tytler, that there was not sufficient evidence to warrant the conclusions, that many of them were communicable by contact.

Mr. Judd also passed a high encomium on Dr. Tytler, and thought most of his views well worthy of serious consideration. He could not, however, assent to the statement, that no allusion was made in the Mosaic law to contagious diseases, and referred to Leviticus in support of his opinion.

Dr. Tytler replied to both the last speakers, but the time of the Society having elapsed,

It was moved by Mr. Judd and seconded by Dr. Ryan, that the subject be resumed at the next meeting on the 27th instant.

We owe it to the Society and Dr. Tytler to state, that we have only given an outline of the discussion, but shall do it ample justice after the next meeting. We fully agree with Dr. Tytler as to the absurdity of the modern doctrine of contagion, and stood alone, as to the non-contagiousness of cholera, against the Central Board of Health, when there was not a physician in Great Britain of our opinion, except Dr. Sanders*, of Edinburgh. We saw the day, however, when the profession in France, almost unanimously, and there was only one solitary exception, confirmed our views; and the result was, that, on the re-appearance of the disease in 1833, we had no Cholera Boards, notwithstanding the absurd Cholera Act, no quarantine, no alarm, to fright the isle and world from its propriety. We owe it to the fourth constitutional state,—the public press,—to acknowledge, that its promulgation of our views put an extinguisher on cholera contagion and central Boards of Health.

Reviews.

The Dublin Journal of Medical and Chemical Science, including the latest discoveries in Medicine, Surgery, Chemistry, and the Collateral Sciences. No. XIV., Vol. V. May. Hodges and Smith.

THD original communications in this number of our esteemed contemporary are extremely practical and valuable. They are evidently the productions of experienced practitioners. We shall notice the most important of them at present.

The first article is on the Use of Mercury in Ulceration of the Cartilages of the Joints, by Dr. O'Beirne. He commences his paper by alluding to the extreme suffering and destructive alterations in diseases of the joints, which have often defied all remedies, and led to the loss of limb or life. He cites the opinion of Mr. Brodie as to the incurability of ulceration of the joints, and then proceeds as follows:—

"Mercury, from its decided and happy effects in all kinds of membranous inflammation, always appeared to me to be the only agent capable of answering the various ends in view. But the injurious consequences so generally said to attend its use in scrofulous persons, who are so frequently the subjects of this affections of joints, deterred me for a long time from giving it a trial. The following considerations, however, could scarcely fail to have great weight. In the first place, it must be admitted, that injurious consequence have

* See London Medical and Surgical Journal, vol, iii.

not always attended the use of mercury in strumous persons, and as far as my experience has led me to observe, they have supervened chiefly in cases where ptyalism has been produced slowly, or only in a slight degree. Secondly, we are not without means of anticipating and preventing the supervention of such consequences, or of combating them when they have supervened. Thirdly, in cases of syphilitic iritis occurring in scrofulous persons, we do not hesitate to use mercury, so as to produce ptyalism as rapidly as possible, in order to save the eye; and yet, we rarely observe serious consequences to attend the practice. Fourthly, it is manifest that there is much greater danger in permitting such a disorganising process to go on unchecked in the cartilages of joints, than from any of the ordinary consequences of the free use of mercury in strumous habits. Ultimately, these considerations prevailed, and decided me on giving this agent a trial in cases of the description under consideration; and to employ it so as to act rapidly and fully on the mouth. The first trial was made, about a year ago, in the case of a woman admitted into the Richmond Surgical Hospital, with ulceration of the cartilages of the knee-joint. In this case, the value of the mercurial plan of treatment seemed to be established by the disappearance of all the symptoms, as soon as the mouth became affected; and by the fact of the woman regaining the full power of walking, and being discharged perfectly well, in the course of a fortnight from her admission. Since that time, I have tried the same plan in similar affections of the joints, and with similar results. Three of my colleagues in the Richmond Surgical Hospital, and Mr. Cusack Roney, one of the senior surgeons of the Meath Hospital, have also employed it with success."

Dr. O'Beirne details several cases of disease of the wrist, knee, ankle, and hip-joints, occurring in children about the age of puberty, and in adults, which rapidly yielded to the use of mercury, used to the extent of making the mouth sore. Some of these cases were seen by Dr. Peile, Mr. Carmichael, Dr. M'Dowel, Dr. Fry, Mr. Cusack Roney, and others.

This is a new and valuable practice, and reflects great credit on the originality and sound reasoning of Dr. O'Beirne. If mercury be found a remedy for the intractable and often irremediable diseases of the joints, a great improvement will be accomplished. We cannot help detailing one of Dr. O'Beirne's cases, and from this our readers may form their opinions of the rest. Some fifty years since such would be considered incurable. Amputation remained for some, and long continued suffering and permanent lameness would be the consequence of others.

"Case II.—James Flood, aged 23, admitted into the Richmond Surgical Hospital, under my care, on the 16th of September, 1833. About eighteen months ago he had a gonorrhœa and a swelled testicle, for which he was placed under the influence of mercury. He afterwards caught cold, his right knee swelled, and he was admitted into the Richmond Hospital by Dr. Peile, who succeeded in completely removing the swelling and other symptoms. Shortly after leaving the hospital his left knee became attacked with a dull pain, which slowly increased in acuteness during seven or eight months, until about four months ago, when it became excessively great, and the knee began to swell. At present, except at night when it is very severe, he has no pain when lying quietly, and in the horizontal position; but when he moves, or attempts to stand, or when the heel is struck ever so lightly, he immediately feels very acute pain in the knee joint. He complains also of an acute pain extending down the outer side of the leg, and terminating at the sole of the foot. The effusion into the joint is considerable; but there is no discoloration of the cutaneous surface. His general health is impaired.

" Frequent leeching, cupping to 18 ounces above the knee, blisters, lotions of acetate of lead, frictions three times a-day with strong mercurial ointment, anodyne draughts, and draughts of camphor mixture and wine of colchicum, were employed in succession, but without any benefit, until 28th Sept., when he was ordered to take a pill containing three grains of calomel and half a grain of opium every third hour.

" Sept. 30th.—Mouth not affected; no material change; pills repeated.

" Oct. 1st.—Considerable ptyalism. Pain and swelling greatly reduced; and he feels comparatively little pain in moving in bed, or when the heel is struck smartly. Pills

omitted. Ordered to have a draught of vinum colchici and camphor mixture at night.

"2nd.—Complains of severe griping pains in the stomach and bowels. Ordered a purgative draught, followed by an emollient enema; a blister to be applied to the epigastrium; and when his bowels have been freely moved, to take occasionally saline effervescing draughts, and beef tea *ad libitum*.

"3rd.—Slept soundly last night. Mouth still considerably affected; griping pains gone. Pain and swelling of the knee remarkably diminished, and very little inconvenience from striking the heel; no pain whatever in the outer side of the leg. Enema, saline draughts, and nourishment repeated. The knee to be covered with an emollient poultice, frequently renewed, and as warm as he can well bear it.

"In a few days this man found that he could stand upon the limb, and walk about without pain, but in doing so, said that the joint and limb felt very weak. He was, therefore, confined to bed, ordered frictions of soap liniment to the limb, and to have full diet. Under this plan his general health recruited, and the power of the limb became so completely restored, that he was discharged from the hospital on the 26th Oct., that is, on the twenty-eighth day from the commencement of the use of mercury."

(*To be continued in our next.*)

Foreign Hospital Reports.

HÔPITAL ST. JEAN.

Opisthotonos—Death—Autopsy—With some Physio-Pathological Observations on Inflammation of the Spinal Marrow.

BY C. F. BELLINGERI, PRINCIPAL SURGEON TO THE HÔPITAL ST. JEAN.

A girl, 13 years of age, of delicate constitution, affected with an immense wen on the side of the neck, who in other respects had been playing about in perfect health, was seized suddenly, without shivering, with pain in the left shoulder and region of the larynx, rigidity of the neck, also severe pungent pain in the region of the occiput, and difficulty of opening the mouth. Though she experienced torture on deglutition, she got up, and was able to eat. The next morning she felt pricking pains along the dorsal vertebræ, accompanied by a sensation of twitchings of the inferior extremities, though she walked about. On the 27th the same symptoms continued; the rigidity of the neck became worse, so bad that she was obliged to go to bed. On the 28th, stiffening of the limbs commenced; they were drawn backwards; and the next morning the head and neck became similarly affected. From this time to the 31st she was bled five times, and took a cathartic composed of the pulp of cassia fistula, tamarinds, and olive oil, after which she passed a lumbricus by stool.

When she was admitted into the hospital she was bled from the feet, and thirty leeches were applied to the spine. On the 2nd, sixteen leeches more were applied behind the ears, and in the evening M. Bellingéri examined her for the first time.

At this time the head and neck were drawn backwards, the head slightly inclined to the right side, the spine curved, forming a convexity anteriorly; the legs and thighs were also drawn backwards, and were capable of being rendered flexed only by external force, which caused great pain. The movements of the superior limbs were stiff, the fore-arm being less motionless than the arm; all flexion appeared lost, and it could not be raised to the head. The attempt to flex either arm or fore-arm gave excessive pain. The pupils were constantly retracted, and thus remained, when a lighted candle was placed close to them or at a distance, neither sight nor hearing was affected, with the exception of a slight buzzing noise, of which she complained, annoying her every now and then. The alæ of the nose were drawn upwards, and remained in an arched position; the upper lip was also raised, and she was unable to approach the one to the other. The commissures of the mouth were slightly retracted, and gave her a kind of sardonic smile; in fact, all the muscles of the face were contracted; the cheeks hollowed, which gave to her a cadaverous aspect; sensation all over the body was perfect; great difficulty in moving the inferior jaw; was unable to protrude the tongue further than the alveolar arch. There was a certain degree of dysphagia, and she could only swallow spoonfuls of liquid. Pulse small and contracted,

104; abdomen tense and flat. In attempting to administer an injection per anum, much resistance was offered by the sphincter. The discharge of urine voluntary; heat little greater than natural; a slight and continued moisture of skin. She complained of constriction of the throat, for which the jugular vein was opened, the spasms disappearing for a short time, and returning with greater severity, so violent that it appeared to have produced death from asphyxia, owing to a spasmodic closing of the glottis. Immediately after death the left arm was drawn spontaneously backwards.

Autopsy.—Twelve hours after the body was cold the limbs remained in a state of stiffness, and in twenty-four hours flexibility returned.

Medulla spinalis.—On its posterior surface a simple sanguine extravasation without congestion was discovered, which occupied the external surface of the dura mater from the third to the sixth dorsal vertebra; on cutting through the dura mater, the arterial vessels of the pia mater, which lined the posterior part of the medullary substance, were congested, more or less, extending from the ninth dorsal vertebra to the inferior part of the spinal marrow, it existed throughout the whole extent of the posterior surface, but very extensive at its superior extremity and at its origin. In all these regions it is necessary to notice that the engorgement was limited by the posterior origin of the nerves on each side, and that it did not extend on the lateral surfaces of the spinal cord.

On the anterior face the cellular tissue which lined the dura mater, as well as the dura mater itself, was, throughout its whole extent, much injected, much more even than its posterior surface. This membrane being opened, the middle spinal artery was found much engorged with arterial blood, also some of its ramifications, particularly those in the lumbar region.

The spinal marrow itself was healthful.

Head.—Slight sanguine extravasation between the dura and pia mater; the superior part of the cerebrum was much injected with red blood, though limited to the arterial capillary vessels of the pia mater. That portion of the pia mater lining the cerebellum and annular protuberance was also much gorged with red blood, as also the inferior extremity of the medulla oblongata.

The brain was in a normal state.

Abdomen.—The jejunum and its mesentery were very inflamed. This intestine contained twelve large, long lumbrici, rolled up together. The following are the deductions drawn by the author from these facts:—the anterior surface of the pons Varolii is formed of fibres coming from the cerebellum; irritation of these fibres is capable of producing spasm in the direction of extension, principally of the head and neck, and it also causes trismus, spasmodic dysphagia, and constriction of the pharynx.

The posterior part of the spinal marrow presides over extension, in fact, we observe its injection produce this effect, but slightly, however, in the superior limbs, the injection being less intense in the cervical region; stronger, however, in the inferior, for another reason. Injection of the pia-mater of the cerebellum also demonstrates that this organ governs the movements of extension.

The injection in this case was limited to the pia-mater, and the symptoms were confined to muscular contractions. This proves, then, that irritation limited to the white substance of the spinal-marrow produced spasm only, without altering the sensibility, and that the posterior roots of the nerves of the medulla spinalis, are not destined for sensation, since the inflammation, by which they were affected, produced neither augmentation nor diminution of the general sensibility. Lastly, the inclination of the head to the right side appeared owing to the slight engorgement of the middle lobe of the right hemisphere of the cerebrum.

The pathological considerations are less important; however the author lays a stress on the presence of the worms in the jejunum; it is to them that he attributes the inflammation of the jejunum, which was, according to him, the primary point of nervous irritation, and afterwards of inflammation of the tunics of the spinal marrow.

The professor quoted a second case, the subject of which was a young man, who was attacked with lumbar pains, and permanent spasm of the flexor muscles of the trunk, but more particularly of the inferior extremities. Bellingeri stated this disease to be a chronic inflammation of the spinal marrow; the sentient system remained perfect, and under the antiphlogistic treatment the patient recovered.

Morbid affections of the spinal marrow can then produce permanent spasm of the muscles; and in the latter case, the spasm chiefly occupied the flexors of the lower extremities, and from the uncontrollable power of their movements, a superficial observer would have thought them in a state of paralysis, and he feels convinced that, in the majority of cases, what is called paraplegia does not depend upon defect in the nervous action, which engenders true muscular paralysis, but rather that the difficulty of movements is owing to predominant action of certain muscles over others, *which is an habitual state of spasm.* This condition is known by the rigidity the patient experiences in the affected muscles, and to a sensible hardness to the touch, whilst in paralysis the muscles are in a state of softness and flaccidity This is a very important point to determine, especially if we wish to draw any physiological deductions from symptoms and autopsic examinations, it is essential to distinguish whether the affection be spasm or paralysis.

The opinions of Bell and Magendie, who state the posterior spinal nerves are the conductors of sensation, and the anterior the nerves of motion, are thus directly opposed by the experiments of the Italian physiologists, and, from the singular facts connected with the preceding case, it appears to us a point worthy of more minute investigation.

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, May 8th.

John Wale Bryant Ash . . Bristol.
Francis Henry Marshall . . Pitsford.
George Chippendale Richards . London.
John Rowley . . . Lancaster.
Philip Wynter Wagstaff { Leighton / Buzzard.

BOOKS.

Vindiciæ Medicæ; or a Defence of the College of Physicians. By SIR GEORGE L. TUTHILL, M.D. Longman and Co.

Pharmacopœia Homœopathica. Edidit F. F. QUIN, M.D., Medicus Ordinarius Leopoldi Primi Regis Belgarum, &c. Londini, 1834. Veneunt apud S. Highley.

The fruits of the "Gospel of Medical Salvation," or, as Catullus would say to the author,

Insipiens esto cum tempus postulat et res;
Stultiam simulare loco prudentia summa est.

Correspondents in our next.

Erratum.—In the list of those who received diplomas at the Royal College of Surgeons, the address of the following gentleman was omitted—George Fayrer, Bodmin, Cornwall; *for* Daniel Kitchen Tyeman, *read* Daniel Fletcher Tyerman; in the advertisement of Dr. Weatherhead's Pedestrian Tour through France, inserted on the wrapper of our last week's number, for the word witticisms, *read* criticisms.

METEOROLOGICAL JOURNAL.

MONTH. May, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
8	☽	64	72	60	30·02	29·83	67	66	S.W.	S.	Fine	Fine	Fine
9		66	71	54	29·61	29·53	63	62	S.W.	N.W.	—	—	—
10		59	65	52	29·70	29·65	62	62	N.N.W.	S.	—	—	—
11		57	69	57	29·60	29·52	61	65	S.E.	S.S.W.	—	—	—
12		61	66	55	29·45	29·46	63	66	S.W.	S.S.W.	Cloudy	Rain	Rain
13		58	60	54	29·35	29·38	68	69	S.W.	S.W.	Rain	—	Fine
14		59	63	55	29·52	29·54	69	67	S.W.	S.E.	Cloudy	Fine	Cloudy

50, *High Holborn.* WILLIAM HARRIS and Co.

ALL Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 121. SATURDAY, MAY 24, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,
BY PROFESSOR SAMUEL COOPER.
Delivered at the University of London, Session 1832—1833.

LECTURE XC., DELIVERED APRIL 18, 1833.

Gentlemen,—When a cataract is free from every complication; when it is not attended with frequent headach, nor pains in the eye; when the pupil retains its regular circular shape; when the iris possesses its natural power of motion in the different degrees of light; and when the patient can readily discern the difference between light and darkness, and even perceive bright colours, and the outlines of objects, in shady places, where the pupil naturally expands,—the prognosis is favourable.

We have no medicines nor applications capable of dispersing an opacity of the lens, or its capsule. The cases, injudiciously blended with the subject of cataract under the name of *false cataracts*, which are only obstructions of the pupil by lymph, effused in consequence of inflammation, may sometimes be benefited, or even cured, by the means which I recommended in speaking of iritis; but no real analogy exists between such cases and opacity of the lens and its capsule. In all examples of true cataract, it is only by an operation that sight can be restored.

Whether an operation should be performed when the cataract is single, and the other eye in the enjoyment of good vision, is a question on which some difference of opinion is entertained. Diversity in the refracting powers of the eyes after the removal of the lens from one of them, and the apprehension of confused vision, as a result of the operation, are the reasons usually urged against the practice, which, however, has, to a certain extent, at least, proved successful; while the continuance of a cataract in one eye not only gives a disposition to the origin of the same kind of opacity in the other, but permanently impairs the sensibility of the retina itself for want of exercise.

It is a general rule, gentlemen, and I believe an excellent one, never to operate upon both eyes at the same time. In particular, when extraction is to be done, this maxim is universally adopted. It is also a maxim to let the patient have the benefit of preparatory treatment before he undergoes the operation. His diet should be lowered and his bowels emptied.

In cases of congenital cataract, you may inquire, ought the operation to be delayed till the patient has attained the age of docility and reason? Or ought it to be practised in early infancy? Every consideration seems, I think, to be in favour of an early performance of it. If it be postponed, the eyes, having no distinct perception of external objects, acquire such an inveterate habit of rolling, that, for a long time after the pupil has been cleared by an operation, no voluntary effort can control this irregular motion. The retina, too, by a law common to all structures of an animal body, for want of being exercised, becomes more or less deprived of power. From the age of 18 months to two years is deemed an advantageous period for operating on congenital cataracts.

Gentlemen, I will next mention to you a curious fact:—Persons blind from congenital and other cataracts of long duration, and habituated to live with four senses, are generally confused and perplexed on the restoration of vision. They have a difficulty in combining the action of the eye with that of the other senses. Hence Dupuytren has often found it necessary to deprive them, for a time, of the use of one or two of the other senses, in order to enable them to use the organ of vision. He has applied this principle to infants, by closing their ears, as it was noticed that they suffered themselves to be guided by sound, and by impressions received by the hands, which they thrust out before their bodies like tentacula.

Gentlemen, there are three kinds of operation for the cure of cataract. 1st. The method formerly termed *couching*, and which is simply the removal of the cataract out of the axis of vision, leaving it still in the eye. It is now frequently called *displacement*, and has two

varieties, *depression* and *reclination*. 2nd. Surgeons practise *extraction of the cataract;* that is, they take the opaque lens completely out of the eye. 3rd. Another method often adopted consists in the *division of the cataract into fragments*, which, being exposed to the aqueous humour, become absorbed.

By *depression* and *reclination* you change the situation of the cataract. In *depression*, the lens is pushed directly below the level of the pupil. In *reclination*, the lens is made to turn over into the middle, and towards the bottom of the vitreous humour, so that the surface of the lens, which was previously directed forwards, is now placed upwards, and what was the upper edge is turned backwards. Over the lens, displaced in this manner, the vitreous humour will close much more completely than over the simply depressed lens, so that its ascent behind the pupil again will be less likely to happen. Nor will the retina be so liable to be pressed upon by the cataract as after depression; yet, reclination unavoidably does more extensive injury to the hyaloid membrane of the vitreous humour.

Gentlemen, I may next observe, that *extraction* is the complete removal of the cataract out of the eye through an opening made in the cornea. The incision for this purpose must form the segment of a regular circle, be smooth, and, at the same time, of sufficient size to permit the easy passage of the cataract through it. Both in this first period of the operation, and in the subsequent one of opening the capsule, the iris should remain entirely free from injury.

One of the chief dangers of extraction is that of the loss of the vitreous humour, which, if due care be not taken, is apt to be suddenly forced out of the eye along with the cataract.

Another risk is that of the iris being wounded. Sometimes the operation is followed by a prolapsus of this organ, sometimes by a closure of the pupil from the inflammation excited in the iris by injury of its texture.

The *division*, or breaking of a cataract piecemeal, gentlemen, may be done with a needle, either through the sclerotica or the cornea. It has the recommendation of being the most easy, but sometimes needs repetition. Opaque portions of the capsule, however, frequently resist absorption, and must, after all, either be extracted or displaced. The division of a cataract, when performed by passing the needle through the cornea and pupil, is termed *keratonyxis*.

Gentlemen, it is now well ascertained, that no method of operating for the cure of cataract should be exclusively preferred; and that each has its advantages in particular cases.

Depression and Reclination through the Sclerotica.—Each of these operations has three stages.

In the *first*, the needle is introduced through the coats of the eye into the vitreous humour.

In the *second*, the instrument enters the posterior chamber, and is applied to the cataract.

In the *third*, the displacement is effected.

It is only in the third stage that reclination differs from depression.

The patient is generally seated on a low stool, with his head supported on the breast of an assistant, who stands behind him; and, if the operation be about to be done on the left eye, he puts his right hand under the patient's chin, while with the index and middle fingers of the left hand, applied to the margin of the upper eyelid, he keeps it raised against the superciliary ridge of the frontal bone, without making any pressure upon the eyeball itself.

The operator sits in front of the patient, on a seat of such height that the patient's head is opposite to his breast. If it be the left eye which is to be operated upon, he takes the needle in his right hand, while, with the left fore-finger, he depresses the lower eyelid, and at the same time puts the end of the middle finger just below the caruncula lachrymalis, so as to prevent the eye from rolling inwards.

1st Stage.—With the little finger resting on the patient's cheek, the surgeon introduces the needle one-eighth of an inch behind the temporal edge of the cornea, so as to avoid the ciliary processes, and one line below the transverse diameter of the pupil, so as to avoid wounding the long ciliary artery. For the purpose of avoiding the lens and ciliary processes more surely, the needle should be directed towards the centre of the vitreous humour, but only to the depth of one-fifth of an inch, as it would be wrong to injure the vitreous humour to an unnecessary extent.

Second stage.—One flat surface of the needle is now to be turned forwards, the other backwards, and its handle inclined towards the temple, so as to bring its point between the ciliary processes and the circumference of the lens.

The instrument is next to be carefully introduced between these parts into the posterior chamber, across which its point is to be conveyed, till it arrives behind the nasal portion of the iris.

Third stage.—When depression is the method chosen, the flat side of the end of the needle is now to be placed upon the upper part of the lens, the handle gradually elevated, and the point carried downwards, and a little outwards and backwards, the proper direction in which the lens should be depressed, but no further than is necessary to remove it from the axis of vision. The needle should be kept for a minute or two on the lens, and, before it is withdrawn, you should observe whether the cataract rises again.

Some operators turn the point towards the pupil, and move it freely in it, in order to be sure that the capsule, if left behind, will be so lacerated that it will give no further trouble.

When *reclination* is preferred, the surgeon alters the plan of proceeding in the third stage, and then, instead of placing the end of

the needle on the vertex of the cataract, he applies the instrument to its front surface, a little above its centre, and makes pressure on it downwards and a little outwards, by which manœuvre it is made to fall backwards, as it were, into the vitreous humour.

If displacement be attempted on a soft fluid cataract, no sooner is the capsule opened with the needle than its contents mix with the aqueous humour. In a day or two, however, this fluid will become clear again; but unless you break the anterior portion of the capsule, before you withdraw the needle, vision will still be interrupted by the capsular part of the cataract.

Gentlemen, let me next remind you that the *after treatment* is a business of considerable importance. The eyes are to be shaded by means of a light compress, pinned to the night-cap. The room is to be kept moderately dark, and a low diet and quietude strictly enjoined. After three or four days, a green shade may be put on; but the eyes are not to be used for at least a fortnight after the operation.

Extraction of the cataract through an incision in the cornea, gentlemen, is divided into three stages.

In the *first*, the cornea is opened with the knife;

In the *second*, the anterior layer of the capsule is divided;

In the *third*, the cataract is taken out of the eye, or extracted.

The eye to be fixed, as already explained; unless the surgeon choose to place the patient in the recumbent position, with the intention of dividing the upper segment of the cornea, while he fixes the upper eyelid himself; a plan now sometimes adopted, and which has its advantages.

First stage.—1. The point of the knife is to enter the cornea very near the sclerotica, and a little above the horizontal diameter of the cornea.

2. It is first to be directed rather towards the iris, until it reaches the aqueous humour, so that there may be no risk of its gliding between the layers of the cornea, and not entering the anterior chamber at all.

3. As soon as the point is in the anterior chamber, the handle is to be inclined backward, and the point directed towards the place at which it is intended to make it pierce the cornea on the side towards the nose.

This place should be rather above than below the horizontal middle diameter of the pupil, and very near the edge of the cornea.

4. Having performed the *punctuation* and *counter-punctuation* of the cornea, as they are termed, you will now have the eye completely under your control. All pressure at this particular period is to be removed, and therefore the finger placed on the caruncula lachrymalis may be shifted to the lower eyelid. The instant that the section is finished, the upper eyelid is to be allowed to fall, the room rather darkened, and nothing more done till the patient has had a short time given him to become composed again.

Second stage.—For opening and lacerating the anterior layer of the crystalline capsule, a lance-shaped, sharp, double-edged needle, such as I now show you, is the best instrument. The assistant is very cautiously to raise the upper eyelid, without touching the eye in the least. The operator draws down the lower eyelid, and presses it very gently against the eyeball, so as to make the cataract advance a little, and the pupil expand, but not so forcibly as to burst the hyaloid membrane.

The needle is then to be introduced under the flap of the cornea, and through the pupil to the anterior layer of the capsule, which is to be freely cut and torn in various directions; then the needle is to be withdrawn, and the eye again closed.

Third stage.—If the pressure made on the lower part of the eyeball in the second stage were continued, the lens would come out of the eye on withdrawing the needle; and many surgeons allow this to happen. Others let the pressure cease for a minute or two, and close the eye again after having divided the capsule.

They then take the curette in the hand, which held the needle, and having opened the eye, and renewed the pressure, they see the whole lens pass into the anterior chamber, and then through the incision in the cornea. The curette is only used, if necessary, to facilitate its passage through the wound.

The patient is now to close his eye again, and the operator, having received the lens on his finger nail, examines whether it is entire.

After having once more opened the eyelid, and ascertained that the sides of the incision in the cornea are accurately in contact, and the pupil clear and circular, the eyes are to be shut, a narrow strip of court-plaster put from one eyelid to the other; and over that a light fold of linen is to hang down from the cap, to which it is to be pinned.

The patient should afterwards be kept perfectly quiet, in a room somewhat darkened, with a nurse to watch him, so that he may not rub the eye with his hand during sleep. The incision may be looked at on the third day, and on the fourth the patient may be allowed to sit up. On the fifth a shade may be put on, but the eye should not be used for at least ten days, and then only on large objects. The bowels are not to be disturbed for a day or two after the operation, but the patient should be restricted to low diet for eight or ten days. If much pain and inflammation follow the operation, be sure to bleed the patient freely, and give calomel. When you attempt any proceedings through the pupil, you must not forget to dilate that aperture with belladonna.

The kind of operation to be preferred must depend upon the species of cataract, and the sort of eye which is to be dealt with. I put out of present consideration the difference of skill in different operators. No doubt, gentlemen, extraction is the right method, when the

cataract is hard, and the practice not contra-indicated by the cornea being remarkably flat, the iris too convex, the eyeball small, and sunk in the orbit, or the space between the eyelids very narrow.

When there are adhesions between the cornea and iris, or between the iris and the crystalline capsule, extraction should not be attempted.

A very small pupil, not admitting of being much dilated even by belladonna, would be another reason against extraction.

The operation of division is most applicable to caseous or fluid cataracts, and especially to such as occur in children. If the cataract were hard, but not proper for extraction, owing to the general form or state of the eye, depression should be practised.

The loss of the crystalline lens necessarily produces a considerable diminution in the refracting power of the eye, and in its faculty of adapting itself to the different distances of objects. These defects are palliated by the use of convex glasses of different foci. Their use, however, must not commence too soon after the operation, and never as long as vision continues to be improving without them.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XXII.

Pathology of Painters' Colic—Researches on the State of the Nervous and Digestive Systems—Treatment—Use of Narcotics and Purgatives—Efficacy of Tobacco—Treatment of the Gastric Complication—Paralysis—Mode of Pemberton—Use of Strychnine—Colic from Copper—Case of Mercurial Spasms—Affection of the Respiratory Muscles.

GENTLEMEN,—We were occupied at our last lecture in considering the symptoms of painters' colic. I mentioned that it occurs under a variety of forms; that the symptoms are to be attributed to a lesion of nervous function independent of any known organic change; and that the same disease may be seen in animals which have been exposed to the poison of lead. There are some other facts connected with this disease, which should not be passed over, and which I am anxious to lay before you previously to entering upon the treatment.

You will recollect that I introduced the subject by stating that painters' colic belonged to the class *neuroses*, and that I endeavoured to show that this implied a lesion of function of any part or viscus of the body, frequently characterised by the most decided departure from the natural condition, and yet unaccompanied by perceptible organic change. I said also, that it was hard to suppose the existence of great functional alteration, *without any molecular change;* but that, in the present state of science, we are compelled, for want of a better term, to call these affections *neuroses*, in contradistinction to diseases in which there is organic lesion visible. To illustrate this point, take an example from two different cases. In one case of what is called *dyspepsia*, we have inflammatory, or, at least, sub-inflammatory derangement of the stomach: here the disease is traceable to organic change; in another case we have symptoms of nearly the same character, and yet there is no organic lesion. Painters' colic comes under the latter head; we observe symptoms of excessive functional lesion, but dissection does not exhibit any organic change. Pathological anatomy tells us what it is not, and we arrive merely at a negative knowledge of its nature. We have decided proofs of extraordinary lesions of the nervous system, and yet, when we come to the post mortem examination, we cannot find any visible change to account for these striking phenomena.

The old pathologists maintained, that spasm of the intestines was the principal cause of the disease, and attributed the symptoms to their contraction. This opinion appears to have some foundation, when we consider the violent symptoms of colic which accompany this affection. Dubois de Rochfort has mentioned, that in such cases he has found intus-susception of the intestines. De Hean says, that contractions of the colon are very common; and several authors make the same assertion. The results of more modern observation, however, are against these opinions. I have told you already, that, in consequence of this disease seldom or never proving fatal, there is a degree of doubt attached to its pathology; but it is an interesting fact, that where death, from other causes, has occurred during the existence of painters' colic, the digestive tube has been found either in its healthy state, or with a few detached spots of vascularity, without any decided inflammatory character, and totally insufficient to account for the symptoms. This, which is all that pathological anatomy reveals, may be considered as purely accidental, and only of occasional occurrence, so that we are compelled to look upon the disease as one in which there is great lesion of function without any organic alteration.

In the hospital of La Charité, at Paris, a vast number of cases of painters' colic have been treated. In the space of eight years five hundred cases of this description have been admitted; out of these, five died while labouring under the disease; and the following is an abstract of the appearances observed on dissection. In the first case, there was rupture of an aneurism of the abdominal aorta, and the patient sank from loss of blood. On examination, the digestive tube was found in the natural and healthy condition—there was

neither *vascularity nor contractions.* The subject of the second case died of apoplexy. The whole intestinal canal was found healthy, and, contrary to the doctrines of the school of Broussais, there was neither congestion nor vascularity. In the third case, the patient had fits of an epileptic character, in one of which he expired. The colon exhibited a slight degree of redness, but quite insufficient to explain the symptoms during life. In the fourth, the cause of death was the same, and, on dissection, the tube was found healthy. Another patient, after recovering from the symptoms of painters' colic, got a sudden attack of asphyxia and died. His body was examined, but there was no trace of disease in the colon or any other part of the intestinal canal. Here we have five cases in which there was either no disease at all in the digestive tube, or, if there was any, the amount was quite insufficient to account for the symptoms. Louis, in a memoir which he has published, on sudden and unexpected deaths, gives a case of this disease where death occurred suddenly on the eighth day. The intestines were found to be in a healthy condition. Martinet gives two cases of persons who died of the cerebral symptoms while labouring under this disease: here, also, the tube was in the normal state. Thus we have eight cases with dissections detailed by various authors, all men of high professional celebrity, having no theory to support, and all agreeing in the statement, that there is little or no appreciable lesion of the digestive tube; that in the majority of cases it is in a state of health; that no contraction exists; and that such morbid appearances as have been found must be looked on as accidental.

There is one interesting circumstance in these cases which deserves to be noticed. With the exception of the first and fifth cases, all the patients presented that form of the disease in which the functions of the brain are decidedly injured. Here it seems probable that the cause of death was excessive irritation of the nervous system. Now, in the observations I made on the cases, which were treated at the Meath Hospital, you will recollect I stated, that where the cerebral symptoms were predominant the abdominal were more or less indistinct and latent, and that the cause of indistinctness, or even total absence, of these might be owing to the force of the disease being thrown upon the brain and spinal cord. Such was the case in the instances above recited, and such we have also seen to be the result in the case of those animals of an inferior order, that have been exposed to the poison of lead. How far the predominance of cerebral excitement may explain the want of appearances of disease in the digestive tube may be a subject of consideration.

What is the state of science with respect to the brain and spinal marrow? Allow me here to call to your recollection the symptoms of functional derangement of the nervous centres, the coma, the violent convulsions, the amaurosis, the deafness, the delirium, the paralysis. All these are violent symptoms, and you would naturally expect to find them connected with some sensible alteration, some congestion, or inflammation, or ramollissement. But nothing of this kind can be discovered. In all the cases, where death occurred under such circumstances, at La Charité, with the exception of some slight appearances of cerebral lesion in the second, there was no perceptible disease in the brain, or spinal cord. The membranes and substance of the brain presented their normal condition; there was little or no fluid in the ventricles; the spinal cord was healthy and natural in consistence and colour, and there was no effusion into its sheath. All these circumstances led to the conclusion that painters' colic is essentially a neurosis. Observe, too, how interesting it is to connect the circumstance of the absence of organic change, with the singular fact which I mentioned in my last lecture, that the comatose symptoms of this affection may be treated with stimulants and opiates. Where we have coma with congestion of the brain, opium has the effect of increasing the symptoms; here it was found to have a contrary effect. So that our experience and the results of pathological anatomy, as far as they go, appear to square exactly. We see, then, that painters' colic is not inflammation of the intestines, or of the brain, or of the spinal cord, and this information, though of a negative character, possesses considerable value in a practical point of view. I do not know any case of what have been termed neuroses, in which the bearings of pathological research on practice are so extensive and so satisfactory.

It is a fortunate circumstance that this disease is seldom fatal, and it is some consolation to think that, although the patient's sufferings are dreadful and often protracted, there is little danger of life, and that the complaint is almost always amenable to judicious treatment. I have been for some years in the habit of treating it in a routine way, and can speak from experience of its success,—of course this treatment is to be modified by circumstances. Suppose a patient applies to you with violent pain about the navel, a hard and retracted state of the abdomen, obstinate costiveness, and the other symptoms which characterise an attack of painters' colic; the first thing I would advise you to do is to prescribe a full opiate. Many persons would object to this, and say that there is constipation enough already, and that opening the bowels would be much more likely to give relief. But opium does not here add to the constipation; indeed, so far from doing this, it sometimes acts as a laxative. At all events, it is a remedy which is perfectly unobjectionable. Give, then, in the first place, a full opiate, it will have the effect of relieving the patient's sufferings, and will enable you to gain time for the employment of other means. The next thing is to place the patient in a hip-bath, and keep him in it as long as possible.

Do not neglect this, for I know of nothing that gives more decided relief. I have often seen cases where the patient was quite easy while he remained in the bath, but experienced a return of the pain as soon as he left it. If you have no means of procuring a bath in this way; the next best thing is to have recourse to emollient stupes containing some narcotic, after the manner first introduced by my colleague, Dr. Graves. One of the best of this kind is the tobacco stupe, if you cannot get this you may employ poppy-heads for the same purpose. The tobacco stupe is much better than the tobacco injection, because its effect can be more easily regulated, but in violent cases I am in the habit of combining both, employing the stupe during the paroxysms of pain and throwing up a tobacco enema every four or six hours, until a decided impression has been made on the symptoms. In the success which has attended my distinguished friend Dr. O'Beirne's treatment of tetanus by the use of tobacco we see an analogous effect. In this way you will succeed in giving relief; you should also prescribe a brisk cathartic, and this you may do without any fear of injuring the patient, or exciting intestinal inflammation. The insensibility of the intestines to the stimulus of even powerful purgatives is a curious feature in this disease, and bears strongly against the idea of its being connected with any inflammatory condition of the tube. In the Hospital La Charité the treatment is routine; it consists of an emeto-purgative plan, which is continued day after day until the symptoms yield. The purgative we employ in the Meath Hospital is croton oil, combined with castor oil and mucilage, or given in the form of pill. When the bowels have been freely acted on, the case generally goes on well. After the bowels have been opened, we continue the employment of the hip-bath, the narcotic stupes, and anodyne injections, taking care at the same time to persevere in the use of purgatives.

Andral makes a good remark on this point. "Here (says he) are cases in which, from some peculiar alteration in the state of innervation, the mucous surface of the bowels is rendered less sensible than in its ordinary condition, and can bear freely the stimulus of powerful purgatives. May not this condition also occur in other states of the economy? We are, therefore, led to conclude that purgatives are not, in all cases, direct stimulants."

Painters' colic has been treated in Paris by bleeding and leeching, but this has not been found so successful as the ordinary purgative plan. I have never seen a case in which general bleeding seemed to be called for except one, and this was a most violent case which had resisted the ordinary means of treatment for forty-eight hours. I recommended bleeding from its well known antispasmodic power; a quantity of blood was taken, and soon after the purgatives began to act, and the patient got relief. With respect to leeches, I have employed them only in those cases which are accompanied with symptoms of fever and gastric irritation; where there is quick pulse, hot skin, foul tongue, thirst, vomiting, and epigastric tenderness. In such cases I have applied leeches, but my experience of them is, that the relief afforded is by no means so great, or so decided, as in cases of intestinal inflammation, and it is a mode of treatment which I do not by any means rely upon for removing the disease.

After the violent symptoms have been subdued, the next thing you have to consider is, whether there is any paralytic affection, and how this is to be treated. If the disease be severe or of considerable duration, you may look for paralysis of one or both of the upper extremities with a good deal of certainty. This part of the subject, I believe, more properly belongs to the consideration of nervous affections, but, as I have gone so far into the treatment of painters' colic, I may as well give the whole together. The paralysis which follows this disease is different from that which is the result of apoplexy; it is a neurosis of the passive kind, and to be treated as such. The patient, some time after the occurrence of the usual symptoms of colic from lead, begins to complain of weakness in his arm, he feels some difficulty in extending his fingers or raising his hand to his head, and then the symptoms become more marked. The arm and fore-arm become rapidly atrophied, the paralysis principally affects the extensors, while the flexors retain a considerable share of power, the fingers are bent, and the arm hangs by the side. Here the first thing you should do is to adopt the treatment recommended by Dr. Pemberton in his work on Abdominal Diseases, namely, to apply a splint to the inside of the fore-arm and hand, so as to counteract the preponderating influence of the flexors. Apply a splint to the fore-arm, wrap it up in flannel, and make the patient keep it supported by a sling. In this way you establish a kind of balance between the antagonist muscles, and place the extensors under favourable circumstances for bringing about a cure. If the patient has both arms affected, which is sometimes the case, change the splint from one arm to the other every second day, and continue this alternation until the cure is completed.

You will next have recourse to the use of strychnine, one of the best remedies we possess in cases where the paralysis does not depend upon organic disease of the brain. This is a remedy which is given with good effects even in cases of paralysis from apoplexy, *where there is reason to suppose that absorption of the clot has taken place.* In a case of apoplexy, it can be employed only after some time and where depletive measures have been sedulously put in force, but in a paralysis of this description you may begin with it at once. Commence with the exhibition of one-twelfth of a grain of strychnine two or three times

a-day, and go on increasing the dose gradually, until a grain, or even a grain and a half, is taken in the twenty-four hours. To ensure the exact division of this powerful drug, you should direct a grain of it to be dissolved in a few drops of alcohol, and then made into pills of an equal size with crumb of bread or conserve of roses. In this way you will succeed in bringing back the lost power of the muscles of the fore-arm and restoring its nutritive functions. I may mention here, that the atrophy of the paralysed limb, which occurs in this disease, cannot be accounted for by supposing that it is produced by want of exercise; the emaciation is so rapid (sometimes taking place in ten days or a fortnight) that we can only attribute it to some unknown lesion of innervation.

If the use of strychnine be followed by severe muscular twitches, pain in the head, or convulsions, you must omit it for some time, and then, when these effects have completely subsided, it may be resumed if necessary. You should also bear in mind, that this remedy is one of those medicines which have been termed accumulative, that is to say, a patient may be taking it for a considerable time without any perceptible symptom, and then its effects explode suddenly, the quantity which has been accumulating in the system manifesting itself at once by symptoms of great intensity. Here you omit it immediately, and with a view of relieving the existing symptoms, prescribe a draught, composed of camphor mixture, ammonia, and opium. This has generally the effect of calming the nervous excitement and you will seldom have any more trouble on this account. *En passant*, I would advise you, whenever you employ strychnine in private practice, to inform your patient of the occurrence of such symptoms, and tell him that there is no cause for alarm. Instead of strychnine, some of the continental practitioners are in the habit of prescribing brucine, and it is stated with considerable advantage. I have tried it in two or three cases without much apparent benefit, and I am inclined to think that it is decidedly inferior to strychnine. In France, however, it has been very largely employed, and has the reputation of being a remedy of considerable value in the treatment of paralysis. It has one advantage at least over strychnine, it can be much more easily divided and regulated, so far as respects the quantity given, as it is a much weaker preparation than strychnine, one grain of which is equivalent to six grains of brucine.

In addition to these measures, I have seen much benefit result from the application of blisters and frictions, with stimulating liniments to the spine. It is also of importance to remove the clothes in which the patients have worked; they are frequently charged, saturated with lead, and have a considerable tendency to keep up the disease. I have so often seen an attack of painters' colic reappear shortly after leaving hospital, and without any evident exposure, that I could only attribute it to the circumstance of their garments being saturated with the lead.

In the foregoing plan of treatment there is nothing new; it is, in fact, a routine practice, but it is one which is borne out by the results of pathology, and which, from long experience, I can strongly recommend. I may also remind you that the plan of treatment followed in the Hospital of La Charité, which has more cases of this disease than any similar institution in Paris, is completely routine.

Other metals besides lead, as, for instance, copper, produce effects somewhat analogous. Copper is said to produce salivation, colic, and vomiting. Brass-founders are liable to these symptoms, as also other persons employed in the manufacture of copper. I have not seen the disease, but it is said to be analogous to lead-poisoning, so far as colic is concerned; in other respects the symptoms differ. The convulsions are not so violent, nor is the paralysis nor coma so frequent: there is often considerable fever, thirst, difficulty of respiration, præcordial anxiety, diarrhœa, and prostration of strength, so that it comes much nearer to ordinary intestinal inflammation with fever, than painters' colic. Yet it is a curious fact, that, notwithstanding all this array of symptoms so closely bordering on inflammation, it has been found in Paris, where several cases of this disease have been seen, that it is amenable to the same treatment as painters' colic, and that, under the use of purgatives, the fever, thirst, diarrhœa, and tenesmus subside.

Mercury, under certain circumstances, will produce a most extraordinary affection, on which I shall here make a few observations. The disease is not of very frequent occurrence, but it is of importance in practice to be able to recognise and treat it properly. It is a proposition well known to almost every one, that a many bad effects have resulted from the abuse of mercury; and I need not tell you how many persons are injured by the empirical employment of this potent drug on all occasions and in all constitutions. It is a common opinion that mercury acts principally on the capillary and absorbent systems, but there can be no doubt that it also acts upon the nerves, and that in a very remarkable manner. I have seen cases where the constant use of calomel has produced a marked derangement of the nervous system, manifested by great irritability, tremors, hysterical excitement, and hypochondriasis. You will see in the various works on Toxicology an account of the effects produced by mercury on persons employed in quicksilver mines, and on tradesmen, such as looking-glass manufacturers and others who come in contact with mercury. I shall read for you the notes of a remarkable case of this kind, which was some time back under treatment in the Meath Hospital. It may be called a form of the paralysis agitans from the

effects of mercury. Similar cases have been described.

A man, aged forty-six, was admitted into one of our medical wards in October 1833.

He stated that, from the time he was eight years of age, he had been employed in a looking-glass manufactory, and that his occupation principally consisted in what is technically termed the silvering of mirrors. In this process the operator's right hand is repeatedly immersed in a vessel filled with mercury, while the left fixes a sheet of tin-foil, on which the metal is rubbed. Artisans while thus engaged are in the habit of using a muffle, which covers the mouth and nostrils. This the patient said he had never used, because he found that those who were in the habit of wearing it did not enjoy better health. For thirty years he continued to enjoy tolerable health, with the exception of some bleeding from the gums, with shooting pains and a sense of formication in various parts of the body, accompanied by a slight loss of power in the hands, which came on at various times, and was generally relieved by the use of ardent spirits. He had been frequently salivated, and when admitted had lost nearly all his teeth. The mode in which he lost them was this, gum-boils formed close to the roots of the teeth, which soon after dropped out, and in this way the local inflammation subsided. About three years ago, he had an attack similar to that for which he had been admitted; he went into the hospital and was put under an active antiphlogistic treatment with relief. From that time up to the period of his admission, he had enjoyed tolerable health, except that the sight of the right eye was considerably impaired, and that his memory was slightly affected. He forgot the names of persons and places, and was frequently at a loss in endeavouring to recollect the persons to whom he had lent his tools. On being brought into the hospital, he presented an extraordinary specimen of human suffering, and I was at first unable to give his complaint a name, the case being the first of the kind I had seen. It exhibited the phenomena of a violent spasmodic affection; it was different from tetanus, or hydrophobia, or hysteria, but it bore some faint analogy to chorea. The head, arms, and fingers, particularly on the left side, presented a succession of quick, convulsive, jerking motions. The angles of the mouth were retracted, the eyebrows twitching, the head constantly thrown back, but the agitation scarcely raised the arms. The nostrils were spasmodically dilated. The sterno-mastoid, trapezius, scaleni, diaphragm, and the abdominal muscles were similarly affected. Their contractions were short, rapid, and painful. From the constant hiccup with which the spasms of the diaphragm were attended, and the jerking motions of the tongue, his speech was interrupted and indistinct. He was occasionally free from spasms altogether, but whenever he transmitted volition to any part of the muscular system, it became instantly affected. When he endeavoured to raise his foot from the ground, it quivered and fell quite powerless and useless. Whenever he attempted to carry a vessel to his lips, he generally overshot the mark, carrying the vessel towards his ear, nose, or forehead, and spilling its contents over his face or neck, so that it was a common saying among the patients in the ward, that he did not know the way to his mouth. But if a vessel was applied to his lips by another person, he could swallow easily. A sudden blast of cold air, the application of a cold hand to the skin, or the abrupt entrance of any person into the wards brought on an attack of spasms. The muscles of the left hand and of the left side were affected much more than those of the right. The mental powers were not impaired, the patient was intelligent, and seemed anxious to communicate the particulars of his case. During the whole course of the disease he retained a full power over the urinary discharge and defecation. There was some slight tenderness on pressure over the fourth and fifth dorsal vertebræ, but the rest of the spine exhibited no increase of sensibility. His skin was cool and dry, his pulse quick, weak, and small, his bowels inclined to be costive, but easily moved by laxatives. Here we see a marked difference between this affection and painters' colic.

The treatment adopted in this case was very simple. Leeches were applied to the tender part of the spine, the patient was placed in a warm bath, and got some laxative medicine, followed by an opiate. He was also ordered to have a large flannel shirt, and to be placed in a warm comfortable bed. He passed the night tolerably well, and next day appeared to be much improved. I shall not continue the daily reports of this case, but shall merely mention, that after a few days a great improvement took place. The spasms of the left side continued, though much less severe. Those of the purely voluntary muscles on the right ceased, while the spasms continued in the respiratory muscles on this side. We found that all the muscles of the face which have been called respiratory by Sir C. Bell, the platysma, scaleni, pectoral, and intercostal muscles, and the diaphragm, were thrown into violent spasms, while the purely voluntary muscles remained in a state of perfect quiescence. I am not aware that this circumstance has been observed in any other case. As far as it goes, it tends to corroborate the views of Sir C. Bell. In the treatment of this case we employed narcotic frictions, particularly those composed of the extract of belladonna, to the spine with considerable benefit. The patient was cured by very simple means, and at little expence to his constitution.

HOPITAL DES VENERIENS.

OF THE COMPLICATIONS AND OF THE TREATMENT OF BLENNORRHAGIA IN WOMEN.

BY PHILIPPE RICORD, D.M.P., &c., &c.

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(*Continued from page* 369, *Vol. IV.*)

WHATEVER may be the cause producing blennorrhagia in the woman, that affection may present different complications, of which some belong to all its forms, while others are the consequence of its virulent nature. I am about to enumerate, in its turn, each of these complications, dwelling chiefly upon the most important.

1st. A complication, generally not very serious, but very inconvenient and frequent, particularly in fat women, is *intertrigo*, erythema of the external parts of the great labia and the internal part of the thighs Frequently the matter of an abundant and acrid discharge, joined to fatigue and uncleanliness, determines this complication. I have seen in some patients, who are in the habit of much neglecting themselves, these parts affected with erysipelas, with eczema, or with herpes. There are some in whom the integuments of this region, by means of a kind of mucous transformation, furnish a muco-purulent secretion, analogous to blennorrhagic matter, and thus give rise to a kind of extra-genital blennorrhagia. Such an affection, more frequent when there are about to supervene mucous papulæ, and which most commonly is only in some measure the first degree of them, is most frequently accompanied with a disgusting odour, quite peculiar and characteristic, when the mucous papule exists.

2nd. The different parts composing the vulva may be affected with œdema. I have shown, in my clinical lectures, instances very curious in this respect. Sometimes the nymphæ alone have been attacked: there existed, in those cases, a species of phymosis; at other times, the great lips being affected at the same time with the small, the latter have undergone a strangulation more or less powerful, and comparable to a true paraphymosis. A young woman still occupying the bed No. 35, of my first Women's Ward, presented us a very remarkable example of this. This œdema of the genital parts, which likewise occurs under other circumstances, but which is seen rather frequently in simple as in virulent blennorrhagia, may terminate in a speedy and complete manner, or else pass into a state of induration more or less difficult to overcome, or even be complicated with erysipelas, or terminate by suppuration or gangrene.

3rd. With blennorrhagia phlegmonous inflammations at times supervene. Hence the frequency of abscess of the great lips. In some cases I have seen abscesses supervene in the perinæum during a blennorrhagia. In one patient with a most acute blennorrhagia, an abscess was developed in the clitoris, the suppuration was very abundant, and a part of the prepuce was destroyed by the force of the inflammation alone. A number of women have cysts, more or less voluminous, in the substance of the genital lips; these cysts may remain for an indefinite period without being changed; but, under the influence of mechanical or other excitations, or as a consequence of acute blennorrhagia, they are inflamed, suppurate, and give rise to an abscess, which, when it opens spontaneously, or when a small aperture is made in it, tends unceasingly to be reproduced, or to be transformed into a fistula, which most frequently is only to be cured by an operation.

4th. The inflammation of the urethra may extend to the bladder; indeed I have frequently seen cystitis and vesical catarrh complicate blennorrhagia in the female, or be in some measure but an extension of that disease. Accompanying the same, I have more generally observed *dysuria*, or even complete retention of urine, sometimes depending upon the excessive inflammation, sometimes on a state purely spasmodic, or, finally, occasioned by these two causes united. In some rare cases the patients have voided blood with the urine; there has been *hæmaturia*.

5th. Buboes come sometimes to complicate blennorrhagia in women, and most particularly when it affects the urethra. Produced by sympathetic irritation, or depending upon successive inflammation of the lymphatics, from the inflamed surface to the most adjacent gland, it may be developed in every form of blennorrhagia, and assume different seats, as I shall hereafter mention in a special article upon buboes. But a constant fact, which I ought here to call to mind in investigating bubo as a complication of blennorrhagia, is, that whatever may have been the intimate nature of the discharge when there have not existed true chancres, never have the suppurated buboes furnished a pus susceptible of being inoculated.

6th. If we seek the complications from the uterus and its appendages, we find in some patients aberrations of the menstrual discharge, some being seized with amenorrhœa, while in others there supervenes true metrorrhagia. These cases are rare, it must be confessed, but nevertheless they exist. In a young chlorotic patient under my care at the Hôpital des Vénériens, the blennorrhagia appeared to have brought back the menses, which, up to that time, had not come as a consequence of all the emmenagogues that had been employed. Sometimes women of a very nervous temperament have been subject to frequent attacks of hysteria during the progress of a uterine blen-

norrhagia, or else in them this affection has been complicated with true metritis. But what I have already twice had occasion to observe, there are, as complications, some symptoms which may be referred to as an inflammation of the ovaries, similar, in this case, to the inflammation of the testicle in man. A patient lying at No. 6 of the second Women's Ward of my service, aged 32 years, affected with a very acute urethro-genital blennorrhagia, was seized suddenly with a sense of tension in the iliac fossa of the left side. The touch, which yielded distinctly the sensation of a tumefaction, occasioned much pain, and I could appreciate in that spot an increase of temperature; there supervened some nausea and a febrile movement, with fulness of the pulse; the patient remained lying on the back, and, from preference, inclined to the left side, with the thighs a little bent upon the pelvis. The discharge from the urethra, and from the genital parts, had almost entirely disappeared. On touching, by the vagina, the following is what I was enabled to determine. Pressure of the neck of the uterus, by the indicator finger, was not painful, while pain was produced when the finger, placed upon the left side of the womb, tended to push the organ back towards the right iliac fossa, by exercising a sort of tension upon the left broad ligament; the same manœuvre, practised upon the other side for the sake of comparison, produced scarcely any uneasiness; defecation, emission of urine, and in general all the abdominal movements were painful. These symptoms, combated by antiphlogistics, disappeared towards the twelfth day, and, in proportion as they lost their intensity, the discharge became more and more abundant; when suddenly the discharge diminishing anew, the same series of phenomena were manifested, but this time on the right side. I have, again, at present at No. 2 in the first Women's Ward, a patient, in whom the pupils attending my clinical lectures have had an opportunity of verifying a case almost similar, to that which I have just related; yet, in this second observation, the left side has alone been affected.

7th. Mucous papules, or pustules, a frequent consequence of virulent blennorrhagia, may be regarded as complications; the same is true of divers kinds of vegetations, many of which are altogther independent of all virulent principle. As to chancres, distinct from blennorrhagia, and due to another kind of contagion, they may exist at the same time with this and complicate it; they may, by means of irritation of the parts adjacent to their seat, determine alone discharges, or keep them up, without these discharges being of a nature similar to the pus they secrete.

8th. Blennorrhagic ophthalmia, and arthritis, disturbances of the circulation, of the innervation, of the digestion, of the urinary secretion, &c. may occur as accidents, or as complications of blennorrhagia.

9th. Finally, it must not be forgotten that in this, as in all other diseases, the duration of the particular cause of the evil is a troublesome complication.

Passing now to the history of the treatment of blennorrhagia, whatever may be still its particular cause, its essence, its intimate nature, and its complications, or accidents, it does not less appear with the characters of catarrhal inflammation, acute or chronic, and as such calls for the treatment of inflammations in general, less subject, perhaps, in the woman than in the man, to abrupt displacement, or to metastases, having nothing to be feared from its rapid cessation by delitescence; it would doubtless be very advantageous to be able to produce its suppression at its origin. But hitherto it must be confessed there is no efficacious and certain method of obtaining this happy result; and if sometimes the production of suppression of discharges in man is successful, from the use of revulsives applied to the digestive tube, by copaiba taken at the commencement of the disease, by astringent, irritant, and even caustic injections into the urethra; these means in the woman remain most frequently without influence, or aggravate the evil in the greater number of cases.

Yet, in the impossibility of procuring the arrest of blennorrhagia in women, care must be taken in its treatment to fulfil exactly the indications, and not to lose sight of this principle, that the more recent the blennorrhagia the more easily can it be cured, if it be well treated; while the cure of it will become more difficult when it shall have passed into the chronic state, and when it shall, in some measure, have established a right of domicile by altering the tissues. In the treatment of the affection under notice, the cause producing it, and capable still of keeping it up, must be removed, the most perfect continence must be enjoined, all irritating contacts must be avoided, and the organs of generation must be kept in the most complete state of repose; all cause of excitation of the adjacent organs must be avoided; the bowels must be kept relaxed by diluent drinks, such as veal-tea, whey, barley-water, sweetened with honey; and emollient injections, frequently repeated, must be employed in order to avoid the accumulation of fæcal matter in the rectum. The urine must be rendered more watery by a sufficiently great quantity of drink; this is a very important point, but one which is not well comprehended by all medical men; indeed, they appear most frequently to seek to increase the secretion of the urine, and hence its excretion, to desire to make their patients make water more frequently. But this idea is false and injurious, particularly in the case of urethral blennorrhagia in the male and in the female, for if it were possible for the patients to remain for a very long time without discharging urine, the inflamed surfaces, deprived of the irritant influence of the urine, would certainly become better; likewise, never do I, in the treatment of a discharge,

administer diuretic medicines, such as nitrate of potassa, or others, I give the preference to mucilaginous decoctions, sweetened with syrup of orgeat, of currants, or of lemons. The object here, I repeat, is not to increase the secretion of the urine, but only to render that liquid less irritant by increasing its watery principles. Baths in blennorrhagia are extremely useful, and that, perhaps, more so in women than in men; but the preference must be given to entire baths, recommending the patients to take them of a very moderate temperature; too hot or too cold they are no longer appropriate; their temperature must be graduated, not by the aid of the thermometer, but rather by the sensations of the patients taking them, so that when they are in the water they may be neither hot nor cold. When the contact of a foreign body is not very painful, when the introduction of the pipe of a watering-pot syringe does not induce suffering in the vulva, I recommend, during the bath, vaginal injections, frequently repeated, with the water itself of the bath. Independently of baths, which are taken every day, or every second day, according to the necessity, the patients, who must as much as possible remain in a state of repose, inject themselves every morning and evening with a mucilaginous injection, such as the decoction of the marsh-mallow-root, or of linseeds. These injections, which ought not to be made, as I have already stated, except when the introduction of the syringe does not produce too much pain, must also be had recourse to in such a manner that they may remain for a short time in the vagina. To obtain that, the patient, couched upon her bed, elevates the seat, or, seated upon a chair, places the legs upon something more elevated than the seat upon which she is sustained. These precautions having been taken, the injection must be pushed slowly. In some patients the pain is greater than the inflammation seems to warrant in these cases. Independently of the opiates and antispasmodics that may be administered in lavements or by the mouth, one finds considerable advantage in adding to the emollient injections some poppy-heads, or some of the plants of the solanum montanum (*Morelle*). But a means of the greatest importance, and which should never be neglected, is the continuous application of the simple or the narcotised emollients I have just indicated; indeed, in spite of the precautions taken, the liquids injected do no more than pass over the diseased surfaces, and then act only as a means of cleanliness, without having the time to operate a medicamental effect. To be more efficacious, plugs of linen ravellings (*charpie*), or fine sponges must be imbibed with them, and introduced into the vagina, and allowed to remain there. I ordinarily have an injection made, and then I cause to be introduced into the vagina, and as far up as to the neck of the uterus, the plug of linen ravellings imbibed with the liquid of the injection, and attached to a thread that hangs out of the vulva for the facility of withdrawing it. The plug should be sufficiently long to occupy the whole length of the vagina, and not sufficiently bulky to distend it, which would be productive of irritation. Once it is placed, as it must have lost from compression a certain quantity of the liquid with which it was charged, I cause a new injection to be made upon it, which it in great part retains. This plug is renewed twice in the four-and-twenty hours. At the hospital a small entire speculum of M. Recamier is made use of in order to place it; and, in the cases in which the introduction of the speculum produces pain, the patients introduce it themselves with the finger, which is very easy to be done, and even in these cases preferable, for then the women have need of no one to dress them. But the means I have just indicated, and which are applicable in all the cases, allowing for the appropriate modifications, do not alone suffice when the blennorrhagia is intense, or when it is complicated; indeed, when the inflammation is vivid, blood-letting becomes necessary. Bleeding of the arm is very useful in women who are strong, and who, moreover, have a slight febrile reaction. In the commonest cases, leeches, in number proportionate to the power of the patient and the violence of the affection, should have the preference. I have them applied in the fold of the thigh whenever there are no chancres, for there is then no fear of ulceration of the bites as a consequence of inoculation. But in the case in which chancres exist, leeches should no longer be placed upon a part dependent and susceptible of being touched by the pus, which might transform their bites into true chancres.

If the menstrual discharge supervene during the progress of a blennorrhagia, it should momentarily replace artificial blood-lettings, which should be only practised, if needful, after the menses have ceased to flow. Moreover, during this period, the injections may be continued, but the plugging should be suspended.

The different complications of blennorrhagia I have indicated yield to the above treatment, or else, if they resist it, or if they become intense, then forming in some measure a separate disease, and independent of the blennorrhagia, their peculiar treatment must be applied to them, into the details of which I cannot enter in this article.

But blennorrhagia in the woman, as in the man, does not always yield to antiphlogistics the most judiciously applied, and most commonly then other means must be resorted to. Copaiba may be employed for it; but it must be confessed that it is far from having the almost specific virtue it has with the man. I have very frequently employed it for all the forms, and in varied doses, alone, or mingled with cubebs, and rarely has it produced, in a clear manner, effects similar to those observed in the male sex. Its most evident and most

efficacious action is manifested in cases of urethral blennorrhagia of the woman, cases which have the greatest analogy with blennorrhagia in men, in which this medicine is advantageous.

However, the copaiba acts in one sex as in the other in two different manners, at first upon the digestive passages, of which most frequently it disturbs the functions by determining, in doses relative to the individuals taking it, more or less frequent stools, and then upon the urinary organs, by increasing sometimes the secretion of the urine, but by always communicating to this fluid its characteristic odour, and consequently a part of its principles, which come to act directly upon the diseased urethral mucous membrane. The vagina and the womb, placed in a *juste milieu* between the rectum and the urethra, seem by their position to escape from this last action of the copaiba, since under its influence the urethra recovers, while the vagina and the uterus still furnish their morbid secretion. So the copaiba and its succedanea, the cubebs, turpentine, &c., succeed sometimes in suppressing urethro-genital discharges; I scarcely insist on their employment, except in the cases of blennorrhagia of the urethra in the woman, preferring rather, as soon as the diminution of the inflammation prescribes it, to have recourse to astringent or resolutive plugging. Indeed, as soon as the acute stage diminishes, as there is no more pain, the emollient injections and the emollient pluggings are abandoned, and replaced by injections and pluggings of another nature. Injections and pluggings with the concentrated solution of the acetate of lead succeed the most frequently, and I give them the preference in most cases. When the patients are still very near the acute state, I employ the following solution:—

Common water, a pound,
Crystallised acetate of lead, half an ounce.—Mix them together.

When the patient is altogether in the chronic state, the dose of the acetate of lead is increased to an ounce for the same quantity of water. The injections, moreover, are renewed twice a-day; at the hospital there is but one dressing in the twenty-four hours After the injection, the ravelled linen, steeped in the same liquid, is introduced into the whole length of the vagina, and allowed to remain, care being taken to make thereon a new injection, as in the case of the employment of emollients, which I have already indicated. It is important to remark here, that in some patients, without determining the least pain, and when the discharge has entirely ceased, some points of the vagina or of the neck of the uterus become excoriated under the influence of the too concentrated acetate of lead. Then it must either be weakened or completely suspended. For a hundred women affected with blennorrhagia, sixty are cured by the means I have just indicated, in twenty days, a month, two months, or still later. In others who have resisted antiphlogistics and the employment of the acetate of lead, and in whom the disease has passed into the chronic state, lesions of tissues that must be combated are found by the aid of the speculum; sometimes they are vegetations of the vagina, or of the neck of the uterus, which must be cut out or cauterised; at other times they are granulated or prominent ulcerations, having the aspect of a suppurating surface of a blister, or else hollow ulcerations, that must be locally attacked, and which are the cause of the persistence of the discharges. If these diverse ulcerations are still accompanied with acute inflammatory symptoms, or if the patient have actually her menstrual discharge, or expects it soon, I still cause the emollient injections and plugging to be continued. In the contrary circumstances, all the granulated and prominent ulcerations, and those of which the aspect resembles the surface of a blister in a state of suppuration, are touched, after having been laid bare by the aid of the speculum, with a small brush of linen ravellings steeped in acidulated nitrate of mercury. Unless the prominence be very considerable, the cauterisation must never be very profound, one must content oneself with whitening the surfaces, taking care to make the caustic bear upon the diseased points. To that end all the affected parts must be previously wiped, and the mucus, which would otherwise alone be cauterised, removed by the aid of a long dry charpie brush. But the very tenacious mucosities, especially that coming from the interior of the uterus, yield with difficulty to the action of the dry brush. To remove them perfectly, they must in some cases be previously coagulated by the aid of the acidulous nitrate itself, and then they may be extracted in concrete morsels with the greatest facility, and the cauterisation of the parts they cover may be affected. Cauterisations thus made never produce either pain or accident; upon more than six hundred women, whom I have subjected to it, and who have owed their cure to it, there are at most seven or eight who have felt something, without, however, suffering; the others did not even know they had been touched. Immediately after the cauterisation, I place a plug, imbibed with the solution of acetate of lead, which is subsequently renewed twice a-day, the injections being made as has been indicated above. The cauterisations are moreover repeated every seven or eight days as long as necessary, care being taken to graduate their intensity according to the particular aspect of the ulceration, and in reference to the results of antecedent cauterisations, they requiring to be so much the stronger, in proportion as the tissues appear softer, of a more dull greyish-white, and more prominent.

The ulcerations hollow beneath the level of the adjacent parts, whatever may be their presumed nature, sometimes yield and cicatrise

under the influence of cauterisation with the acidulous nitrate of mercury, like the former; but in a great number of cases, the cauterisations appear to keep them up, or to increase them. When neither emollient nor narcotic applications produce their cicatrisations, when they have resisted the solution of acetate of lead, and the acidulous nitrate of mercury, I place upon them some calomel prepared by the aid of vapour, by means of a brush made of ravellings of linen, placing subsequently into the vagina a plug of dry linen ravellings. In some cases, moreover, of profound ulcers, which had likewise resisted this last means, the cure has been effected by the application of Narbonne honey mingled with a twelfth part of proto-ioduret of mercury. By aid of these means, I have been able to cure a great number of patients that hitherto had been regarded as incurable, and there are scarcely any but those affected with degenerated or carcinomatous ulcerations, that have not yielded to these modes of treatment; but these last cases have been very rare. Upon the great number of patients I have had to treat in the course of two years at the hospital, I have but twice practised amputation of the neck of the uterus, in cases of fungous cancer.

Yet in some patients, without there having been very marked, or even appreciable, alterations of tissue, discharges have still been able to persist. Most commonly they have for seat the deep parts of the vagina, the neck of the uterus, or the uterine cavity, these parts being cured neither so well, nor so quickly, as those in contact with the air, or placed more exteriorly.

Yet in these cases, plugging with dry charpie, or the introduction of the air, by means of a gum elastic perforated speculum left in the part, injections, and plugging with solution of the sulphate of zinc, with chlorine water, with pure wine, or the vinous decoction of Provence roses, with the solution of corrosive sublimate, with decoction of oak bark, of sulphate of alumine, the diluted tincture of iodine, the acidulous nitrate of mercury diluted, &c., employed by turns, have sometimes succeeded; the employment of purgatives, of blisters to the inner parts of the thighs, to the hypogastric and sacral regions, and vapour baths, have likewise sometimes yielded fortunate results; but in these obstinate cases no indication should be neglected; the use of bitters, and of astringent tonics, and of iron in particular, is very favourable in weak, lymphatic, and scrofulous women; as also sulphurous remedies, Barége baths, injections, and plugging with Barége water, in psoriatic women.

I have, it must be confessed, seen these means be much more efficacious in the particular case I have just indicated, than the use of mercurials, the action of which is very weak or wanting in the greater number of patients, in whom there exists nothing but a discharge; and it is only when there are other symptoms, that its employment with me finds a motive and appears efficacious. In the discharges coming from the interior of the uterus, and which are due to some slight or deep alteration of its mucous surface, a local medication is likewise required as for the vagina and the vulva; for as medications applied upon the vulva would do nothing for the deep-seated parts of the vagina, so medications placed in the vagina have little or no influence upon the uterine cavity, and they must, therefore, be introduced into that cavity. I have been able by means of injections of a solution of acetate of lead practised every day, in the intervals between the menstrual periods, to destroy chronic uterine discharges. In two cases of patients markedly lymphatic, and even scrofulous, very abundant whites have yielded to uterine injections made with the following solution :—

℞. Distilled water, three ounces,
Tincture of iodine, one drachm. Mix them together.

If one would obtain some advantage from this treatment, it must be continued very carefully.

In some patients who have exhibited ulceration of the os tincæ running into the cavity of the womb, and of whom the uterine secretions have been purulent, I have attempted cauterisation of the internal surface of this cavity. To this end, I have had constructed a syringe with a double cylinder, of which the pistons worked singly, and which enclosed in one of its cylinders acidulous nitrate of mercury, diluted with twelve parts of distilled water, and in the other pure water. Its pipe, also double, is adaptable to a gum elastic catheter, of about eight inches in length, which, opened at its two extremities, and smeared with a greasy body, is introduced into the uterus. The injection of the acidulous nitrate is then pushed gently, and in small quantity, to the extent of about a small teaspoonful, and after having allowed it to remain for a minute or two, the watery injection is then pushed on. Five patients affected with very abundant purulent uterine discharges, and which had resisted all other means, have been thus treated and cured in my clinical service at the Hôpital des Vénériens. I should state that I have only employed this means as a desperate remedy, and with all possible precautions, and that although I have never had any troublesome cases, in some patients it has produced accidents of short duration, but formidable in appearance, having determined, in the greater number, instantaneous and very violent hysterical attacks; which, by the way, would tend to support the opinion of those who place the seat of that disease in the womb.

However, when I have obtained the cure of a blennorrhagia in a woman, whether there does or does not remain a mucous discharge, I recommend the habitual use of injections of cold water, once or twice a-day, and that by commencing eight days after the cessation of the menstrual discharge, to stop again eight days before its arrival, and recommence afterwards

in the same manner. By following this practice, the cures have appeared to me to be more substantial, and the spontaneous relapses less frequent.

ON THE CAUSE OF DEATH IN ASPHYXIA.

BY DAVID WILLIAMS, M.D., LIVERPOOL.

As the Editors of a distinguished medical publication, I deem it necessary to address you on a subject, that has not only reference to myself but in some respect to medical literature. Presuming it likely, that the work on the Physiology, &c., of Asphyxia, just published by Dr. Kay, of Manchester, may be reviewed in your Journal, I am desirous of putting you in possession of certain circumstances connected with his subject. I may remark, though familiar to you, that, until lately, Bichat's views of the nature and cause of asphyxia were considered the most probable and best established, hence they were those that were taught and admitted in our colleges and medical writings.

In a paper, On the Cause and Effects of an Obstruction of the Blood in the Lungs, published in the 19th volume, 1823, of the Edinburgh Medical and Surgical Journal, I have given an account of a series of experiments which I had performed. From phenomena, which were witnessed in these experiments, I deduce:—that the obstruction of the blood in the lungs, on suspension of respiration, is not the effect of a mechanical cause, that is, of collapse, or subsidence, of the lungs; that the obstruction of the blood in the lungs, on suspension of respiration, arises from a deprivation of pure atmospherical air. From these deductions and the facts, that an animal can survive only a very limited time the suspension of the function of respiration, and that the blood undergoes a wonderful change in consequence of its being acted upon by the inspired air, I infer, "that the blood cannot pass from the system of the pulmonary artery into that of the pulmonary veins, without first undergoing those unknown changes from the action of the inspired air."

In my paper, I have noticed that Harvey supposed the circulation, in asphyxia, to be arrested in the lungs; Goodwyn and Bichat in the heart; that Harvey attributed the vacuity of the aortic system, after death, to an obstruction of the blood in the lungs, in consequence of their collapse; that Goodwyn and Bichat concurred in imagining asphyxia to be immediately dependent upon the circulation of black blood, or blood of a venous character,—the left ventricle, according to Goodwyn, ceasing to act "from a defect of a stimulating quality in the blood itself,"—the heart ceasing to act, according to Bichat, from the circulation of black blood (*sang noir*) in the coronary arteries, this fluid stopping (*empêche*) the action of its fibres. The error of these several views I have pointed out; and, in conclusion, I have advanced the theory—that the immediate cause of the cessation of the action of the heart, on suspension of respiration, arises from the obstruction to the circulation in the lungs: not from a state of collapse of these organs, as supposed by Harvey, but from a deprivation of pure atmospherical air. Further, I have cursorily examined how the obstacle to the circulation of the blood, from the deficiency of pure atmospherical air, is adequate to explain the cause of some of the vital phenomena observed in health and disease.

My paper, as I have above stated, appeared in the 19th vol. of the Edinburgh Medical and Surgical Journal for 1823. In the 29th vol. (1828) of the same Journal, Dr. Kay published an essay, entitled "Physiological Experiments and Observations on the Cessation of the Contractility of the Heart and Muscles in the Asphyxia of Warm-blooded Animals," in which he develops the same views, with respect to the immediate cause of the cessation of the action of the heart, as I had already done by a similar or analogous series of experiments. In this essay no reference is made to my paper, which had appeared, in the same Journal, four years previously. This circumstance I mentioned to Dr. Kay. In 1831, Dr. Kay published "Further Experiments on Suspended Animation" in the North of England Medical and Surgical Journal. In this essay, in a marginal note, Dr. Kay says that I had called his attention to my paper, and states my having anticipated him in one of his conclusions, namely—"That the obstruction of the blood in the lungs, on suspension of respiration, arises from a deprivation of pure atmospherical air." This marginal note is copied into Dr. Kay's recently published volume on the Physiology, &c. of Asphyxia. However, though Dr. Kay enters very elabo-

ately into the history of asphyxia in this volume, yet no notice whatever is taken of my having questioned the correctness of Bichat's hypothesis, or of my having advanced the theory, "that the immediate cause of the cessation of the action of the heart, or asphyxia, on suspension of respiration, is the effect of the circulation being obstructed in the lungs.

I regret that any circumstances should arise to render it imperative on me to make this communication. But, in consequence of the author of the article on asphyxia in the Cyclopædia of Medicine, and the reviewers of Dr. Kay's recent work in the Liverpool Medical Journal, having given Dr. Kay exclusively the credit for being the first who pointed out the errors of Bichat's hypothesis, and established that the immediate cause of asphyxia is the obstruction to the circulation in the lungs, I deem it incumbent on me, in my own defence, to set the profession right on those points. Should the subject of asphyxia be hereafter reviewed in your Journal, I trust the reviewer will take the trouble of examining the papers alluded to, and thereby satisfy himself of the truth of this statement, and do justice accordingly.

Liverpool, May 12th, 1834.

Foreign Medicine.

ACADEMIE DE MEDECINE.

Sitting, April 29th, 1834.

President—M. Lisfranc.

Spontaneous Evolution of the Fœtus in case of Arm Presentation.

M. Velpeau introduced the subject of the terminations of labour complicated with presentation of the upper extremity. The opinion that in certain cases this species of accouchement could terminate without manual assistance, has met with some opposition; facts, however, have confirmed it, the birth taking place by the breech or the head. Half a century ago Denman stated that the fœtus could make its exit by the head, whilst the arm presented. M. Velpeau, as well as others, have seen cases confirming this assertion. The practice formerly employed tended to bring on such a termination. Fabrice de Hilden mentions a case in which the fœtus was pulled by the arm; and adds, that his wife, who was a midwife, always adopted this course. Generally, however, these labours terminate by a birth of the breech. It had been tried to explain this by saying that the breech descended because the chest ascended, which explanation had been generally adopted. It has, however, been contradicted lately by Guillemot, who maintains that the arm does not ascend, and that the breech nevertheless comes down. A few days since M. Velpeau was called to a case of arm presentation, in which all attempts of inversion had been fruitless, the uterus contracted with violence and very frequently; the hand of the operator could not be carried into the cavity of the pelvis, and the shoulder, already, with part of the chest, were in the vagina; the arm, which was black, swollen, and livid, projected outwards. Instead of making repeated trials, M. Velpeau waited patiently. The abdomen, then the hip and pelvis, successively escaped, and the child was born without the arm having moved. A similar fact has been noticed by M. Perrot, in which case the breech escaped. Numerous other cases might be mentioned. From these facts it may be seen that, in cases of arm presentation terminating by the breech, the fœtus does not undergo evolution, but unrolls, as it were. This is not so extraordinary as it might at first seem; for, the acromion and the clavicle pressing against the side of the inferior circumference of the pelvis, all the force of the contractions bear upon the breech, the body being alone able to yield, the chest and abdomen are driven down, and the breech is expelled, because it offers less resistance than the head. The practical results will be, that when the arm presents it will certainly be better to endeavour to bring down the head or the feet; but when the shoulder is protruded, and the uterus forcibly contracting, in which case the fœtus is generally dead, it would be, perhaps, more proper to favour spontaneous evolution, than to bruise the parts by painful manœuvres.

M. Capuron.—The possibility of birth by spontaneous evolution has never been contested. That which remains to be known is, if spontaneous evolution be profitable to humanity, and if we must wait for it when the arm presents. If we wait long the fœtus will

putrefy, and then that part which yields first will carry down the head with it.

I was called some time since to a case in which the shoulder presented, but no attempts had been made to hasten delivery. A jingling noise was heard suddenly, and the child fell on the floor. It is not difficult to conceive spontaneous evolution to take place when women have been fatigued, and putrefaction has commenced in the fœtus. M. Velpeau does not mention the size of the children in the cases he has described. In all those I have seen they were small, the head was soft, and they were still-born. The question is, whether, in practice, we must wait for this evolution or not. Now, when the shoulder is protruded, the hand cannot be introduced; if you leave the patients to nature, you would have utero-peritonitis from putrefaction of the fœtus, and contusion of the parts. The shorter plan would be, to draw down the shoulder, and to extract the child. Nothing, then, has been done for science, in omitting to explain the dimensions of the children.

M. Villeneuve.—The observations made by M. Velpeau appear to me important; for to this day, spontaneous evolution in cases of arm presentation have been considered of very rare occurrence. I have only seen one example of it, in which I had not been able to invert the child; the pains were moderate, and I left the patient at two o'clock in the morning, at four she was delivered of a child of large size, which was her first.

M. Moreau.—The facts mentioned by M. Velpeau are very common, and known to all obstetricians; with regard to their explanation, that given by Denman was not, it is true, sufficient, but others have rectified it. M. Velpeau has omitted to say, that in spontaneous evolutions the fœtuses might be small, still born, or putrefied. Ought we to adopt the precept, to wait for the evolution? No; it can only be considered as a fortunate occurrence, but far from establishing a rule. When the shoulder is protruded, if the patient be left she is exposed to death, the fœtus swells, putrefies, and gases are disengaged. I have seen a case in which the child was very large, the liquor amnii had been expelled, and the acromion presented at the external orifice of the vagina was livid and distended; the hand could not be introduced. Bloodletting and fomentations were prescribed. I saw her again some time after, putrefaction had made some progress, and the genital organs were slightly relaxed. I was then enabled to introduce my hand, and produce the inversion. The putrefaction was such that I was attacked with erysipelas of the arm in consequence: it would have been better to have dismembered the child, and extracted it sooner.

M. Velpeau in reply observed, I am of the same opinion as my colleagues in the principal point, but I have not completely treated the question. M. Capuron says, that in spontaneous evolution fœtuses are generally small and still-born; this is usually the case; but Denman and others mention children who were born at the full period, and weighing nearly six pounds; and there are six or seven authenticated cases in which the children were alive. I have not said that we should either assist or wait for the evolution; when inversion is possible, doubtless we should attempt it, but when otherwise, we should perhaps endeavour to assist the evolution.

Bilious Epidemic at Limoges.

We extract the following from an interesting paper communicated to the Gazette Médicale by M. Voisin, surgeon to the central penitentiary of Limoges.

The house of detention at Limoges is situated in a meadow at the south-east of the town, about two hundred yards from the river, and thirty feet above its level. This spot is extremely damp, often obscured till nine or ten in the morning by a dense vapour, which has collected during the night. The atmosphere is so cold, that it is only on the brightest days of summer that the genial influence of the sun's rays can overcome its baneful effects. Cold and humidity are the predisposing causes of suppression of transpiration, and the exciting causes of that long train of diseases, distinguished by the several appellations of enteritis, colitis, dysentery, intermittent, typhoid, and bilious fevers. As for the predisposing causes, these are of a local nature, such as confinement, melancholy, debility, profligacy, each of which by itself would have little influence, but becomes, when combined with others, a powerful agent. All these are to be met with in their worst forms in the Penitentiary of

Limoges. In the months of October and November, the number of patients increases rapidly; every autumn bringing in its train an epidemic affection, attacking principally the chylopoietic viscera. This year (1833) however, we have had bilious fever, instead of the usual intestinal disease. M. Voisin attributes this anomaly to the medical constitution of the year. The warmth and dryness of the summer, the bad quality of the fruit, have doubtless contributed to the prevalence of the influenza. Many patients, at the close of this disorder, have had their memories impaired to an extraordinary degree, in others the generative system has more or less suffered. The same effects have been observed after attacks of the bilious fever. A few cases of the latter had occurred during the summer in the neighbourhood, they increased in number in the month of September, at which time the intermittent fever of the country generally becomes prevalent. This month was very cold and wet; in October after the continuance for several days of southerly winds, the bilious epidemic was ushered in, and lasted as long as the wet weather, which prevailed for seven days, bringing on, at its termination, dysentery and erysipelas; up to this time, men only had been attacked. After four days of fine weather, a southerly wind returned, and with it rainy weather; the women now became affected, and the number of cases gradually increased. Generally speaking the worst cases of an epidemic happen at its commencement, it was not, however, till the close of this, that it was complicated with pneumonia, pleuritis, enteritis, &c., &c. In this manner the disorder continued through the whole of its course, increasing when the weather was cold and damp, and sensibly subsiding at the recurrence of an amelioration in the state of the atmosphere.

We will here detail some of the most prominent cases furnished by M. Voisin, to explain the characteristic symptoms of the different stages and varieties of the disease.

First, as an example of the bilious fever in its simple state, we shall notice the case of the woman Vrilette, unmarried, aged 31, of sanguineous temperament, who was seized, the afternoon of the 27th of October, with shivering, followed by heat, pain in the forehead, and in the epigastric region, loss of appetite, disagreeable taste in mouth; continual nausea, especially after eating; no thirst. During the four succeeding days, there was progressive increase of these symptoms, with shivering and sleeplessness at night. Every day at noon exacerbation with shivering and heat.

On the 1st of November, greenish hue of the skin, and of the sclerotic coats of the eye; pain on pressure in the epigastric region; tongue pasty and white; very little fever; skin natural; urine high-coloured and clear; bowels open; respiration easy. (Sulphatis sodæ, ℥iss., antimon. tart. gr. iss., misce; decoction of barley and liquorice, *ad libitum;* fever diet.) M. Voisin here remarks that antim. tart. is the only catharto-emetic he has employed during the prevalence of the epidemic.

Nov. 2nd.—Yesterday she vomited much bile, and had several stools; she perspired in the night, and slept in the morning. Shivering followed by diuresis, after which all the symptoms disappeared.

Bilious Dysentery—Gangrenous Erysipelas of the Face—Death.

Etier, convict, came into the infirmary the 18th of September, *facies hypocratica;* skin natural, but rather dry; no fever; tongue natural; belly drawn inwards; tenesmus, diarrhœa, continuing night and day; stools fœtid and bloody, consisting of fluid with white flocculent matter on its surface; no loss of appetite. This state lasted till the 15th of October, notwithstanding the application of leeches to the anus, the use of opiate and astringent injections, of opium internally in all its forms and in large doses, emetics, strict attendance to diet, and warm baths.

On the 15th an erysipelas of the face made its appearance; diarrhœa had diminished. On the 16th, abundant discharge of yellowish serum from the eyes. 17th. Whitish eschars on the left upper eyelid; return of dysentery. 21st. Gangrene of the left eye; the patient discharged by stool an enormous quantity of fœtid bilious matter. A little broth was allowed. He died on the 23rd at four o'clock, A.M., after having been delirious all night.

Autopsy.—Ecchymosis on the anterior surface of the left thigh and dorsum of the foot; muscles slightly discoloured and infiltrated; stomach filled with thick bile; small intestines healthy; colon and cœcum inflamed and ul-

cerated, especially the latter at its lower extremity; spleen three times its natural size; inflammation at the base of both lungs; circumscribed abscess between the superior lobe of the right lung and pleura.

Bilious Catarrhal Fever—Diarrhœa—Dropsy—Death.

The woman Poumeyret, aged 25, sanguineous temperament, a convict, entered the infirmary Sept. 30th. She had suffered from retention of the menses, brought on by grief in consequence of her detention. For the last fortnight she had every day an accession of fever, coming on at 5 P. M. and lasting till midnight. Twenty grains of the sulphate of iron were exhibited on the day of her admission, which checked the paroxysms; but, about the 4th of October, she complained of shivering in the back, coldness of the feet, pain in the head, anorexia, bitter taste in the mouth, dry cough, want of sleep, pain in the epigastrium; the skin was of natural temperature, respiration easy, but there was a greenish hue of the eyes and face; fever inconsiderable; tinnitus aurium.

Oct. 5. The same symptoms; nausea.

Antimon. tart. gr. jss,

In a five-ounce mixture.

7th. Has had bilious vomiting and diarrhœa. Disappearance of the other symptoms.

From this time she became gradually better, recovered her appetite, and was able to get up, but the greenish hue of the face still remaining, the decoction of cinchona was prescribed on the 13th. On the 17th, bilious diarrhœa, which continued till the 20th, when it gave way to opiate injections. On the 24th, return of appetite; still much debility.

28th. Ascites was discovered; there had been suppression of urine and perspiration for the last four days. The patient could only lie on the left side. Hydro-thorax.—Decoction and tincture of cinchona persevered in.

Nov. 2. Return of diarrhœa, diuresis; belly less distended; anasarca diminished; tongue dry; left side dull on percussion.—Decoction of cinchona and oxymel scillæ.

3rd. Expectoration of pinkish sputa; pulse small and frequent; tongue dry and pasty; diarrhœa; great oppression; voice nearly extinct; decubitus on the left side; skin cold; died the next morning.

Autopsy.—Thorax.—Left side filled with yellow serum; lung extremely contracted; the superior lobe was affected by tubercular pneumonia; incipient vomicæ were found about its apex; right lung healthy; pericardium filled with serum. *Abdomen.*—Intestines floating in fluid; liver and spleen adherent to the diaphragm, both surfaces of which, as well as the peritoneum, were studded with miliary tubercles; inner surface of stomach coated with viscid mucus, streaked with blood. The venous system of the abdomen, especially that of the stomach, were distended with dark blood; ileum contained much bile, in a pure state, and was slightly ulcerated at its termination. The remainder of the intestinal canal contained nothing remarkable.

Catarrhal Bilious Fever—Diarrhœa—Latent Pneumonia—Typhus—Death.

Brunette, a women, 23 years of age, of bilious temperament, had suffered for three weeks with evening exacerbations, lasting sometimes all night, and even continuing some part of the morning; pain in the arms and legs; severe headach; greenish hue of the face; tongue greenish and pasty; bitter taste in the mouth; anorexia and vomiting; pain under the right breast; slight cough; pulse slightly quick; urine of a saffron hue; stools natural. (Twenty leeches to the scorbiculus cordis, and fever diet.) This antiphlogistic treatment was persevered in for four days, but instead of diminishing the severity of the symptoms, tended rather to increase it. (Gr. ij antimon. tart. to be taken in three doses, at intervals of half an hour.) This produced vomiting of bilious matter in enormous quantities, it also acted on the bowels, and in a short time all the symptoms disappeared. On the sixth and seventh the affection again increased; antiphlogistics were had recourse to but without effect; small doses of tartarized antimony were then administered, and for a short time the patient felt a little relieved. On the 10th, latent pneumonia was discovered, other symptoms remaining much the same. The tartar emetic was from time to time administered, with some slight temporary relief. On the 19th diarrhœa supervened, the patient continued to lose power, the pulse became rapid, and on the 21st she died.

Autopsy.—Pneumonia of both lungs, which

were considerably infiltrated; there were traces of inflammation in the bronchi, but not in the trachea. The superior lobe of the left lung was adherent to the pleura. *Abdomen.*—Stomach contained a quantity of viscid mucus, but there were no signs of inflammation, although the patient had taken twelve grains of emetic tartar. The mucous membrane of the intestinal canal was in a state of congestion; towards the extremity of the ileum some of the follicles of Brunner were inflamed, there were also extensive ulcerations in the neighbourhood of the ileo-cæcal valve; the mesenteric ganglions were of a pinkish hue; spleen larger than natural.

THE LEEDS MEDICAL SCHOOL.

On Monday last the annual adjudication of prize medals and certificates of honour to the pupils of the Leeds School of Medicine, who had distinguished themselves in their late examinations, took place.

The lecture room of the school was crowded on the occasion. After a few prefatory remarks by the President, the sealed papers, handed by the pupils, containing the names of the successful candidates, were opened, and the following contains a statement of the distribution of the medals and certificates of honour:—

ANATOMY, PHYSIOLOGY, AND PATHOLOGY.

Medal—Mr. J. B. Wood.
Certificate of Honour—Mr. Wm. Ainley.

PRINCIPLES AND PRACTICE OF SURGERY.

Medal—Mr. Samuel Hey.
Certificate of Honour—Mr. B. Addison.

MATERIA MEDICA AND THERAPEUTICS.

Medal—Mr. R. W. S. Hopper.
Certificate of Honour—Mr. Skilbeck.

CHEMISTRY.

Medal—Mr. William Ainley.
Certificate of Honour—Mr. Gibson.

PRINCIPLES AND PRACTICE OF PHYSIC.

Medal—Mr. H. Keyworth.
Certificate of Honour—Mr. Wm. Ainley.

FORENSIC MEDICINE.

Certificate of Honour—Mr. Wm. Ainley.

MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN.

Medal—Mr. Sagar.
Certificate of Honour—Mr. R. W. Hopper.

The medal is a beautiful specimen of art, executed by Wyon. On one side it presents the effigy of John Hunter, the great founder of modern pathology; on the other, a laurel wreath, surrounded by the designation of the school "Schola Medicinæ Leodiensis." The answers returned by all the pupils to the questions proposed were most creditable to their ability and acquirements, and reflect high honour upon the school, of whose efficiency they may be considered as the first substantial fruits.

On Wednesday the pupils entertained the teachers at Scarborough's Hotel. Nearly forty gentlemen sat down to an excellent dinner, Mr. Charles Chadwick in the chair; Mr. Graham acted as vice-chairman. Several appropriate speeches were made, the utmost enthusiasm and good feeling prevailed, and the evening altogether was spent in a very rational and gratifying manner.

UNIVERSITY OF LONDON.

On Friday, the 16th inst., the Earl of Durham, supported by the Lord Chancellor, the Duke of Somerset, and nearly all the members of the Council, distributed the prizes to the medical students, in the presence of about 600 of the proprietors and friends of the University.

Dr. Elliotson, as dean, read the report of the proceedings of the Faculty of Medicine during the present session, and the following students then received prizes or certificates of honour from the chairman:—

PRINCIPLES AND PRACTICE OF MEDICINE.

Gold Medal—John Taylor, of Huddersfield.

Equal
- *Silver ditto*—William Moorhead, of Dungannon, Tyroneshire.
- *Ditto, ditto*—E. S. Hare, of Yoxall, Staffordshire.

Certificates of Honour.

4. Joseph Humpage, of Bristol.
5. Arthur Tibson, of London.

Equal
- 6. Robert Marsh, of Bath.
- 7. John B. Hodgson, of London.

8. H. P. L. Drew, of London.
9. William Robins, of Gloucestershire.
10. John B. Peacock, of Chester.
11. Edward Baker, of Birmingham.

ANATOMY AND PHYSIOLOGY.

Gold Medal—Edward Sellick Hare.
First Silver Medal—Thomas Bradshaw, of Huddersfield.
Second Ditto—William Moorhead.

Certificates of Honour.

4. Henry Walker, of Hampstead.
5. Thomas Morton, of Newcastle-upon-Tyne.
6. Joseph Humpage.
7. John E. Catley, of Cambridge.
8. C. Lingen, of Herefordshire.
9. Gay Shute, of Gosport.
10. T. F. Tyerman, of London.
11. G. S. Brent, of Southsea.
12. W. Kelly, of London.
13. Thomas Baskerville.
14. G. G. Holmes, of London.
15. P. B. Ayres, of High Wycombe.
16. A. Leggatt, of Guildford.
17. E. B. Walford, of London.
18. W. Acton, of London.
19. W. Lord, of Farringdon.
20. R. Wallis, of South Shields.

PRACTICAL ANATOMY.

Gold Medal—John Taylor.
First Silver Medal—A. J. Dixon, of Hovingham, Yorkshire.
Second Ditto—Thomas F. Tyerman, of London.

Certificates of Honour.

4. W. Moorhead.
5. Edward S. Hare.
6. Thomas Bradshaw.
7. H. Walker, of Hampstead.
8. C. Lingen.
9. Robert Marsh, of Bath.
10. A. B. Cutfield, of Deal.
11. John E. Catley.
12. Thomas Morton.
13. W. Lord.
14. W. Kelly.
15. G. S. Brent,
16. Joseph Humpage.
17. Gay Shute.

MATERIA MEDICA AND THERAPEUTICS.

Gold Medal—Thomas Bradshaw.
First Silver Medal—Frederick Cripps, of Wisbech.
Second Ditto—Benjamin Clark, of Saffron Waldon.

Certificates of Honour.

4. Thomas Haymes, of Leicester.
5. J. H. Rogers, of London.
6. C. Maitland, of London.
7. J. E. Catley.
8. W. M. Bush, of Clifton, Bristol.
9. F. Wakefield, of London.
10. J. Prankerd, of Langport.
11. Thomas Paffard.

SURGERY.

Gold Medal—Thomas Lavery, of Manchester.
First Silver Medal—William Moorhead.
Second Ditto—Charles Nossoe, of London.

Certificates of Honour.

4. Thomas Morton.
5. Francis B. Peacock.
6. John Taylor.
7. John E. Catley.
8. A. King, of Bridgewater.
9. G. Hill, of South Normanton.
10. Edward S. Hare.
11. William Robins.
12. Robert Wallis, of South Shields.
13. E. Jones, of Kynaston.
14. Thomas F. Tyerman.
15. John Davis, of London.
16. J. B. Shaw, of London.
17. E. Baker of Birmingham.

MIDWIFERY.

Gold Medal—W. W. Webb, of London.
First Silver Medal—Edward S. Hare.
Second ditto—John Taylor.

Certificates of Honour.

4. Robert Marsh.
5. William Robins.
6. J. Douglas, of London.
7. F. R. T. G. Rodgers, of Windsor.
8. — — —
9. George Gill.
10. R. E. Edwards, of Lyme Regis.
11. H. Norton, of London.
12. W. Kelly, of London.
13. A. King.
14. Thos. Henry Cooper, of Lewes.
15. John Chippendale, of London.
16. Gay Shute.
17. John Thomas Darvill, of London.

CHEMISTRY.

Gold Medal—John P. Potter, of Notting-hill, Kensington.
First Silver Medal—Thomas Bradshaw.
Second ditto—Philip B. Ayres.

Certificates of Honour.

4. William B. Tegetmeir, of London.
5. Francis Wakefield.
6. Thomas Henry Cooper.
7. Arthur Tibson.
8. W. J. Hughes, of London.
9. Thomas Laycock, of Doncaster.
10. Edward D. Doughty, of London.
11. Henry Normansell, of London.
12. Thomas Baskerville.
13. Robert H. Semple, of Islington.
14. Thomas R. Hill, of Worcester.
15. William Hardwicke, of Lincolnshire.
16. Thomas Haynes, of Leicester.
17. E. J. Erichsen, of London.
18. Charles Dobson, of London.
19. Edward B. Baker, of London.
20. C. Robinson, of Bath.
21. John E. Catley.
22. Henry Walker.
23. Edward Hulme, of Bromley, Kent.
24. Frederick Cripps.
25. J. B. Shaw, of London.
26. Richard Nicholson, of London.

COMPARATIVE ANATOMY.

Gold Medal—Samuel Hadwen, of Lincoln.
Certificate of Honour—Kearsey Cannan, of London.

MEDICAL JURISPRUDENCE.

Prizes equal { John Taylor. / Thomas Henry Cooper.

Certificates of Honour.

3. R. C. Edwards.
4. Edward D. Doughty.

BOTANY.

Gold Medal—E. S. Hare.
Silver ditto—Alfred Leggatt.

Certificates of Honour.

3. Arthur Tibson.
4. Edward B. Walford.
5. Joseph White Holm, of Highgate.
6. William Acton.

KING'S COLLEGE.

THE distribution of the prizes at King's College, to the successful candidates in the School of Medicine, took place on Tuesday, 19th inst., in the lecture-room of the establishment. The seats were crowded with the parents and friends of the pupils. Amongst them were a great number of well-dressed females, who seemed to take a lively interest in the proceedings. At 2 o'clock, the hour which had been announced for the commencement of the business of the morning, his Grace the Archbishop of Canterbury, attended by the Bishops of London, Gloucester, and Chester, the Rev. Mr. Lonsdale, and several other clergymen, the members of the Council, the Principal of the College, and the Professors, took their seats. The prizes, consisting of gold and silver medals, certificates of honour, books, &c., were arranged on the table in front of the Archbishop, and were distributed to the candidates in the following order.

ANATOMY.—H. C. Metcalfe, the silver medal; Messrs. Young, Lee, and Park, certificates of honour.

PRACTICAL ANATOMY.—G. Galland, the silver medal; Messrs. Ward, Park, and Atkinson, certificates of honour.

FOR THE DISSECTION OF AN UPPER EXTREMITY.—Mr. Chance, 20 guineas.

BOTANY.—G. Cooper, the silver medal; Messrs. Smith, Baynes, and Cooper, certificates of honour.

CHEMISTRY.—W. H. Thornthwaite, the silver medal; Messrs. Freeman and P. Margatson, certificates of honour.

MATERIA MEDICA.—Mr. Jones, the silver medal; Messrs. Baynes, G. Smith, and T. Symonds, certificates of honour.

MIDWIFERY.—W. B. Whitefield, the silver medal; Messrs. Park, Symonds, and Taylor, certificates of honour.

PRACTICE OF MEDICINE.—W. B. Whitefield the silver medal.

FORENSIC MEDICINE.—H. C. Metcalfe, the silver medal; Messrs. Orwin and T. P. Margatson, certificates of honour.

SURGERY.—Mr. John Simon, the silver medal; W. C. Robinson, certificate of honour.

The gold medals for general proficiency in medical knowledge were awarded to Mr. T. P. Margatson and Mr. H. C. Metcalfe.

The several Professors, Messrs. Mayo, Partridge, Burnett, Daniel, F. and B. Hawkins, Fergusson, Watson, Green, and Principal Otter, severally addressed the Chairman; they spoke in terms of great praise of the proficiency of the students, of the regularity of their attendance at the lectures, and the general propriety of their behaviour. The Principal Otter took occasion to eulogize the liberal and truly christian conduct of Sir Henry Worsley, K.C.B., who had made a munificent donation of 2,000*l.* to the College, for the purpose of educating and fitting out missionaries for the propagation of Christianity in the East Indies, and of Mr. Lethus, who had made a donation of 300*l.* to be invested in funds, and the interest applied to the purchase of prizes to be distributed to those pupils whose attendance at chapel, moral conduct, and progress in the knowledge of Christianity should be most eminent. The prizes, consisting of books, had been on the present occasion awarded to two gentlemen, who, in consequence of their not being aware of what was to take place, were not in attendance.

The Bishop of London, in an appropriate address, proposed a vote of thanks from the assembly to the Archbishop, which was seconded by a gentleman of the council, and carried by acclamation.

His Grace returned thanks for the honour conferred upon him,

After which the company broke up with feelings of high gratification.

THE
London Medical & Surgical Journal
Saturday, May 24, 1834.

PROGRESS OF PARLIAMENTARY INQUIRY—APOTHECARIES' HALL.

THE public is to be presumed unacquainted with the details of the proceedings before Mr. Warburton's Committee. This fiction in the law of publication, like many fictions in the common law, we must, as a matter of course, respect; and we are, therefore, compelled to abstain from printing that which every person may hear spoken if he pleases. We will not question the wisdom of the regulation under which our pages are closed against matter so interesting to the profession. Those who cannot avail themselves of the opportunity of listening to the original evidence, especially our friends out of the metropolis, must rely upon the wisdom and discernment of the active members of the Committee, that their long-entertained desires will not be frustrated;—that the whole and every part of the great question will be thoroughly examined;—that in its turn every separate province, which accident or convenience has made in the republic of medicine, will be minutely surveyed, and the relative effects of each on the others judiciously discriminated:—nothing less is worthy of the interests involved,—of the times,—of the excited anticipations of the medical public;—and perhaps the good seed we have had a hand in sowing among the public at large has already grown sufficiently to awaken its attention to the downright importance of the condition of the medical profession, in respect to the health of the state, and to interest it too in the results of the labours of the Committee. To persons possessed of this "eager hope," growing out of their "fond desire," (to invert the mental process of the poet,) it is enough to say, that we, who, as individuals, have free access to the inquiry, repose undoubting confidence on the result of the investigation—and that we are satisfied the evidence will furnish a complete account of the present state of the profession in every stage and in every condition. If the superstructure to be raised be not found large, solid, and commodious, the evil will not arise from an imperfect survey of the ground.

To persons who have occasionally been present we beg to address a few words. It is a very natural mistake for those to fall into, who take a deep interest in the result of a multifarious investigation, and think, in the pride of intellect, they have found out "the feature on which the question hinges," (to use the words of a celebrated prime minister,) it is, we repeat, a very natural mistake for such persons to fall into, if they are present at one stage only of the investigation, to conclude that the judge, or counsel, or committee, as it may be, is taking a partial or unsatisfactory view of the whole question. This distrust in the judgment of others is too flattering to our self-confidence not to be readily entertained. "Of all the flatterers," says Lord Bacon, "the arch-flatterer is a man's self." But it is nevertheless so fraught with injustice to others, and so mischievous withal, that, palpable as is the error, we must not therefore hesitate to unveil it in the case before us.

We are acquainted with several excellent persons, sincere friends of medical reform, who have fallen into the mistake we have noticed.

Of course the College of Physicians was entitled to precedence in the inquiry. Its assumed virtues, its denounced vices, equally established its right to that pre-

eminence. Would it not be rash to conclude, that the operations of the College at Lincoln's-Inn Fields were disregarded, because it remained at the back of the dock while the other stood at the bar? And, in like manner, in probing the ulcers of the latter, should the Committee be deemed inattentive, meanwhile, to the worst condition of the Hall at Blackfriar's Bridge? We agree with the persons we allude to in the opinions they entertain of the paramount necessity of examining into the state of pharmacy in these countries. That it is in a very deplorable condition it is impossible to deny, and it is moreover an undeniable fact, that the corporation, to whose care this interest is apparently entrusted, is, in point of numbers and of legal influence, the great medical corporation of the kingdom.—But let it not be too rashly concluded, that there is any novelty in this common-sense view of the relative importance of the three metropolitan corporations; or that the Committee is not sensible that the full investigation of the affairs of Apothecaries' Hall is a subject inviting its amplest powers, and upon the results of which every question that can be proposed in medical polity will in a great degree depend for its solution. This portion of the labours of the Committee is as yet scarcely touched upon, but we have no doubt that, when entered into, it will be elucidated in due proportion to its importance.

It matters little what medical skill we exact from the practitioner, if there can be no reliance upon the drugs he has to administer. In choosing the different sorts of teas there is no sacrifice of health, whatever there may be of taste, in following the injunctions of our pocket: it is very different in the case of medical agents, in which variations of flavour and strength involve the medical properties for which they are used, and are of as much importance to the *vile body* of the poor man who is constrained to have recourse to them, as to the *sacred person* of his Majesty, with all the safeguards the law imposes on his physicians. In such articles it is absurd to talk of free trade. The wholesale trade in them is of necessity confined to a few persons. And it is beyond dispute that a powerful control over the market to exclude palpably inferior specimens should be placed in the hands of some proper authority. We conceive it would be well worth the attention of Government to establish a properly qualified pharmaceutist for this special purpose, whose salary—a liberal one—might be paid out of the revenue now raised by drugs; and we submit to the liberality of the Chancellor of the Exchequer, whether all taxes for any other than medical purposes upon medical drugs might not be repealed. We are aware it will be said the prime cost of physic, as increased by direct taxation, is a trifle compared with the retail price. It is so; but, at all events, we submit, whether so small a tax might not at least be altogether appropriated for the payment of public officers, whose duties it would be to protect the public in the purchase of drugs against their own ignorance, and the avarice of the evil-disposed druggist. All these matters it will be the duty of the Committee to inquire into.

Again, upon the subject of Chemical Pharmacy, it will be the duty of the Committee to examine why it is that this most important branch has been so shamefully neglected in this country, whilst our scientific neighbours of France have been daily adding to the powers of the practitioner by their skilful chemical analysis.

Their late discoveries, recorded both in this Journal and other periodicals, are now familiar to the medical public, and make us blush, as Englishmen, that we have not a name in the healing art to be placed in competition with their distinguished pharmaceutists. With us the name of "chemist" is a *nom de guerre*, and only means, in general, that the person who claims the adjunct carries on open war against, and acts in defiance of, the Apothecaries' Hall. Nor can the Apothecaries' Hall complain of this abuse, seeing that not a single member of its own body deserves the honourable title, or, at least, has proved his desert by his discoveries. In mathematical sciences we have had a Newton, whose transcendant fame, above that of all others, the student may conceive he has made some advance in knowledge, according as his power of appreciating it increases. In chemistry we have had a Davy;—we now boast of a Faraday, whose life is a comment on the innate love of science, the attribute of true genius. But, in that most valuable and practical art, of which the College of Physicians professes itself the censor, of which another corporation is the guardian, we cannot name a single successful English cultivator. When we consider how desirable it is that all pharmaceutical agents should be prepared by chemical agency,—that a medicine elaborated by chemical agency comes from the mint of nature, pure and unalloyed, the same yesterday, to-day, and for ever;—when we consider, to take an example, how precisely a physician can calculate upon the operation of so many grains of quinine, where ounces of bark might have baffled his utmost skill,—how iodine with unerring certainty operates where it were vain to have recourse to burnt sponge,—how—but it is unnecessary to add to the list,—can there be a doubt that pharmaceutical chemistry is of the utmost value, and that it has been grossly neglected by those among us who pledge themselves to be its promoters?

We have but lightly touched upon these matters. There are other parts of the subject still to be investigated, which we have not even opened. As we have already requested some of our friends not to deem the Committee undiscerning in that it had not yet investigated the most important portion of the subject of medical reform; in the same spirit we beg liberty to be allowed to continue our comments upon these subjects, without, for the present, incurring the censure of having overlooked more important topics.

Reviews.

The Dublin Journal of Medical and Chemical Science, including the latest discoveries in Medicine, Surgery, Chemistry, and the Collateral Sciences. No. XIV., Vol. V. May. Hodges and Smith.

(*Concluded from page* 510.)

The second case was one of disease of the hip joint, or the Morbus Coxarius of former writers, which continued for months, attended by the most acute suffering, and for which leeches, cupping, the actual cautery, and moxas, were the remedies, as we have repeatedly witnessed in our own and foreign hospitals.

"Case V.—On the 28th of Nov. 1833, I was requested to see Miss Eliza O——, residing at Booterstown Avenue, near this city, aged 14, of an active, lively disposition, with blue eyes, and a clear delicate complexion. This young lady's mother informed me, that her daughter was observed, about a month ago, to limp about the house, apparently without pain; that in walking she moved the right leg outwards, and so as to describe a half-circle; that about a fortnight ago she complained of a pain in the left hip, groin, and knee, which was at first of a dull kind, but gradually became so acute, particularly at night, that her father became alarmed, and confined her to

bed. On carefully placing her for examination in the horizontal position, the internal malleolus of the left leg is situated lower by half an inch than that of the right; and the left heel evidently descends lower than the right. Striking the left heel, ever so gently, gives her great pain in the hip joint. The slightest pressure over the left groin, where there is some tumefaction, or on the corresponding trochanter, also causes severe pain in the hip joint. She complains of acute pain in the knee, shooting along the leg to the ankle; and she cannot bear the left ham to be pressed upon. Pressure along the course of the sciatic nerve produces no inconvenience. When taken out of bed, she stands with the affected knee bent and advanced beyond the sound one; and puts only the toes of the left foot to the ground; the left nates is flattened, flaccid, and apparently broader than the right, and there is no vestige of the transverse fold in which it naturally terminates. Pulse natural, general health little impaired, bowels rather confined, tongue whitish.

"This being the first opportunity that I had of treating the disease in the hip, on the mercurial plan, I was naturally anxious to give it a trial. But I considered it only fair and prudent to represent all the facts of the case to the young lady's parents, and recommend a consultation. My representation had the desired effect, and it was agreed to call in the able assistance of my colleague, Mr. R. Carmichael. Six leeches, followed by cold lotions, were ordered to be applied to the affected groin.

"On the following morning she was seen, in consultation with me, by Mr. Carmichael, who at once recognised the case as one of hip disease, and concurred in the propriety of employing mercury, in conjunction with other means. Ordered to take a pill consisting of one grain of calomel and two grains of aromatic powder three times daily, until the mouth becomes touched; to have a blister applied behind the left great trochanter; and the vesicated surface to be dressed with tartar emetic ointment; also, to be confined to the horizontal position in bed, and to lie on a firm mattress.

"Dec. 3rd.—Mouth slightly affected. Says that she feels greatly relieved from pain, but complains of the severity of the blisters; bowels still confined. Pills to be repeated until the mouth becomes more decidedly affected; and if the bowels be not moved before to-morrow morning to have a dose of castor oil.

"5th.—Has taken five pills since last visit. Took also a dose of castor oil yesterday morning, which produced dark green discharges from the bowels. The gums are now tender, and the breath is fœtid. There is no pain on pressure upon the groin, or in the ham, of the affected side. She no longer complains of pains in the knee or leg; the left nates is nearly as plump and firm as the right, and the transverse folds at its lower margin has reappeared, and is distinctly marked, but it is situated somewhat lower down than on the opposite side; and both lower limbs are precisely of the same length. Pills omitted; allowed weak chicken broth.

"8th.—No pain whatever in the groin, knee, or ham. On being placed standing on the floor, she brings both heels together, and walks without feeling the least inconvenience; scarcely any ptyalism. Ordered two grains of calomel every day, and to go on, in other respects, as before.

"9th.—Seen by Mr. Carmichael and myself; admitted to have little, if any, vestige of the disease. Mouth slightly affected; bowels regular. Says that she feels rather weak, yet in the absence of her attendant, has been detected in running about the room, as if she had no complaint. Ordered to have strong beef tea and chicken broth *ad libitum*; to take two grains of calomel every second day, and every vigilance to be used in keeping her confined to bed, and in the horizontal position.

"17th.—Scarcely any affection of the mouth. Health in every respect good, and feels much stronger; none of the external signs of the disease visible; and, on being permitted, walks about the room without feeling the least pain, or any greater weakness in the left than in the right limb. Calomel discontinued. Permitted to have moderate quantities of solid animal food, and light table beer, but still to be confined to the recumbent position.

"30th.—Seen by Mr. Carmichael and myself. In excellent health; insists that she is 'as strong and well as ever,' and is very urgent to be allowed to get up and walk about; and, after the most careful examination, no

difference whatever is observable in the lower extremities. Directed to be confined to a sofa; to have a little wine and water, and the most nourishing articles of food; and to take half a pint of the compound infusion of sarsaparilla daily, for some weeks.

"After being treated thus for three weeks, this young lady was at length permitted to walk about, and return to her former pursuits. Since that time, she has had no enlargement of the lymphatic glands, nor any of the other unpleasant consequences of the use of mercury in strumous persons; and she is now, (March the 1st, 1834,) in perfect health."

The following letter and case are from one of the most distinguished members of the profession in this country, and will, no doubt, be read with that interest and attention which any communication from him is sure to excite.

"*Rutland-square, Feb. 20th*, 1834.

"My Dear Sir,—Agreeable to your wishes I send you a brief account of the case of hip joint disease, in which the mercurial plan of treatment was attended with the most decided advantage, as it seemed to check at once the progress of the disease; an effect which is no doubt owing to the powers which the exhibition of this mineral possesses in stopping the progress of membranous inflammation. That the synovial membrane of the hip joint, and not the cartilage, is often primarily engaged in this disease, we may infer from one of the first symptoms which marks its commencement,—a fulness of the groin, depending in all probability upon the increased secretion into the joint, similar to that which we know takes place in synovitis of the knee. You will observe, that as soon as the inflammatory symptoms had yielded to this treatment, the further exhibition of mercury was discontinued, and absolute rest, with counter-stimulants, and the exhibition of sarsaparilla, only enjoined.

"Believe me, yours truly,

"Richard Carmichael."

"Case VI.—On the 21st of last December, I was called to the King's County to see a young gentleman about twelve years of age, whom I found, on examination, to labour under all the symptoms of an acute attack of the first stage of morbus coxarius. There were fulness of the groin, flatness of the nates of the side affected, pain in the knee; and when the heel was struck, it gave the most acute pain in the joint of the hip. The patient could not be moved without occasioning great distress. When placed in the erect position, he rested on the toes of the affected limb advanced beyond the other, and there was an apparent lengthening of the former. Pulse rapid, great thirst, and other symptoms of high symptomatic fever were present. This boy had, I understood, a bilious fever for some time, and that the attack above described immediately followed.

"The frequent application of leeches to the groin and hip was recommended, afterwards blisters, followed by dressings of tartar emetic ointment applied for half an hour daily. Mercury was ordered in small doses, so as to affect the gums, but not to an extent to produce salivation, as the boy had been greatly exhausted by previous pain and symptomatic fever. I did not see him again, as I immediately returned to Dublin, but had the following communication from Dr. Fry, of Forbane. He writes, on the 12th of January, 'I have much pleasure in informing you, that our patient has been progressively advancing towards recovery since I last communicated with you on the subject. The mercurial action, though not to the extent of salivation, has been, with very little intermission, exerted the whole time. Digestion goes on well, which appears by his bowels acting naturally, once every day, and sometimes twice. Appetite very good. There is now no difference in the length of both legs, and motion in the affected one can be borne without apparent pain, as formerly. We have, however, adhered to your wish in enjoining the most perfect quietness.'

"In my reply, I recommended that the mercury should now be discontinued, that an infusion of sarsaparilla in lime water should be exhibited in such quantities as the stomach would bear without inconvenience; and that the discharge from the blistered surfaces, on the groin and behind the trochanter, should be promoted, by dressing them occasionally with tartar emetic ointment for half an hour.

"On the 2nd of February, Dr. Fry again writes, 'I have much pleasure in informing

you, that Master ——— has been steadily advancing towards recovery since my last. The sarsaparilla with lime water appearing to agree remarkably well with him. His general health seems quite recovered, and all inflammatory appearances in the local affection have entirely subsided. He has occupied his new bed (Earl's) for some time. It seems admirably constructed for persons so affected, and, in his particular case, has contributed much to his general comfort.' Accompanying this statement, the father of the boy adds in a postscript, 'my little fellow thinks himself so well now, that he says he could walk if he was allowed; but, of course, this is not to be thought of as yet.'

"The following case is communicated by my friend, Mr. Cusack Roney, one of the senior surgeons of the Meath Hospital, a gentleman of very considerable experience, and who has put the practice to the severest possible test, by employing no external applications whatever, and trusting solely to the internal exhibition of mercury.

"Case VII.—John Rice, a tanner by trade, aged 17, robust, and of a scrofulous constitution, having light-blue eyes, fair complexion, and thick lips, admitted on the 27th of November, 1833, into the Meath Hospital. The surgeon, who admitted him, directed scarification and cupping behind the trochanter of the left femur. On the 1st of December following, he was placed under my care, and the appearances noted were these: apparent elongation of the left lower extremity; flattening, flaccidity, and unusual breadth of the nates of the same side; no vestige of the fold formed by the nates of this side; and when standing, the knee was flexed, he stood on his toes, and with the affected limb considerably advanced beyond the sound one. He complained of severe pain in the knee and at the groin, but there was no swelling in either of these situations. When the heel was struck, he experienced acute pain in the hip-joint, and he felt the same sensation when he attempted to stand, or bear, upon the affected limb. He said also, that he was frequently awoke at night by pains, which were much more severe than those which he felt during the day. On questioning him as to those pains, he stated, that they were at first of a dull kind, and had gradually increased in intensity. His general health appeared to be little, if at all, injured.

"Dec. 3rd. No improvement. Twelve leeches to be applied to the hip.

"6th. Still no improvement. Tartar emetic ointment to be freely applied over the whole of the affected hip.

"8th. General pustulation of the hip. Still no change for the better in the local symptoms.

"12th. Pustules nearly gone, but no apparent change. Tartar emetic ointment repeated.

"14th. No other sensible change in the local symptoms, further than feeling at ease when he does not move in bed. Seen and examined by Dr. O'Beirne, who recommended the active use of mercury, and so as to affect the mouth as quickly as possible. A scruple of calomel directed to be made into ten pills, and one of these to be taken thrice daily.

"17th. Mouth very slightly affected. Feels somewhat easier. Calomel pills repeated.

"19th. A considerable degree of salivation; slept soundly last night; both inferior extremities are of the same length; he has no pain in either the knee or the groin; the nates of the affected side is more plump; and, contrary to the strict injunctions given to him, he has been walking about the ward, and, apparently, as if he had no complaint of the kind.

"20th. Has persevered in walking about the ward, and he now declares, that he is perfectly well, and insists upon being allowed to go home. Discharged; and walked away without the least limping, or appearing to feel any pain whatever.

"About the latter end of last February, this man again presented himself at the Meath Hospital, with all the symptoms of hip disease, in its first stage. He was admitted by one of the surgeons, who ordered moxa to be applied behind the great trochanter of the affected side. But he again proved refractory, refused to permit the application of the moxa, and left the hospital without waiting to be discharged."

Dr. O'Beirne quotes some foreign clinical reports on the efficacy of mercurial frictions, in rheumatic affections of the joints, more particularly those of M.M. Trousseau and Recamier. He also refers to the practice of Drs. Ebel and Wedekind described in the January number of our Dublin contemporary, of employing corrosive sublimate in rheumatic

affections of the joints, but it was not tried on scrofulous subjects, or in ulceration of the cartilages.

Dr. O'Beirne very strongly recommends an infusion of sarsaparilla in lime water, in preference to all officinal preparations of this remedy. He has found it most effectual in syphilitic and mercurial affections, after all other preparations had failed. He has likewise found the infusion of great benefit in catarrh of the bladder. The following is the formula :—

"℞. Radicis sarsaparillæ Jamaicensis
concisæ uncias quatuor.
Radicis glycyrrhizæ semunciam.
Aquæ calcis libras duas.

Macera per horas viginti quatuor in vase vitreo optimé operculato, et in loco frigido et obscuro ; dein cola in usum.

Sumat hujusce infusi dimidium, partitis vicibus, quotidie.

"This formula differs from that of the Dublin Pharmacopœia, first, in containing double the quantity of sarsaparilla; secondly, in containing liquorice root; thirdly, in requiring the infusion to proceed for twenty-four instead of twelve hours; fourthly, in not requiring agitation of the contents of the vessel. This formula also differs from that given by Dr. Copland, first, in containing double the quantity of sarsaparilla ; secondly, in not requiring the sarsaparilla to be bruised; thirdly, in not requiring the agitation of the contents of the vessel; fourthly, in requiring the glass vessel to be very well, instead of slightly stopped."

The second article is headed, A Case of Pneumo-thorax, from Perforation at the posterior surface of the Lung. By Mr. Poole, assistant-surgeon to the 32nd regiment. The narrator is entitled to credit for his accurate diagnosis.

The third article is a Surgical Report of the Cases treated in the Meath Hospital during the past year. By W. H. Porter, Lecturer on Anatomy and Surgery. The following are the principal cases :—1. Aneurism occasioned by the sequestrum, in a case of necrosis of the tibia. 2. Functional derangement of the brain, the result of injury, cured by the operation of the trepan. 3. Curious and interesting case of bronchotomy. 4. Disease of the lymphatics of the left arm, amputation at the shoulder-joint. These cases are deeply interesting to the practical surgeon, and therefore we shall notice them fully on another occasion. We wish our London hospital surgeons would imitate the example set them by their brethren in Edinburgh and Dublin, and not allow the immense field of practical surgery in their possession to run wild and remain uncultivated.

The fourth article is entitled, a Case of Trial for Poisoning by Arsenic. By T. E. Beatty, M.D., M.R.I.A., Professor of Medical Jurisprudence to the Royal College of Surgeons in Ireland. This was a most difficult case to decide, as the deceased had taken laudanum and arsenic. The evidence on which the accused persons were convicted was entirely circumstantial. Dr. Beatty obtained arsenic by the usual process, and a druggist's apprentice swore that one of the prisoners had purchased that poison, to which he had added oil of aniseeds, and also a quantity of laudanum. The narrator alludes to the shortness of time (five hours) in which death took place, and after adducing ample proof of analogous cases from the work of Dr. Christison, he concludes by citing a case published by Mr. Wright of Dublin, in the Lancet, vol. xvi., p. 612, in which death took place in four hours from the time the poison had been swallowed.

The succeeding paper is furnished by Dr. S. Cusack, on Nervous Diseases occurring principally in women. The author describes those nervous or neuralgic pains in the side so common to dyspeptic, hypochondriacal, and nervous women, which, according to others, often depend on spinal irritation, or derangement of menstruation. He points out the inefficacy of depletion and counter-irritation over the affected part; and the beneficial results produced by alterative doses of blue pill, galbanum, followed by aperients. His usual mode of administering these medicines is the following :—℞. Pil. galb. c., gr. vij., pil. hydrarg., gr. iij., fiat pil. ij., 3a quaque nocte sumendæ. ℞. Inf. quassiæ, ℥xij., mag. sulph, ℥iss., fiat haustus 3a mane sumendus.

We highly approve of this mode of treatment, but we must state that it has not been so successful in our practice, as Dr. Cusack informs us it has been in his. We have often found it necessary in the disorders under notice, to examine the spine, and very frequently have discovered that some vetebra was pained on pressure, and then leeching and antimonial

ointment became necessary. In many patients too, there is more or less spinal distortion, and unless this is remedied by the mechanical contrivances, or "supports," such as those of Mrs. Hart, late Mrs. Callam, so strongly recommended by Sir A. Cooper, Mr. Brodie, and other eminent surgeons in London, very little good will be done by internal medicine, and at best only a temporary relief afforded*. We have also observed the most remarkable alleviation produced by the addition of one-grain of strychnine to the above pills. We are ready to admit that Dr. Cusack's plan is often effectual, when the spine is natural; but it certainly fails in the class of cases to which we have alluded.

The fifth original communication is on Pathological Researches, by Dr. Morgan, of the Whitworth Hospital. He details two instructive cases of disease in the brain, unaccompanied by severe pain or symptoms of acute inflammatory action. In one, the petrous portion of the temporal bone was diseased, and the primary attack was attributed to imprudent exposure to cold by bathing in the sea, soon after the employment of mercury for the removal of syphilis.

The sixth and last article is headed—Cases of Uterine Hæmorrhage. By Dr. Churchill, Physician to the Wellesley Lying-In Dispensary. The first case was one of placental presentation, delivery was delayed, and death ensued. Dr. Churchill candidly avowed, after mature reflection on the result, that early delivery was a better mode of practice. In the second case delivery was performed while "the pulse was absent at the wrist, the heart's action feeble and fluttering, and the surface cold." No hæmorrhage occurred after delivery. The edge of the placenta presented at the os uteri, so that complete dilatation was effected without disturbing the placenta itself. The patient was ordered fifteen drops of laudanum in some cinnamon-water every hour, and took 180 drops during the night.

This practice was proposed by us some years since, and is followed by our experienced and celebrated friend, Mr. Barlow, of Blackburn. He assured us, last summer, that he never lost a patient by adopting it. The old plan of allowing the woman to sink, for fear of injuring the os uteri by "forcing it." or rather dilating it, will soon be abandoned. Every obstetrician must admit that the os uteri is capable of dilatation at any period of pregnancy, and more especially in the latter months, when placental hæmorrhage is most common; and great force or rudeness should be practised to rupture the uterine orifice. We lately delivered a lady, under the circumstances mentioned above, at the request of Mr. Austin, of Clerkenwell, but first exhibited brandy and double doses of secale cornutum, so as to increase uterine action, after it was excited by the introduction of the hand. Our object was accomplished; the uterus contracted after the extraction of the fœtus, the placenta was expelled, and there was no hæmorrhage. The patient was so exhausted previously to the operation, that we had placed the transfusing instruments on a table. We mention this case to show the feasibility of delivery, and the value of secale cornutum before the operation is resorted to. The powers of life were so low, that full doses were necessary. The essence of the remedy, as prepared by Mr. Bass, of Hatton-Garden, was used on this occasion, and enables the practitioner to administer an efficacious remedy with as little delay as possible.

The last article of value in our esteemed contemporary is from the pen of Professor Graves, and entitled,—Notices of Modern German Works and Periodicals. The learned Professor gives a brief account of all the German periodicals, which want of space compels us to omit.

Comparing the journal before us with its contemporaries, we unhesitatingly pronounce it one of the best extant in this country.

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* Mrs. Hart's various machines for spinal distortion and deformities of the limbs, were proposed by the most eminent physicians and surgeons in London, and are of the greatest service in those nervous and hysterical complaints which are little benefited by remedies. These may be had at Great Queen-street, Lincoln's-Inn-Fields.

An Introduction to the Study and Practice of Medicine, comprising a brief Exposition of the various branches of Medical Knowledge; Directions for their Study; References to the best Elementary and Practical Books; and a Selection of Medical Precepts. By John Dowson, M. D.,

Member of the Royal College of Surgeons in London, and of the Royal Medical Society of Edinburgh. London: Longman and Co. 1834.

This is a sensible little manual of advice to the student, but we consider its list of medical works to be very defective. We extract the following remarks upon the errors most frequently committed by students in hospital attendance, which strike us as extremely judicious and pertinent:—

"The most important of these errors is their inclination to see many cases superficially rather than few cases well. They are determined to see every thing, and for that very reason they see nothing as they ought. A very little consideration might satisfy them that more is learnt by accurately observing one case, from its commencement to its termination, than by glancing at a thousand. Closely connected with the error just pointed out, is that of selecting the largest hospitals for attendance, instead of those in which clinical instruction is given with the greatest ability, regularity, and frequency.

"Another very prevalent error is the eagerness with which students run to see rare cases and capital operations, for which they often neglect the opportunity of gaining much more useful information. For the sake of seeing an enormous tumour, such as they may never be called upon to treat; or of catching a glimpse of a sanguinary operation, which they may never have to perform; students continually neglect the regular prosecution of their dissections, break the connexion of their lectures and demonstrations, interrupt the course of their ordinary hospital attendance, and thus lose much knowledge which they might have obtained, respecting far more important, because far more common, cases. To watch with care the progress of common diseases, and to learn and fix in the memory the most successful mode of treating them, under the various modifications produced by age, sex, constitution, and mode of life, are the most important objects to every student.

"To know
That which before us lies in daily life,
Is the prime wisdom; what is more, is fume,
Or emptiness, or fond impertinence,
And renders us in things that most concern
Unpractis'd, unprepar'd, and still to seek.
"Milton."

Foreign Hospital Reports.

HÔTEL DIEU.

Gun-shot Wound.

A female cook, 26 years of age, of nervous temperament, was admitted into this hospital for a gun-shot wound of the thigh, which happened to her during the last disturbances at Paris. Whilst in a house in the Rue Transnonain on the morning of the 14th of April, some soldiers entered, killed four men who were in the same room, and wounded also two women and a child. This patient, endeavouring to save the life of one of her relations, threw herself on her knees before the soldiers, and received the bullet in the inferior and internal part of the thigh. The ball appears to have been repelled by the femur, as it was found in her clothes. M. Dupuytren enlarged the wound, and extracted portions of clothing. The femoral artery was not wounded. Simple dressings were applied, and the patient is now doing well.

Violent Contusion of the Face—Necrosis of the Os Malum—Fistula—Treatmnte.

A young man, 23 years of age, of a sanguineo-lymphatic temperament, was admitted on the 21st of April, under the care of M. Dupuytren. He had suffered for several years from pain in the chest, accompanied with a pricking sensation; had several times expectorated sanguineous sputa; his cheeks were flushed; and other symptoms threatened pulmonary consumption. This was not, however, the complaint for which he was admitted. Three months previous he had received a violent blow on the left cheek, which was followed by much tumefaction of an inflammatory nature; an abscess formed, which, when opened, discharged a quantity of purulent matter. After this he got better, but a fistula remained, on a level with the articulation of the malar and superior maxillary bones, for the cure of which he came under the care of M. Dupuytren. On examination with the probe, necrosis of the greater part of the anterior surface of the malar bone was detected. The fistulous opening was enlarged, and small portions of dead bone extracted. The wound was then dressed, its edges kept a little separated to allow of the free exit of the other

portions of carious bone. There being still a large portion not sufficiently loosened, M. Dupuytren has had an instrument constructed, in shape like a gimblet, with which he intends to perforate and extract the dead bone. Since the first operation the patient has had no untoward symptoms; and, to check any determination to the chest, an issue has been applied to the arm.

A Woman delivered of Four Infants without the Assistance of a Midwife.

Six weeks ago, a woman in the Commune de Begney was confined with four living children. This event, not of rare occurrence in Egypt, according to Pliny, is far from being common in Europe. There was no medical attendant, consequently we are unable to gain on this point any useful information. Three of the infants lived only a few hours after birth, the fourth is not expected to survive long.

Enormous Dilatation of the Stomach—Vomiting for thirty years—Hypertrophy of the Muscular Tunic.

The woman Trousset, 50 years of age, was admitted the 19th of April, under the care of M. Piorry. At the age of twenty she was seized, after a favourable parturition, with severe pains extending from the umbilicus to the spine; this lasted for seventeen months, and was followed by vomiting, and severe pain in the epigastric region, which has not since left her. She has been subject to complications of her disorder whenever she has taken any food which disagreed with her. On examination by percussion in the recumbent position, a dulness of sound is perceptible on the left side of the abdomen. The situation of this dulness changes, when the patient is moved; the stomach, which is evidently much dilated, seems to occupy one half of the abdominal cavity; there is perfect sonorousness below it. The patient says she can sometimes feel in the region of the stomach a ball which she can displace by pressure with the hand; [stomach in a contracted state;] vomits at will. Some milk, and a little food were allowed, and she was recommended to promote the ejection of matters contained in her stomach. In the evening she vomited spontaneously three or four pints of clear fluid, containing food in an almost digested state, by which she was relieved. The next day the stomach on examination was found less; the other symptoms remained the same.

M. Piorry, believing his diagnosis confirmed by the bearing of the case, states that it is a very uncommon occurrence to find organic lesion take place so early, and still more so to continue for thirty years. He thinks it very probable, notwithstanding the absence of *black* vomiting, and of discoloration of the skin, that the disease is caused by scirrhus of the pylorus; but as the general health of the patient has only suffered through want of due alimentation, the emaciation being the result only of protracted suffering, more particularly as the symptoms appear to have diminished during the last three years, he believes the patient may yet live for some time, providing she follows the advice given her, and refrains from all improper nourishment.

HÔPITAL DE LA PITIE.

Encephaloid Cancer of the Stomach unattended with Vomiting—Death—Autopsy.

Boucher, a washerwoman, ætat. 60, was seized, in June, 1833, with general uneasiness; her skin became yellow, and her appetite voracious; diarrhœa came on, lasted two weeks, and then disappeared. Since this time the patient has suffered at intervals from violent colic, but she has never had any vomiting. On the 16th January, 1834, she was admitted into the hospital in a very emaciated condition; skin of a yellowish hue. On examination, a rounded tumour of considerable hardness, of the size of the fist, could be felt in the left hypochondrium, there was also pulsation to be distinguished in the epigastrium; tongue was clean; no thirst, nausea, or vomiting; but slight diarrhœa; has had some difficulty of respiration after exercise for the last ten years, which lately has much increased; no palpitation of the heart; has had anasarca in the left leg; pulse 80, regular. M. Rostan supposes a cancerous tumour, first arising in the spleen, and thence gaining the cellular tissue and parietes of the intestine. A mucilaginous drink was prescribed: also mucilaginous and opiate injections.

On the 20th mercurial frictions over the tumour.

28th. Slight infiltration of the lower limbs; tumour had augmented and become painful to the touch. To the above treatment was added the exhibition of four grains of the hydriodate of potass in a five ounce mixture.

Feb. 3rd. Has had for the last two days severe colic. The tumour seems to be composed of two lobes, one occupying the right side, and the other the umbilical region; stools containing blackish matter.

5th. Blister to the tumour. Cough frequent; respiration more difficult; hands become œdematous. Thus she continued till the 17th.

From this time to the 21st she got gradually worse; there was excessive prostration; coldness of the skin; and death soon terminated her sufferings.

Autopsy.—On examination, an encephaloid cancer was found to occupy the pyloric extremity and right half of the stomach. The tumour caused compression of the vena cava inferior. The inferior lobe of the left lung was affected with gangrenous ulceration.

HÔPITAL SALPETRIERE.

Excision of the Ungual Portion of the Thumb —Re-application of the separated Part half an Hour after its separation—Union —Cicatrisation—and Cure.

One of the female servants of this hospital, whilst cutting bread with a fixed knife for that purpose for the patients, completely severed the greater portion of the last phalang of the thumb from the left hand. The medical attendant saw her half an hour afterwards, and found that division had taken place at the root of the nail. The separated portion, which had been picked up from the ground, was pale, bloodless, and cold; it was, however, washed, and reapplied with plasters and bandages. Twenty days afterwards the parts had cicatrised, and the extremity of the thumb was quite sensitive.

LITERARY INTELLIGENCE.

In the Press—An Inquiry into the Nature of Sleep and Death, with a View to ascertain the more immediate Causes of Death, and the better Regulation of the Means of obviating them, being the concluding part of the Experimental Inquiry into the Laws of the Vital Functions. By A. P. W. Philip, M.D., F.R.S.

BOOKS.

A Series of Anatomical Plates in Lithography, with References and Physiological Comments, illustrating the Structures of the Different Parts of the Human Body. Edited by Jones Quain, M.D., Professor of Anatomy in the University of London. Fasciculus XII. Taylor.

The Principles and Practice of Obstetric Medicine, in a Series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children. Illustrated by numerous Plates. By David D. Davis, M.D., Professor of Midwifery in the University of London. Part XXXI. Taylor.

Principles of Physiological Medicine, in the form of Propositions, embracing Physiology, Pathology, and Therapeutics, with Commentaries relating to Pathology. By F. J. V. Broussais, M D., &c. &c. Translated from the French by Isaac Hays, M.D., and R. Eglesfeld Griffith, M.D. Philadelphia, 1832. Carey and Lea.

CORRESPONDENTS.

Mr. Turner.—We have turned it to account.

Mr. Atkinson.—The observations are just, but are too well known to excite any interest.

Mr. Lee.—The communication is under consideration.

List of Gentlemen who received Certificates at Apothecaries' Hall last week in our next.

METEOROLOGICAL JOURNAL.

MONTH. May, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
15		63	69	54	29·60	29·66	67	66	E.S.E.	E.N.E.	Fine	Fine	Fine
16	☽	67	70	56	29.66	29·54	64	64	N.	E.	——	——	——
17		58	62	46	29·25	29·23	64	67	S.W.	S.W.	——	Rain	Cloudy
18		55	64	49	29·25	29·36	65	65	S.W.	S.S.W.	——	Showy.	Fine
19		60	64	49	29·52	29·75	65	64	S.	S.S.W.	——	Fine	——
20		59	67	53	30·03	30·12	63	61	S.W.	W.	——	——	——
21		63	68	49	30·20	30·19	60	61	N.N.E.	N.E.	——	——	——

50, *High Holborn*. William Harris and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 122. SATURDAY, MAY 31, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,
BY PROFESSOR SAMUEL COOPER.
Delivered at the University of London, Session 1832—1833.

LECTURE XCI., DELIVERED APRIL 19, 1833.

GENTLEMEN,—*Malignant diseases of the eye.* It is scarcely necessary for me to remind you, that the eye is subject to three malignant diseases, namely, *cancer*, *melanosis* and *fungus hæmatodes.*

Cancer frequently begins in the conjunctiva, whence it afterwards extends to the eyelids, caruncula lachrymalis, and the eye itself. The lachrymal gland is found not to be so often implicated, as was once to be supposed; though most operators remove it with the rest of the contents of the orbit, when they extirpate the eye for this disease.

As cancer commences on the external parts of the eye, and, therefore, in its early stage, may admit of effectual removal, it is a less formidable disease than *fungus hæmatodes*, which first attacks the optic nerve and retina, the pupil becoming dilated, of a dark amber, or greenish hue, the iris motionless, and the sight seriously impaired or destroyed from the very first. In an early stage of the disease, a white shining substance, compared to burnished iron, may be seen through the pupil at the back part of the eye. As the disease advances, this substance is found gradually to extend more and more forwards, and to be of a solid nature. It is indeed a medullary mass, occupying the whole interior of the eye behind the iris, and presenting an amber or brown appearance.

Next, the form of the eyeball begins to deviate from what is natural; the sclerotica becomes of a dark blue or livid colour; and the fungus gets into the anterior chamber. Lastly, the cornea or the sclerotica ulcerates, so that in the former event the fungus protrudes; and in the latter it forms a tumour covered by the conjunctiva.

It is generally rapid in its growth, often attains a considerable size, is of a dark red or purple colour, and is frequently attended with hæmorrhage and sloughing of its most prominent part; the absorbent glands about the parotid and under the jaw being also affected. The disease, as I have said, begins in the optic nerve and retina, and corresponds in its ungovernable and fatal nature to fungus hæmatodes, or medullary sarcoma in other situations. It is a disease very much restricted to children.

With few exceptions the operation of extirpating the eye for this disease has been of no avail.

With respect to melanosis, or the deposition into the eye of a peculiar black substance, attended with total disorganisation of it, if it be confined to the eyeball, and not extended to the optic nerve, the eye may be removed with a greater prospect of success, than when it is the seat of fungus hæmatodes.

The manner of removing the eye for malignant disease, I will show on the dead subject in the morning lectures on the operations.

Diseases of the ear. What is called *ear ache* frequently proceeds from inflammation of the meatus auditorius, or the tympanum itself, the pain being in general severe; a circumstance observed to attend inflammation of all textures, whose nature and situation prevent them from readily yielding to the swelling, commonly the result of that affection. Inflammation within the ear may proceed to suppuration, the abscess make its way out through the meatus auditorius externus, the Eustachian tube, or the membrana tympani, or even behind the ear, with or without having pervaded the cells of the mastoid process, and occasioned caries of the bone. According to my experience, the worst suppurations of the ear occur in scrofulous children, in whom they are frequently accompanied by disease of the bony parts of the organ, followed in some instances by the necrosis and separation of the ossicula. But, gentlemen, inflammation and suppuration within the ear may not only cause these consequences, and more or less complete deafness, but extend their effects to the dura mater, and

destroy the patient. One preparation illustrating this fact we had upon the table on a former evening.

The *treatment* of acute inflammation of the ear ought to be rigorously antiphlogistic. In adults, copious venesection should be resorted to, and in children, leeches. Besides these means, fomentations and purgatives, followed by blisters, are also requisite.

When exfoliations occur, they most commonly consist of the meatus externus, or of the outer laminæ of the mastoid process.

If, after the reduction of the inflammation, the discharge of matter should continue, and the patient appear to be scrofulous, alterative medicines, as iodine internally and iodine lotions, should be employed; or you may employ an injection of a weak solution of the nitrate of silver. If there be diseased bone present, of course the discharge will not cease till exfoliation is completed.

The *meatus auditorius* is frequently blocked up, and the external side of the membrana tympani covered with hard, dry masses of cerumen, so as to render the patient entirely deaf. Such hardened pellets of wax, if neglected, may ultimately cause a great deal of irritation, followed by inflammation and ulceration of the membrana tympani and lining of the passage, and they always give rise to a sensation of false confused sounds in the ear, which are truly distressing to the patient.

The cure consists in washing out the meatus auditorius by means of a syringe, capable of holding at least four or six ounces of warm water. This should be thrown into the passage, so as to make it regurgitate with considerable rapidity. You will generally have to do this several times, before the pellets are loose enough to be washed out.

The meatus auditorius is occasionally the seat of polypi and other excrescences. When situated near the orifice they may be taken hold of with a hook, and cut away; but, in other cases, it is best to extract them with forceps, and apply the nitrate of silver, or tinctura ferri muriatis to the part to which they were attached.

Extraneous Substances in the Meatus Auditorius Externus.—When insects get into the ear, the best plan is to take them out at once with a pair of forceps if they can be seen. If not, you employ a piece of lint, dipped in honey or oil, and put on the end of a probe; these, on account of their adhesiveness, will entangle any small insect, and bring it out. Then the passage is to be washed out with a syringe. This last plan I find the best of all, not only for insects, but for the removal of peas, small pebbles, &c. The regurgitation quickly brings them out, when all other means fail. One day, when I was visiting the Fleet Prison Infirmary, a child was brought to me with a pebble in each of its ears, that had been there a twelvemonth, and had now excited violent pain and inflammation, attended with total deafness. Various surgeons had failed in their attempts to get these foreign bodies out. I immediately tried what could be done with a large syringe, and had the satisfaction of soon bringing the pebbles so near the external orifice, that they admitted of being hooked out with a bent probe.

Almond or sweet oil, dropped into the ear, soon destroys any insect lodged in it.

Deafness from more internal causes than those which I have specified, forms too long and complicated a subject for consideration in a course of lectures on surgery in general. It may arise from obstruction of the Eustachian tube by mucus, as happens in severe catarrh, by the pressure of a tumour, as is sometimes exemplified in cases of polypi, or swelled tonsils, or in the effects of syphilitic ulceration or sloughing sore throats.

For the removal of deafness, caused by permanent obstruction of the Eustachian tube, Sir Astley Cooper suggested the practice of making a small puncture in the anterior and inferior part of the membrana tympani, a method that has been attended with a degree of success, but which should not be done without mature consideration, and a proper discrimination of the cases to which alone it is applicable.

Diseases of the Labyrinth, or of the complicated apparatus composing the internal ear, are the cases which, generally speaking, completely baffle the art and science of surgery. You scarcely ever have any clue to their cause, or even to the precise parts affected, so that no surprise ought to be entertained at the little success with which such kinds of deafness are treated.

Amongst the varieties of disease to which the labyrinth is liable, I may mention—

1. Disease of the fenestra ovalis and fenestra rotunda, as ulceration and thickening.
2. Malformation of these apertures.
3. Inflammation of the nervous membrane lining the labyrinth.
4. Malformation of the labyrinth.
5. Alteration or deficiency of the liquor of Cotunni.
6. Affections of the nerve of hearing, analogous to amaurotic diseases of the eye.

Gentlemen, you know that when one eye becomes diseased, the other is much disposed to fall into the same condition; but a similar fact does not prevail with respect to the ears. Numerous persons are more or less deaf on one side, but the other ear usually continues its functions very well, and even as long as if the other ear had no defect.

Every kind of deafness from malformation of the labyrinth must be set down as incurable.

Nervous deafness should be treated, I think, on principles analogous to those adopted for the cure of amaurosis. Inveterate cases of long standing must, of course, be hopeless.

Diseases about the Face.—Lupus, or *noli me tangere*, is a tubercular disease, attacking the skin of the face, and very frequently that

of the nose. It begins with inflammation, followed by the formation of bright red tubercles of the skin, which change into superficial, but ill-conditioned, foul ulcerations, spreading with a red margin, and gradually destroying the affected parts of the skin. The disease, indeed, sometimes extends more deeply, as you find exemplified on the nose, where it often destroys the alæ, and all the cartilaginous part of that organ.

The form of lupus, attended with a bright red tuberculated appearance of the skin, is frequently considered to be scrofulous, for it is often accompanied by other marks of scrofula, and is noticed in young subjects. In adults, lupus is often joined with general derangement of the health, from intemperance or other causes. Bleeding, purgatives and low diet, are sometimes required, before other means will prove effective. The best applications, I think, are nitrate of silver or sulphate of copper in solution—lint being dipped in them, put on the part, and then covered with a pledget. The liquor arsenicalis, diluted, is also another favourite application. Arsenical pastes are also sometimes employed; but, on account of the fatal consequences which may arise from the free use of arsenic externally, I would advise you to be very cautious in applying these stronger preparations, especially as I believe lupus will always be as much benefited by other escharotics of equal strength, which have not the same deleterious qualities as arsenic. The diluted liquor arsenicalis, however, may be safely used; and so may the powder composed of ninety-five parts of calomel and five of oxide of arsenic, as used by Dupuytren. The ung. hydr. nitrat. and the ung. nitratis are likewise eligible dressings. I have known a lupus cured by excision.

Gentlemen, I will next make a few observations upon *Salivary Fistulæ*. An opening in the cheek, from which the saliva escapes, and arising from a wound, ulceration, or phagedænic disease, involving the parotid gland, or duct, is called a *salivary fistula*. The duct has also been burst by violent blows. You will sometimes meet with cases in which the parotid duct becomes obstructed by a calculous formation within it, just in the same way as the salivary ducts under the tongue become occasionally blocked up with calculous matter. Calculi in the parotid duct, if not removed, may of course enlarge and excite inflammation and an abscess in the cheek. This bursts, and the flow of saliva from the opening immediately draws the surgeon's attention to the state of the parotid duct; a probe is introduced, and the calculus felt. Here it is hardly necessary for me to inform you, that the first indication is to extract the extraneous substance, and then endeavour to heal the ulcerated opening in the cheek.

If the parotid duct is recently wounded, the sides of the wound should be brought together, and pressure applied. Thus a salivary fistula may often be prevented altogether: either the divided ends of the duct re-uniting, and the saliva resuming its original course, or, what is more probable, the wound in the face healing at every part, with the exception of a small fistulous track, which serves as a continuation of the duct into the cavity of the mouth. This is supposing the wound to have extended quite through the cheek.

When a salivary fistula is already formed, you may cure it by passing a seton from the fistulous opening into the mouth, keeping it in a certain time, and, after withdrawing it, applying the nitrate of silver to heal the outer opening. According to Professor Gibson, the use of the caustic alone will frequently succeed. Another ingenious plan is, what was adopted by Beclard, who passed a leaden style into the orifice of the portion of parotid duct connected with the gland, and then united the outer wound with the twisted suture. This is a quicker mode of cure than the seton, and more sure than simply closing a recent wound and applying pressure.

Gentlemen, I may now speak of *Diseases of the Antrum;* and first, of *abscesses* in it. The antrum, or rather its mucous lining, is subject to inflammation and suppuration. A darting pain is felt in the side of the face, usually supposed to be the tooth-ach, and, indeed, mostly connected with a carious state of the neighbouring teeth. If an abscess form, and the matter be prevented from passing into the nose by accidental obstruction, it may produce an expansion and attenuation of the sides of the antrum; and at length discharge itself either through the cheek, or, what is more common, into the mouth.

The indications are to procure a speedy outlet for the matter; to lessen inflammation and pain by antiphlogistic soothing means; to check the discharge and maintain cleanliness by the use of tepid, slightly astringent, injections; and, if there should be any dead bone, or carious teeth present, to remove them, as soon as circumstances will allow; the teeth as soon as the inflammation has somewhat abated, and the dead bone as soon as exfoliation is sufficiently advanced.

When there is a carious tooth below the antrum, its extraction, and the perforation of the socket, are generally considered the best mode of making an outlet for the matter. In other cases, you may draw the third or fourth grinder. This is a better plan than that of detaching the cheek from the front surface of the antrum, and applying a small trephine, or other perforating instruments to it.

Fungous Diseases of the Antrum are terrible cases, for they produce a gradual expansion of it, and then such pressure on other parts, as leads to an immense degree of suffering, and often fatal consequences. Thus, the pressure may render the eye amaurotic, or even displace it from the socket; it may force out all the neighbouring teeth; make its way through the palate and alveolary processes into the mouth; fill up the nostril; protrude

through the integuments of the face in a frightful form; or through the cribriform plate of the ethmoid bone, or the orbital process of the frontal bone into the cranium itself, when the patient soon dies in a comatose state. I have seen cases, however, in which the patient did not die, or even become senseless, till the mass of the tumour in the cranium had attained the size of an orange.

Now all these tremendous consequences, if the disease be not medullary sarcoma, as I believe it often is, may be prevented by judicious surgery. These are cases, in which the surgeon must act with decision and courage. If the fungus protrude through the cheek, the whole mass should be cut away without reserve; and, in order to extirpate every portion of it from the interior of the antrum, as much bone must be cut away as is requisite for that purpose. This may be done with a strong knife, a chisel, Hey's saw, the trephine, or Liston's cutting forceps, as may be found most convenient. When the fungus has not completely destroyed the front of the antrum, this cavity must be perforated, and a sufficient extent of bone taken away to allow the fungus to be effectually attacked at its root, and entirely removed. I should not consider the operation of tying the carotid artery a necessary preliminary measure. Desault, who performed some of the boldest and most successful operations of this kind, never had any occasion to tie that artery. The hæmorrhage was always commanded, though it is true he was obliged to use the actual cautery, partly for this purpose, and partly for that of annihilating the surface from which the fungus grew. If the disease were fungus hæmatodes, I believe, that it would be most prudent not to attempt any operation, particularly if the case had made considerable progress.

Cancer of the Lips.—The lips are frequently the seat of troublesome and obstinate ulcerations, sometimes connected with disorder of the general health, but more commonly prevented from healing by the constant motion and friction to which they are subjected.

Some ulcers of the lips, having a foul, and even a malignant appearance, will yield to the internal exhibition of the liquor arsenicalis, iodine, the extract of hemlock, the compound decoct. sarsap., or the compound calomel pill, with occasional purgatives. The most eligible dressings are generally the ointment of the nitrate of mercury, or that of the nitrate of silver, 10 grs to an ounce. A phagedænic ulceration of the mucous membrane of the lips and cheeks, sometimes followed by extensive gangrenous mischief, is termed *cancrum oris*. It is to be treated on the same principles as other forms of phagedæna.

When cancer takes place, it is almost always in the lower lip, and it is not an uncommon opinion that the pressure and irritation of tobacco pipes give a disposition to the disease, which usually commences in the cellular tissue between the mucous membrane and the skin. The swelling and induration make the disease obvious before the villous surface of the lip cracks transversely, and a thin fluid oozes out. The part then ulcerates and scabs by turns, and ultimately penetrates more deeply, and throws out a fungus. The patient is generally a male subject, above the middle age, and, as I have said, accustomed to smoking. The skin, mucous membrane, and labial glands now form a close compact mass, and the submaxillary lymphatic glands become affected.

Whenever any malignant disease of the lip resists the alterative plans of treatment, which I have specified, it should be extirpated with the knife, before its effects extend to the lymphatic glands. The disease may be removed by an operation resembling that for the cure of hare-lip, or by a semi-lunar incision, though the lower lip, by which you may make a freer removal of the part, than can be effected in the other way. The commissures of the lips, however, should always be spared. A moderate breadth of the lip may be thus taken away with much less subsequent deformity than might be apprehended. Baron Dupuytren and Mr. Travers have both followed this method, and found it answer.

Diseases of Parts in the Mouth.—Wounds of the Tongue are generally transverse, and caused by the violent and spasmodic closure of the teeth, while the tongue is out of the mouth, as sometimes happen in epilepsy, and falls on the chin. Wounds of the tongue, thus produced, may give rise to profuse hæmorrhage; such as would prove fatal if not soon suppressed. As for taking up one of the lingual arteries for this purpose, it would not generally answer, because the wound almost always affects the branches of both. Sometimes such has been the difficulty, that the surgeon has been compelled to apply the actual cautery, or even to pass a double ligature through the centre of the tongue, behind the wound, and then tie each side of the tongue. I may observe, that extirpation of considerable portions of the tongue is not productive of so much imperfection of the voice as might be supposed.

Inflammation and Prodigious Swelling of the Tongue.—The tongue, when in the state of inflammation, may swell so enormously as entirely to fill the cavity of the mouth, protrude between the teeth, and obstruct deglutition and respiration in a most dangerous degree. I remember seeing a soldier's wife at Brussels, whose life was in urgent danger from such an affection of the tongue, brought on by the use of mercury.

Common antiphlogistic treatment will not afford sufficiently prompt relief. The right practice consists in making two or three longitudinal incisions in the dorsum of the tongue. The copious bleeding, which ensues, soon reduces the swelling. In bad cases all medicines and food ought to be given through a flexible gum catheter.

Ulcers and Indurations of the Tongue.—Putting out of consideration the effect of mercury, the irritation of carious teeth, with points and inequalities, is one of the most frequent causes of ulceration of the tongue. Here, gentlemen, it is clear enough, that the right treatment consists in extracting such teeth, or filing away their sharp projections.

Hard tubercles sometimes grow on the dorsum of the tongue, having a narrow pedicle, and a broad mushroom-like head. These may be snipped of with a pair of scissors, or tied, and the part afterwards touched with the nitrate of silver.

I have seen the whole surface of the tongue covered with hard tubercles, some of them in a state of ulceration. On this form of disease, I find, that mercury has considerable effect. Some inveterate ulcerations of the tongue may be cured by the same alterative plans, as I have advised for similar sores on the lips.

CLINICAL LECTURES

DELIVERED BY

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LECTURE XV.

On the Treatment of Impassable Strictures.

GENTLEMEN,—When a stricture is impassable by the bougie, but is permeable by the urine, although it flows with difficulty, I have of late years adopted a mode of practice which has never failed in my hands to clear the urethra, and to effect a passage into the bladder, without giving rise to the evils attendant on the use of caustic, or to the alarm and anxiety which attend the operation of dividing the stricture by any of the means which have been hitherto recommended. The introduction of a bougie into the urethra, and its retention against the surface of a stricture, have invariably been recommended as an effective means of overcoming a retention of urine, by taking off what is usually called a spasm, and causing the contracted part to yield, so that the urine sometimes flows through it, or the bougie gradually dilates it, and passes on into the bladder. On one occasion, some years ago, in a case of difficulty of making water from stricture, I fixed an elastic bougie in the urethra at night, and was much pleased, on calling on the patient early in the morning, to find that it had passed through the stricture, and that the urine flowed readily by the side of it. I was induced to make this trial from the consideration of the effect produced on a stricture by the dilatation of the part immediately anterior to it by Dr. Arnott's dilator, and which is invariably to improve the flow of urine; in other words, to enlarge the stricture by means of the dilating influence operating on the sounder part in front. One trial naturally led to another, each being more successful than its predecessor, until I supposed I had made a discovery of considerable value; I soon found, however, that the Baron Dupuytren was, and had been, pursuing the same plan in Paris, and, I believe, with as much success.

It might at first sight be supposed that the continued presence of a bougie must give rise to a greater degree of irritation than previously existed, and in all probability to a complete retention of urine. It does, however, exactly the reverse,—it calms the existing irritation, and, after a few hours, if the patient becomes sensible of any difference, it is that his water passes more freely than before. I am quite satisfied of this fact, and believe it to be indisputable as a general rule. The foundation of the method of treatment is built upon it, and if it were not firmly assured the superstructure must fail. The dilatation, nay, the mere separation of the sides of the urethra without any especial dilatation, has an influence of a very favourable kind on a stricture, and may, without being carried farther, effect even a diminution of the contraction in slight cases, so as to allow a bougie to pass with little difficulty. In severe cases, the dilatation of the canal in front of a stricture does but little unless the dilating substance touches the stricture itself, a fact I have had proved, by finding that a bougie may remain for months in a false passage, beginning immediately in front of a stricture, without exerting any perceptible influence upon it.

The best dilating material is a hollow gum elastic bougie, of a medium size, perfectly smooth, and tolerably round at the point, so that it may give as little uneasiness as possible. A very small bougie gives more annoyance than a larger one, is retained with more difficulty, and is more likely to give rise to irritation, in which case it should be removed, and, after a little delay, replaced by a larger one. If this should also give rise to irritation, which rarely occurs, it should be removed, and the irritation subdued by warm fomentations, by opiates, and, perhaps, by the application of a few leeches. There are very few cases which require anything more, provided the patient will be perfectly quiet, live moderately, and preserve the recumbent position, until the irritation has subsided, when he may sit up and walk about his room in his ordinary manner. The bougie is to be fixed in the urethra in the same way as a gum elastic catheter is fixed in the bladder; it should project about one inch beyond the orifice of the urethra, and rather less than more. The point should press against, or rest upon, the stricture with the greatest possible gentleness, so that it may not give rise to inflammation, or to ulceration, and yet should press just so much

as to cause absorption. It is an admitted point in the animal economy, that new formed parts, whether laid down in reparation or in disease, do not resist a stimulus in the same manner as parts of original formation. They are, in fact, removed by the action of the absorbents under the application of a stimulus, which has little or no influence on those parts which have undergone no change, and are coeval with the existence of the individual. The pressure made by the point of the bougie, and which ought always to be an elastic one, should therefore be nicely regulated, so that it may do this and no more. It is a point which requires attention, and some little experience, although a due knowledge of it is soon acquired. It should never be so great as to give pain, or indeed uneasiness, and yet it should be continual. The patient readily learns what is wanted, and, as he can feel when the surgeon cannot, he soon understands how to manage the bougie himself, and can take it out, wash it, change it, or replace it, as he pleases. If he is a very restless, fretful, or naturally irritable man, it may prevent sleep, or prove inconvenient, in either of which cases it may be removed for two or three hours, at the pleasure of the individual, whose private affairs may otherwise render this indulgence necessary. It does no harm, it is merely a little delay, which prolongs the time requisite to effect a cure.

If the pressure be made by a stiff unyielding instrument, inflammation and ulceration may be the consequence, and many evils may be the result; but then this is the abuse of the practice, not the adoption of it, and forms no part of that which I have recommended. The pressure, according to my views, must be so nicely regulated as to cause absorption, but not to give rise to ulceration, and I firmly believe that it may be graduated in such a manner, as to fulfil these intentions most accurately. When the objects stated are duly accomplished, the patient soon perceives that the stream of urine is enlarged, that it comes more freely, and that the general irritation of the bladder and the neighbouring parts has diminished. The principal and most satisfactory sign of amendment is the more ready flow of the urine, and although the bougie should not advance, the amendment on this point is often progressive, until at last the bougie is either found to have passed through the stricture unknown to the patient, or is gently pressed through by his own hand, or by that of the surgeon. The time necessary for the accomplishment of this object must be longer or shorter, according to the extent and nature of the disease, and the state of the constitution of the patient. The object is effected in some cases in from three to six days, in others the progress is slow, although evident, and it may require as many weeks, but in no case that I have met with has the practice failed. When the canal is thus rendered pervious, the cure is only half completed, although the most difficult and dangerous part has been accomplished. The stricture has yielded in its centre, but not in its circumference, and two courses may be pursued; one is to increase the size of the bougie, so that it may press on the circumference of the anterior part of the stricture until it causes its removal, the other is effected by passing the bougie through the stricture, and gradually enlarging it, thus pressing on the inner circumference, in preference to its anterior surface, which method I prefer. When the bougie has passed through the stricture, I always carry it into the bladder, and then replace it by a catheter, the use of which may or may not be continued at the pleasure of the surgeon. A catheter is not necessary to draw off the urine, as it flows as readily by the side of the bougie, but it proves that the instrument is in the bladder, and it is always a great satisfaction both to the patient and surgeon, to see the urine flow through it. I have a gentleman now under my care, whose stricture has been overcome in this way, but in whom the point of a small bougie almost always enters into one of the openings of the ejaculatory ducts, and that of a larger catches on it, and will not often proceed without a little management. If the error be committed of allowing the bougie to lodge in one of these openings, inflammation will in all probability be communicated to the testis, and there is always a chance of such an accident occurring when the orifices of these ducts are irritated even by the instrument resting upon them. If a catheter is used, the eye of the instrument should pass fairly into the bladder for half an inch at least, but it is better to use one made with a hole at the extremity; and when the instrument is not in the bladder, and it cannot always be borne there, it should be withdrawn, so as to lie in the membranous part of the urethra, with the point near to, but not irritating, the prostate gland. It will often remain in that situation quietly when it cannot be advanced without producing the greatest irritation. In some instances where this has taken place, the instrument must be altogether withdrawn, until it has been subdued, when it may be cautiously replaced. The greatest evil, however, usually arises from increasing the size of the bougie too rapidly, and this is a point to which the greatest attention must be paid, whilst it is the error into which both surgeon and patient most frequently fall, as I have stated when treating of the cure by dilatation. It is, then, the point which requires the greatest nicety of management, and this can only be acquired by observation founded on experience. The irritability of the inside of the stricture, and the part adjacent but posterior to it, is sometimes greatly augmented by the urine which passes over them. This is frequently diminished in quantity as well as altered in quality, being loaded with salts and other matters which render it extremely irritating, and, unless it be brought more to its natural state, little or no progress will be made in completing

the cure. The diet of the patient must be then an object of particular attention, and the urine must be tested from time to time, in order to ascertain its nature, and the general treatment must be strictly continued until it is found to have lost its irritating qualities, when there will be a fair prospect of completing the cure. The presence of the bougie gives rise to a discharge, which is greater or less according to the state of irritability of the patient, but it is never accompanied by pain, unless inflammation is brought on either by accidental circumstances, or from the size of the bougie being too rapidly increased, so as to distend the canal beyond what it can readily bear.

When the urethra is rendered pervious, the attempt to enlarge the strictured part too rapidly always brings on pain, irritation of the neck of the bladder, and so much suffering that it cannot be borne, and the large bougie must be withdrawn, and time must be lost before one a size or two smaller can be used in its stead. This, as I have stated, is the error you will be most likely to fall into, and it is therefore the one you must most carefully avoid. If you will recollect what I have said on the question of effecting a permanent cure by dilatation, you will perceive that a permanent cure cannot be accomplished unless a bougie is passed occasionally, so as to take off the disposition for relapse, which lasts for a considerable time, and which must be always borne in mind. I have in my hand the history of the cases of three medical men who have been cured in this way; they are of great interest, and particularly the first; and I selected those of medical men from a great number, because it may be supposed they understood better what they were about than other men, and that they are written by themselves.

June 20th, 1831. A. S——, M.D., aged 38, has had stricture in the urethra for 18 years past, and has been under the care of many of the most eminent surgeons, at different times; but no instrument has ever yet been passed into the bladder, with the exception of a very fine catgut bougie, which Mr. Piele, of Dublin, at one time passed, but could never introduce again.

In 1824, he was affected with severe rigors and fever, recurring twice a-week: and about this time retention of urine for forty-eight hours occurred. The caustic bougie was repeatedly used, and had to be discontinued on account of the rigors that occurred after each application of it. After this, in 1825, the dilating plan was followed for some months with an evident improvement in the general health, and an increased stream of urine. From 1825 to 1830 the complaint was much better; occasional attacks of inflammation in the urethra occurred, which were generally pretty easily got under by the application of leeches to the perineum, and the use of the hip-bath. On August 14th, 1830, was seized with great pain and irritation about the neck of the bladder, and great difficulty in passing water, which came in very small quantity at a time with great straining; these symptoms did not yield to the repeated application of leeches, the hip-bath, anodyne enemas, and suppositories of opium and extract of belladonna, but continued to increase and become more alarming, until the 22nd, when urinary coma came on, and it was deemed necessary to puncture the bladder above the pubes, which was done without delay, and a very large quantity of thick stinking mucous urine drawn off; in about three hours afterwards the coma subsided, and things seemed going on well for a couple of days, when an abscess began to form in the perineum; this increased for a couple of days, and fluctuation being perceived an incision was made into it, and a quantity of extremely stinking matter discharged. In a day or two afterwards another abscess made its appearance on the right side of the scrotum, into which an incision was made, and a tablespoonful of pus escaped; after this another abscess formed in the right groin, and was opened as soon as fluctuation was perceived. These sores all healed kindly and well in the course of eight or nine weeks; but during this time a very severe rheumatic fever came on, which lasted fourteen or fifteen days, and was attended with great suffering during that time. The recovery after this was very slow; the urine began to come away a few drops at a time by the natural passage; the catheter, which was introduced through the puncture into the bladder, was changed about once a-week. It was now attempted to dilate the urethra by the occasional introduction of bougies, and afterwards of graduated sounds, which has been continued up to the present time, but without being able to get any instrument through the stricture into the bladder.

June 22nd, 1831. Mr. Guthrie introduced a gum-elastic catheter down to the stricture, and (having fastened it by a belt round the penis below the glans) left it there with its point pressing on the stricture, and about an inch projecting beyond the extremity of the penis. The passing of the instrument occasioned some pain, and in the evening there was heat and uneasiness along the course of the urethra, which was relieved by taking a draught with 25 drops of the Lancaster Black Drop.

23rd. Passed a quiet night; slept well towards morning; the instrument has kept well in its place; some uneasiness and irritation in the urethra; pulse a little hurried; having kept very quiet in bed all day the uneasiness and irritation were nearly gone in the evening; when the instrument was withdrawn, washed, and replaced; repeated the anodyne draughts; and took a pill of extract of colocynth, five grains.

24th. Slept well; catheter kept well in its place, and caused very little uneasiness; kept quiet in bed all day; removed, washed, and re-introduced the catheter; draughts and pill repeated at bed time.

25th. Going on as yesterday; keeping very quiet in bed.

26th and 27th. Keeping very quiet; the catheter is going a little farther in.

28th. Had an uneasy night; pain and heat along the urethra, and irritation at neck of bladder, which were relieved by removing the cork from the puncture-catheter, and allowing the urine to trickle away in drops for the space of four hours; repeated the pill and anodyne draughts, with forty drops of the Lancaster black drop.

29th. Heat and pain of the urethra and irritation of the bladder subsided; parts feel easy, and the instrument has gone further in; draught and pill repeated at bed time.

30th. Instrument still farther in; draught and pill repeated.

July 1st. The instrument is still advancing, and not causing any uneasiness; draught and pill repeated.

2nd. Puncture catheter changed, the other advancing; repeated draught and pill.

3rd. Instrument still advancing a little; no uneasiness; draught and pill omitted.

4th. Slept well; instrument advancing.

6th. Instrument in as far as it can go; changed for a longer; it appears, on measurement, that it has penetrated an inch since its first introduction.

7th. The new instrument keeps its place, and produces no inconvenience.

8th, 9th, and 10th. Going on well; no uneasiness; keeping very quiet.

11th. A good deal of irritation at the neck of the bladder in the night, so that the instrument had to be withdrawn, after which some urine came by the urethra, two or three times with considerable straining, and then close on half a pint in a better stream than had been made for many years, and with much less exertion.

12th. Made water in an improved stream frequently by the natural passage.

13th, 14th, and 15th. Stream of urine continues to improve.

16th. A small-sized gum-elastic catheter passed with tolerable ease into the bladder, and was left in.

17th. Some uneasiness about the neck of the bladder; urine runs both through and along the side of the catheter.

18th. Uneasiness and cutting sensation about the neck of the bladder.

19th. No. 2 catheter withdrawn and No. 4 introduced with little difficulty into the bladder.

20th. Uneasiness about the neck of the bladder much diminished since the introduction of No. 4; the urine runs both through and along the sides of it.

21st. No. 4 withdrawn and No. 6 introduced with little difficulty in its stead.

22nd. Urine ran along the sides of the catheter during the night.

23rd. No. 6 withdrawn, No. 8 introduced with little difficulty, but occasioned a sensation of great distension along the course of the urethra.

24th. In the afternoon considerable pain and throbbing in the perineum; withdrew the catheter until bed time, and then put in the short instrument, used previous to the introduction of No. 2; urine passed in a large stream when the catheter was out.

25th. Withdrew the short instrument and introduced No. 8 with great facility; some pain in the perineum in the afternoon.

26th. Pain in perineum, which increased with a good deal of swelling towards the evening, when the catheter was withdrawn. Eight leeches, and afterwards a poultice, applied to the part. An anodyne draught and pill at bedtime.

27th. Swelling increased; poultice continued; repeat the draught.

28th. Tumour broke and discharged some matter; poultice continued.

29th. Discharge continues; poultice continued. Introduced No. 6 catheter, and kept it in six hours.

30th. Discharge much diminished. Catheter would not pass into the bladder. Great needing, which was relieved by keeping the cork out of the puncture-catheter for two hours.

31st. Catheter could not be introduced. Introduced the short instrument at bedtime. An anodyne enema taken during the night.

Aug. 1st. Catheter No. 6 passed easily into the bladder.

2nd. No. 6 still in; some irritation at the neck of the bladder. Took an anodyne enema, and kept the puncture-catheter cork out for two hours.

3rd. No uneasiness to-day. No. 6 still in.

4th. Catheter No. 7 introduced. At night great uneasiness about the neck of the bladder occurring at short intervals; took an anodyne enema, which not removing the uneasiness, the catheter was withdrawn, and the short one introduced an hour afterwards, and worn in all night.

5th. No uneasiness; introduced No. 7 catheter again.

6th. No uneasiness; withdrew the catheter and passed water in a large stream three or four times. Introduced the short instrument at bedtime.

7th. No. 8 introduced with ease; a good deal of irritation at night, which was relieved by an anodyne enema and keeping the cork out of the puncture-catheter for about an hour.

8th. Had a good night after the enema; quite easy all day.

9th. No. 8 still in; quite easy.

10th. No. 9 pewter catheter passed easily, but occasioned so much pain about the neck of the bladder that it was withdrawn in two or three minutes.

11th. No. 8 gum catheter introduced.

12th. A No. 10 pewter catheter shortened was introduced with ease, which occasioned a good deal of irritation and needing at night; relieved by an anodyne enema.

13th. Slept well after the enema; easy to-day.

14th. Removed the pewter No. 10, and introduced an elastic gum of the same size. A little uneasiness and needing at night; relieved by an anodyne enema.

15th. Got ease and slept well after enema. Withdrew the catheter in the evening and walked out for an hour; greatly fatigued after the walk; a sensation of rawness along the urethra. No 10 gum catheter introduced at bedtime.

16th. No. 10 removed and No. 11 pewter catheter introduced without difficulty; after being in some time there was uneasiness near the neck of the bladder, which was relieved by an anodyne enema.

17th. Slept well; quite easy to-day; withdrew No. 11 in the evening and walked out for an hour. Great rawness along the urethra after making water, which continued all the evening.

18th. Kept out the catheter all day; urethra feels very raw.

19th. No. 10 elastic catheter introduced, as No. 11 pewter would not pass.

20th. Withdrew the instrument in the evening, and introduced it at bedtime.

21st. No. 12 pewter catheter was passed without difficulty into the bladder, but produced so much uneasiness that it was withdrawn in the course of two hours and a half, and a gum elastic one of the same size introduced in its place.

22nd. Some pain in the perineum; withdrew the catheter, and applied seven leeches; an anodyne enema at night.

23rd. Slept well; pain quite gone; No. 12 flexible catheter introduced into the bladder.

24th. No. 12 in.

25th. No. 12 still in; a good deal of irritation about the bladder; an anodyne enema at bed-time.

26th. Withdrew the catheter, and walked out during the day; introduced it again in the evening, and kept it in fourteen hours.

27th. Catheter in for twelve hours to-day.

28th. In for ten hours.

29th. In for eight hours; withdrew the catheter from the puncture above the pubes entirely, which had been gradually diminished in size for the last four or five changes.

30th. Catheter worn six hours. Some urine came away through the puncture during the night.

31st. Only a few drops of urine passed through the puncture to-day; comes by the urethra in a very large stream.

Sept. 1st. Catheter No. 12 passes with great ease; puncture entirely healed.

2nd. Catheter No. 12 in for two hours, urine comes away in a full stream, and the health is better than it has been for the last ten years.

On the 21st Dec. 1833, he writes to me, saying, that he is quite well, passes his urine in a free, full stream, and introduces a No. 11 silver bougie once a-week.

For eleven months this gentleman scarcely passed a drop of water through the urethra, but wore a gum elastic catheter in the wound above the pubes, which he fastened with sticking plaster against the abdomen above the umbilicus; and through this he made water when he felt a desire, and which he experienced in the natural and usual way. He felt his situation so wretched, that he came to London determined to submit to anything which might place his life even in jeopardy, if the hope of a cure could be held out to him.

The last observation I shall address to you on this subject is, to beg you will never forget that no one method of treatment will succeed in every instance, and that he is the best practitioner who can avail himself of, and duly apply, the various means with which he is acquainted to each particular case.

REFUTATION
OF THE DOCTRINE OF CONTAGION
By Historical and Personal Evidence.

BY R. TYTLER, M.D.

Delivered before the Medico-Botanical Society of London, May, 13th, 1834.

Gentlemen,—I have to return, to the President and the members of this Society, my best thanks for the opportunity you have afforded me this evening, of submitting for your consideration the principles of a new system of nosology for the classification of diseases, hitherto imagined to be of the most contagious description. I candidly confess, that while I view with respect the labours of other Societies, it is to the Medico-Botanical Society alone I look for the real improvement and advancement of medical science. Because the investigation of the qualities of herbs, of plants, and of vegetables, has, in all ages, constituted the legitimate province of the physician; and if I can establish, to the satisfaction of this Society, that a grievous error has, during a long lapse of years, been allowed to creep into our science, and to corrupt medicine to its very core, destroying and polluting the fountains of the healing art; and that this error can alone be corrected by means of the investigation and encouragement of medical botany,—I doubt not, but that the subject, I am about to develope to your notice, will be deemed deserving of the most serious consideration of the members of this Society. It is, gentlemen, in one word, my object to slay the monster of plague and cholera—*contagion*; to immolate this hideous delusion on the altar of knowledge; and by driving his pestiferous carcase far from the precincts of science, prevent for ever this dragon

of corruption and error again tainting medicine with his hateful and baneful presence. The work which I hold in my hand proves the necessity of my adopting the course, that you have this night permitted me to pursue. It is, gentlemen, a Treatise on the Cholera Morbus, by M. Lombard, of Geneva, and, commencing with my name, he states that the first case of the "new plague" was seen by myself; and after detailing the manner in which the disease arose at Jessore, the writer suddenly drops *all* the facts which have been accumulated by myself, demonstrating the origin of this dreadful distemper to proceed from the use of vitiated rice; and as if no such facts were in existence, and as if no researches had taken place by me respecting the origin and cause of a disease, that commenced in my own practice, and under my own eyes, the author proceeds to reason upon the existence of cholera as depending *solely upon contagion*, and its propagation as being wholly inseparable from the same fanciful cause. Thus, standing as my name does at the very outset of M. Lombard's work, I am in a manner rendered responsible for opinions, which are directly the reverse of my own on this most momentous topic; and it must appear to the reader of that production, especially if he should be unacquainted with the discussion that occurred, during the last year, in the Medical Society of London, and if he never should have fallen in with my writings upon the nature and origin of Epidemic Cholera, or *Morbus Oryzeus*,—that I absolutely advocate the doctrine of rice disease having been propagated by infection;—than which a more absolute delusion is not in existence. I therefore, gentlemen, protest against all medical writings, such as this of M. Lombard's, which forsake facts, and reason, without the slightest reference to established and known circumstances, upon a preconceived theory, as if that theory constituted demonstrated and unalterable truth. It may be said, that it is somewhat indecorous to pass comments upon an absent individual; but his book is present, and it is the principles of the work against which I contend.

Gentlemen, I well know that the Asiatic cholera is not contagious. I saw the first case of the malady, which had been brought to the notice of any medical officer, in August, 1817, at Jessore, and consequently am fully entitled and qualified to give an opinion upon this question. The idea of that disease being infectious, or propagated by contagion, is absolutely ridiculous; and I am as positive as that I stand on this spot, or that I see the President in that chair, that the Asiatic cholera is *not contagious*, and that its propagation proceeds entirely from the use of deteriorated rice—a specimen of which I now lay before you. It is unnecessary for me again to go over the ground, which before the Medical Society I travelled, in the months of last September and October. But it is proper I should mention, that the fact of this deteriorated rice being clarified or bleached has, since the discussion of last year, been fully established by means of documents which have appeared in the *Lancet*. That this rice is manufactured into the form of tapioca and arrow-root there can be no doubt; and hence this part of the subject, which refers to the adulteration of articles recommended by the physician as medicinal aliments for the infant and the invalid, cannot be considered otherwise than as deserving of your profoundest attention. Since last year, also, it has been ascertained that the shelly covering named *kun* and *koora*, which exists between the outer husk and the grain of the rice, is embued with an oleaginous substance, suspected to contain the constituents that distinguish the croton oil. This fact, then, leads us at once to understand the effects produced by this substance upon the stomach and bowels of those who partake of it for food; and the extent of a disease, produced by the admission of a deleterious substance of this kind, will of course become equally intelligible, when we reflect upon the immense quantities of this deteriorated grain, which are annually imported into this, and other countries, from the East. Again, it is to be observed, that it is not into those places where the grain is first imported, that the *Morbus Oryzeus* necessarily appears, but in those spots where the *deteriorated grain is used for food*. For example, the vitiated grain being imported into Liverpool, but having been carried by means of the rail-road to Manchester, and given in that town as food to the manufacturers, or at Newcastle, where it was consumed by the colliers, the disorder was manifested previous to its appearance at Liverpool. In like manner the deteriorated grain is imported from India into Greenock, and from that port the rice being carried, by means of the Caledonian canal, through the Highlands of Scotland, there, and when least looked for,— the *Morbus Oryzeus*,— entirely owing to the employment for food of deteriorated rice exported from India, was produced. Hence, wherever the vitiated rice found its way, there the cholera or *Morbus Oryzeus* made its appearance, and nowhere else.

Having thus established the real cause upon which the dreaded and destructive cholera depends for its existence and prevalence, I proceed to explain the principles of the New System of Nosology, which has this evening been laid before the Society. It is proper I should notice, that this system is the natural consequence of the facts, stated by me regarding the terrible results arising from the use of deteriorated grain. This nosology is the inevitable sequel of the Oryzean system, and comprises the conclusions to which I was led from reflection upon the facts, accumulated by me during my researches into the dreadful effects produced by vitiated rice. The work was published in Latin and English, in Hindoostan, so

far back as the year 1821, and a copy transmitted to England by my late friend Dr. Adam, Secretary to the Medical Board of Bengal, was reprinted in one of the medical periodicals of the day, accompanied with commendations passed upon the nosology on account of its originality. But the subject was allowed to drop. The work in which it appeared is at present, I believe, defunct; it never attracted any notice from the medical practitioners of Great Britain, and, consequently this nosology may be considered as wholly new to this Society.

If, gentlemen, contagion be an error, as I contend it is, here is a dreadful and most mischievous error, indeed, permitted to pervade the whole of our science. I view, in common with my medical brethren, with intense interest the proceedings, which the legislature of the country have thought proper to adopt with reference to medical reform. But contemplating, as I do, the baneful doctrine of *contagion*, as a most dreadful and destructive delusion, which tends to the establishment of the horrible quarantine laws, and leads to the violation of every duty of humanity, I admit it is a matter of comparative indifference to me, whether facilities for teaching this error be conferred upon the University of London, or be retained by those of Oxford and Cambridge, Aberdeen, St. Andrew's, Edinburgh, or Glasgow. It is the science itself which requires to be reformed, and this beneficial alteration can alone be effected by the members of the profession themselves. Gentlemen, I have in vain looked into the most ancient authors for a glimpse of the *modern* doctrine of contagion; and I believe that doctrine, as it it at present exists, to be first *distinctly* found in the writings of Dr. Mead. By Lady Mary Wortley Montague, who was the first to introduce the practice of inoculation for small-pox into this country, we are informed that parties, similar to those of pleasure in Great Britain, are formed in Turkey for the purpose of inoculation. Such a statement carries absurdity on its face; and as I shall presently show, that although inoculation does prevail all over the East, yet that operation takes place with a view wholly different to any idea of an individual being secured by its effects from contagious variola. The writings of Moses I hold to be the most ancient records in the hands of the present race of men, at least I can myself find none, nor can I hear of any book which can, in the remotest degree, compete with the Pentateuch in point of antiquity. In the Mosaic writings, accordingly, there are statements made regarding *a burning fever, inflammation*, and *pestilence*, the identical diseases which are, by modern physicians, maintained to be contagious, yet not the remotest allusion to contagion is traceable throughout the whole of the Pentateuch. Nor is a vestige of the same doctrine discoverable in any part of Scriptures; but, as we shall presently see, the doctrine of Divine wrath, originating pestilences, being divulged in the Holy Scriptures, this doctrine has been contorted and perverted into the modern dogma of contagion, which, although comprising an absolute perversion of the truth, yet to doubt its existence is reckoned little else than a medical heresy. In the writings of the father of medicine, Hippocrates, not the slightest hint is given of the same fiction. If contagion were a truth, how comes it that the venerable founder of the healing art should have omitted such a conspicuous fact in those splendid aphorisms, each of which appears to contain the concentrated wisdom of ages? In the New Testament, so far from perceiving contagion divulged, we find the Divine Saviour of mankind himself, whom every Christian acknowledges to be Jehovah incarnate, the Deity Loquens, directing it to be the duty of his followers to visit the sick. "I was sick, and ye visited me," is the language of Christ; "I was naked, and ye clothed me," is the doctrine which is commanded by Jesus. Yet what says contagion?—do not visit the sick, for if you do, you will either receive the disease yourself, or convey it to another; do not clothe the naked, for woollen garments are the recipients and communicants of contagion. Hence the doctrine of the Saviour and the doctrine of contagion are diametrically opposed to each other; and as the former is the doctrine of God himself, the contrary doctrine must have been propounded by the author of evil, the Devil, who was a liar from the beginning, and the father of it. And as the tree is known by its fruit, so is this dreadful doctrine, which aggravates the misery and tends so fearfully to the destruction of the human race, distinctly traceable to its proper and mendacious parent,—the father of lies. In the writings of Celsus, who was contemporary with the Apostles, no trace of contagion is discovered; we are equally at a loss to perceive it in Galen. Avicenna, the first Arabian physician, gives no intimation of such an opinion; and Rhazes, who is the first to give any account of the small-pox, makes no mention of such cause of that disease being in existence, and explains the prevalence of variola upon wholly different principles. In a word, no allusion is made to the fiction of contagion till posterior to the Reformation, when an idea was broached, as is understood, with the political intent of preventing the Emperor from approaching the spot where the Pope and Cardinals were assembled, that a formidable malady raged in the town, and would descend on those who came within the consecrated limits. Still this did not comprise the modern notion of contagion; and it is in the writings of Mead, where we distinctly find the doctrine of propagation of disease from one body to another, and the contagion, by means of clothes, &c., conveyed from house to house, and town to town, that I imagine this untenable figment is first un-

doubtedly published. It is commonly asserted, that in the East Indies no contagious malady is in existence; yet throughout Hindoostan, the diseases, considered in this country to be contagious, are as prevalent as in Europe. In the course of practice in India, I have witnessed, and that, too, subsequent to vaccination, the most terrible cases of confluent small-pox I have ever in my life beheld. In Hindoostan I have, with the exception of buboes in the arm-pits and groins, witnessed a distemper, in every respect bearing the most striking resemblance to Egyptian plague; and typhus gravior, commonly named *jungle*, or *bilious fever*, is, in India, of every day occurrence, while terrific cases of measles appear regularly in India as the cold weather sets in. During the time I was in medical charge of the army in Arracan, I witnessed typhus icteroides in its worst form. Cases of that disease, which prevailed amongst the Europeans in that quarter, were officially stated to me by two assistant-surgeons to bear exact resemblance, —in fact, that they constituted a disease precisely identical with yellow fever, which had, by one of those gentlemen, been seen in America, and by the other, in the vicinity of London. Then, since the diseases are prevalent in India, which in Europe are considered to be highly contagious, why should not contagion be there equally prevalent, as it is asserted to be in this country and America? We are told, that this amazing difference is imputable to the effects of climate, yet Hindoostan embraces every variety of climate; and there we have the contagious diseases of Europe and America asserted not to have reference to either infection or contagion. The fact is, that in India prevails the original idea of contagion, which supersedes the word as employed by us, and thus the natives afford an explanation of diseases upon principles, which, I am now about to show, have travelled into Europe, and assumed the form of *contagion*, without the word itself, or our view of *contagion*, being recognisable by them. The primeval idea of the woman, the tree, the serpent, and death being associated, is as well known in the East, as it is in Great Britain. This woman—the great female parent of mankind—is depicted in a two-fold capacity;—in one she is the genial queen of gardens, fruits, corn, and flowers; in the other, she is a terrible destructive demon, introducing death, and presiding over the grave, and hell. Hence, under the former personification, she is Ceres and Proserpine gathering flowers, and in the other is represented as the wife of Pluto, and grisly empress of the infernal regions. This goddess is well known in India, and is universally held in reverence by the natives under the names of Devi, Kalee, and Seetillah. During the prevalence of the cholera, she was worshipped under the denomination of the *Oolah Bebee*, or *Lady Oolah*, or "presiding goddess of upwards and downwards." She is the goddess of small-pox, which is named *mattah*. In the ancient Kawi language of the Island of Java, *mattah* signifies "the eye," and is hence applied to the sun, which luminary is termed *mattah eare*, or "eye of the day," an expression coincident with *mattare*, translated into Greek by the term *Heliopolis*, or city of the sun, in Egypt; and hence, also, from the same word, *mattarem*, the name of the native kingdom of Java, is derived. It may be asked what connexion has small-pox with the sun, the moon, or the stars? The answer is obvious,—the goddess Devi is the moon, Diana, or Hecate: she presides over the stars, and is arrayed in robes decorated with the constellations. When, therefore, this queen of heaven, or night, in her form of Seetillah, descends into the human body, her stars, or planets, must make their appearance, in the same manner that the constellations are attendant on the radiant Urania. These stars and blossoms are, therefore, imagined to be seen in the pustules of small-pox; and terms, in allusion to this appearance of Seetillah, still constitute the leading expressions of medical science, in reference to inflammatory and eruptive diseases. Thus, physicians speak of *the efflorescence* and *star* surrounding a pustule; hence the pustule is said to advance to *maturity*, and to *ripen*, and *dry*, precisely in the mode in which the same terms are applied to fruits and flowers. The notion of the Indians is, therefore, that small-pox, in every instance, is caused by the descent of Seetillah into the body; and the goddess must not be provoked or tempted on the occasion of her visit and appearance in a family. Whilst I held the office of Superintendant of Vaccination at Allahabad in Hindoostan, the greatest obstacles on the part of the natives existed against the introduction of cow-pox. At first, these people asserted that, by the government, a mark was placed on the arms of the children, in order, at a future period, that they should be recognised and claimed for slaves. This idea speedily subsided, and then the real cause of the aversion to cow-pox became disclosed. Inoculation, unless performed with peculiar ceremonies, and under particular circumstances, is conceived to be a provocation offered to Seetillah, the implacable death-dealing goddess. Therefore, if inoculation be performed, unaccompanied with certain propitiatory offerings and superstitious ceremonies, according to the Hindoos, the presence of Seetillah, in her most wrathful form, is to be dreaded; and hence, after the performance of vaccine inoculation upon the arm of a child, I have seen the parents performing a *poojah* in the centre of a cross-road, with the intent of propitiating the goddess, and deprecating the effusion of wrath which they imagined had been provoked by them, in allowing inoculation without the preceding and accustomed offerings.

The idea, therefore, of small-pox in the shape of a contagious disease emanating from one body and entering into another, is far

removed from the mind of a Hindoo. It is the presence of a presiding goddess, who, at her own free will and pleasure, shifts her habitation when and where she pleases, that produces the disease; and, whenever inoculation takes place voluntarily among themselves, the operation is considered in the light of a propitiation to Seetillah, the person on whom the operation is performed becoming enrolled among the number of her victims or votaries. Hence one great difficulty which existed, and does still exist, to the admission, on the part of a Hindoo, of vaccination being a preventive of small-pox, because, having his own predetermined and inflexible notions on the subject of *mattah*, its causes and consequences, he is unable to comprehend in what manner inoculation, in any form, can prevent an advent or visit from Seetillah.

The first change which the *Oolah Bebee*, or the lady of small-pox underwent in her progress towards Europe, was from the hands of the Mussulmans. This race is known to have comprised the most furious iconoclasts that probably ever made their appearance in the world. The idols of India were at once their aversion and dread; and the merciless destruction, poured forth by them upon the stocks and stones of Hindoostan, fully proved that the destruction of those images and monuments of idolatry, was as much dictated by their dread of an evil and vindictive influence being resident in those objects of idolatrous veneration, as implicit obedience to the commands of the Koran. The superstitious influence ascribed by the Hindoos to Devi, Kalee, and Seetillah, passed to the hosts of the Mahommedans, by whom it was retained and cherished beneath the form of Roh or Rokh, spirit, or pneuma. This Rokh, in allusion to the fluttering of the Divine Roh, or Spirit, on the surface of the abyss at the period of creation, becomes embodied into the fanciful representation of the rokh, an imaginary bird, whose egg is pregnant with death. This roh, or pneuma, or evil spirit, or pestilential aërial influence, from the Mussulmans next passed into Europe, and finally, according to later notions, and the discoveries attendant on pneumatology, assumed its modern dress of contagion. Such, however, are the changes, and variety of opinions received by modern physicians with reference to the contagious pneuma, fomes, or roh, that Seetillah, were she present in England, would hardly be able to recognise herself in the masquerade forms and Harlequin disguises, which, in the hands of the modern disciples of Æsculapius, she has been made to assume. In the midst of this falsification of knowledge, by means of the perversion of science, proceeding from the prevalence of idolatry and superstition, it is remarkable that the true cause, upon which the real origin of pestilence depends, has actually descended to us from remotest antiquity. Thus in Holy Writ, along with the inflammation, and pestilence, and burning, is associated *mildew*, or the destruction of grain, which is denounced by Jehovah as comprising one of the most tremendous judgments awaiting His rebellious people. In the first book of Samuel is described the pestilence which overtook the people of Bethshemesh, and which destroyed upwards of 50,000 persons. This tremendous visitation occurred at the time of the reaping of the harvest, consequently it happened as those persons, who were reaping their wheat in the valley, were making use of the new grain, and the symptoms of this dreadful distemper, as we learn from Josephus, were accompanied with discharges of undigested grain. The fearful pestilence by which 70,000 persons perished, which is mentioned in the 2nd book of Samuel, and 1st book of Chronicles, also occurred at the period of harvest, for "Ornan was threshing wheat," when the plague stayed. Here, then, we gather from Scripture the association of the origin of plagues and pestilences with *mildew* and the presence of grain. The most ancient pestilence on record, detailed in the writings of classical or profane authors, is the distemper by which, during the reign of King Athamas, Thebes was desolated, and occasioned the Argonautic expedition with the view of obtaining the golden fleece, and consulting the oracle at Colchis. That plague is said to have been occasioned by the wrath of Ino, who, to revenge herself on Nephele, produced the pestilence *by poisoning all the grain which had been sown in the earth.* But, in fact, Nephele is "a cloud;" and here, then, in this tradition of an universal malady arising from a general cause, is shadowed forth the vitiation of grain by means of clouds, showers, and inclement seasons, as well as, in the same legend, is detailed the terrible effects which grain so distempered is capable of occasioning. Josephus records the fearful pestilences which accompanied the famines and neglect of agriculture that prevailed during the Jewish wars. Many similar pestilences, arising from similar causes, are on record, till the days of Justinian, when the tremendous plague occurred that ravaged the Roman empire, and was accompanied by a total neglect and suspension of agricultural operations. The sweating sickness was introduced into England by the army of Henry VII., who were in extremity for want of supplies, and it continued during the period this country was ravaged with the desolating calamity of civil war. It is needless, gentlemen, to multiply instances, but, from the earliest period downwards to the present times, famines, vitiation of crops, and pestilences, proceed hand in hand. The famine, or vitiation of the harvest, first precedes, and the plague occurs precisely in the relation of cause and effect. In the year 1816, the crops, owing to inclement seasons, were injured in Great Britain, and that year was remarkable for the occurrence of typhus fever, small-pox, and varioloid disease, in all their destructive forms. In the following year, the crops, by the agency

of the inclement weather and other causes, were vitiated in Bengal, the great rice mart of the universe, and this vitiation was succeeded by the cholera, which has spread universally coincident with the employment of the vitiated grain; and along with the cholera in India were witnessed small-pox, and typhus-fever, characterised by the most terrible symptoms which attend the progress of these maladies. Mature and great reflection on these facts has, therefore, led me to frame the "exemplum parvulum nosologici novi," which is now in your hands. It is based upon the principle that in vegetables, under certain circumstances, a matter exists incapable of assimilating with the animal blood. When this matter, whatever it may be, either excess or deficiency of life, is absorbed into the circulation, disease follows, because nature attempts to expel it from the animal body. If the *vis naturæ* be sufficient for this purpose, the patient recovers, but if the strength of his constitution be unequal to the effort, the patient dies, affected with symptoms which are dependent upon the nature of the organ or viscus to which, in the course of circulation, the noxious vegetable matter is determined. If, for example, the noxious matter be determined to the upper part of the stomach and bowels, and there produce violent inflammation and gangrene, the result is cholera morbus in its worst form; if the inflammation be in minor degree, the disease is typhus gravior or mittor, according to the extent of the inflammation which is present in the villous coats of the alimentary canal. If the determination should be to the liver, then an augmented secretion of bile is the consequence, and the disease assumes the aspect of yellow fever. If the determination be to the lower extremity of the intestines, the consequence is dysentery, if to the eye, ophthalmia, and should the result be gangrene on the surface of the body, the distemper is dry gangrene, and confluent small-pox, and mal des ardens.

It is to the presence of this principle in vegetables, comprising matter unassimilitable with the animal blood, to which I am desirous of directing the attention of this Society. This doctrine is in fact deducible from highest antiquity, and, whilst it has been overlooked by modern physicians, it is nevertheless in a manner preserved by the Jewish writers of the present day. For one of the most learned followers of the Mosaic Law in London, Mr. Goodman, in a late work, entitled the Faith of Israel, expressly lays down the one principle, that vegetables derive their sustenance from the earth, and animals derive their life from the vegetables. Accordingly this presents us with the real explanation of the phenomena of life, and if the vegetable matter be unassimilitable with the blood, it is plain that disease must follow, till its expulsion from the system take place. But of all vegetable matter grain is the substance, from which the principle of life is derived in greatest abundance to animals, and of the grains which afford subsistence to man, wheat stands in the highest rank, and next to it barley. We have all heard of the nutritious qualities of oatmeal; but let us view the inhabitants of the Highlands of Scotland, whilst living upon that farinaceous aliment. The intellect of these hardy mountaineers never did become fully developed, whilst the Macs, the Camerons, and the Grants, confined to the glens and recesses of their native mountains, subsisted upon oat and barley-meal. While living upon food of that description, the clans were simply marauders, feudal depredators, and plunderers of sheep and cattle, and affected proverbially with cutaneous distempers. But having been admitted to the Lowlands, and there become partakers of wheaten flour, in the form of fermented bread, the descendants of the Highlanders have been seen endowed with intellect that has rendered them the ornaments of the world, and the boast of literature. Gentlemen, it will be found that the intellect of man is developed exactly in proportion to the consumption of grain for food, and that of all nations, those by whom wheat is consumed, and in the form of fermented bread, are the most distinguished for advancement in civilisation. Hence a distinct gradation takes place in man, from the grain eaters to those who feed on roots. The Hindoos, and other Asiatics, by whom rice and unfermented bread of wheat, barley, and other grains, is consumed, reach a certain stage in civilisation, beyond which they are observed incapable of progressing. On the other hand, the feeders on roots, such as the inhabitants of New Guinea and the aborigines of New Holland, are an unvaried race of wretched savages. Some years ago an Irish sailor was discovered on the desolate shores of an island in the Pacific Ocean; he had subsisted on shell-fish and roots for nearly two years, and had become reduced in that time to the miserable state of a perfect savage. It is consequently a mistake to assert that savagism is the original condition of man. So far from this being the fact, that humiliated state of society clearly exhibits a condition into which man has sunk, in consequence of the neglect of agriculture, and the substitution of roots instead of grain for food. Might not, gentlemen, this fact of a peculiar disposition, derived from vegetable roots, when exclusively used for food, account for much of what passes in a neighbouring island? And might not the encouragement of agriculture, and the cultivation of wheat instead of potatoes, tend more than any legislative enactment, to accomplish the amelioration of the condition of the poor, and diminish the sanguinary excesses which so lamentably prevail in the country to which I allude.

This is, then, gentlemen, the principle upon which the new nosology, I have ventured to submit to you this evening, is founded. In all cases of typhus, small-pox, and plague, the disease originates in a vegetable principle, imbibed either from solid or liquid food, circulating in

the system, and incapable of assimilation with the animal fluids. Hence the worst cases of plague and cholera are identical. This is demonstrated by means of facts contained in the works of Dr. Mead, as contrasted with the account of a case, described by Dr. Mellis, Surgeon of Kishenagur in Bengal. By the latter the instance of a man, affected with cholera, is published in the Calcutta Magazine for the month of November, 1818, in which, upon dissection, gangrene was found existing to a great extent in the intestinal canal. This man died within twenty-four hours from the commencement of the attack: and by Mead it is mentioned, that the worst cases of plague were those in which gangrene in the bowels supervened within twenty-four hours from the first stroke of the disease. Here, then, the cholera of India and the plague, as described by Dr. Mead, are proved to be identical, and consequently both depend upon the same cause, vitiated grain; that being the fact, I hesitate not for a moment to believe, that this subject will be deemed deserving of serious notice from the Medico-Botanical Society. Contagion is at once the bane of mankind and the opprobrium of medicine: and dreadful is it to know, that brave soldiers and sailors, who have been fighting the battles of their country, upon their return to Britain, overwhelmed with disease contracted in the course of service, should, through the operations of the quarantine laws, be excluded from treading the Christian shores of the British empire, lest they should disseminate a distemper, whose origin is wholly dependent upon a cause totally different from contagion, and which malady is liable to be augmented, in all its horrors, by the operation of the very laws that are formed under the mistaken idea, that they tend to its destruction. The importance of the subject upon which I have touched is undeniable; and I conclude with requesting to be allowed to remark, that the absurd vanity of being deemed the author of a new system is far from constituting the motive that has led me thus to trespass upon the notice of the Society. A positive conviction of the utter baselessness of the doctrine of contagion, and the truth of the origin of some of the most terrible diseases to which our race is liable, as propounded by myself, in the pamphlet submitted to your notice, have alone induced me to occupy the time, and intrude on the attention, of the Society, with an attempt at the classification of *morbi Cereales*, or those diseases which are produced by the employment of vitiated grain.

Foreign Medicine.

On the Nerves and Structure of the Iris.

BY M. FARIO, OF VENICE.

Some anatomists and physiologists attribute to the iris two nervous branches of different origin, one coming from the third, the other from the fifth pair,—the first presiding over contraction of the pupil, the second over dilatation. The author objects to this hypothesis, on the grounds that the nerves of the iris do not really belong to either of those cerebral nerves, but that they are derived from the ophthalmic ganglion, which certainly receives filaments from those nerves, but constitutes in itself an intermediate centre, where the properties they possessed disappear. These nerves of the iris arise by a common origin from this ganglion, and their antagonism cannot be proved by the experiments instituted in support of that opinion. In some animals these nerves come directly from the cerebral nerves, in which case the movements of the iris seem to be voluntary. Mr. Mayo, having seen the pupil dilate, after the section of the third pair, has thence concluded, that this nerve presides over the contractile motions of the iris; but such an effect might be purely sympathetic with the paralysis of most of the muscles of the eye, brought on by section of the third pair; at all events, we may but conclude, that the ophthalmic ganglion was paralysed in its functions. M. Magendie affirms that section of the fifth pair in rabbits determines a contraction of the pupil, although he thinks that in these animals the fifth pair of nerves sends no branches to the iris. If it were so, what fact would be proved by the experiment? He has been led into error, by supposing that the iris of rabbits receives no branch from the fifth pair; and his experiments are completely at variance with those of M. Fario. The theory of the former being supported by another hypothesis, viz.—that the iris consists of two orders of muscular fibres, one circular, the other radiated, would always be invalidated by the anatomical fact, that no muscular fibres have as yet been demonstrated in the iris. On the contrary, the vascular, spongy, and erectile structure of this membrane, demonstrated by simple inspection and by the microscope, is confirmed by its relations to the choroid. The iris relaxes and enlarges the pupil when the choroid is inflamed; because then the vessels of the latter, being congested, no longer send to the iris a sufficient quantity of blood to render it turgid. However that may be, the following are the principal experiments attempted by the author, the results

of which are curious. He took off the cranium in a young pigeon, divided the membranes, and raised the anterior lobe of the cerebrum, which operation apparently gave excessive pain to the animal and caused slight contraction of the pupil. The trunk of the third pair was then divided, the pupil did not immediately dilate, but in the course of eight minutes; ten minutes after, the fifth, and again, at a similar interval, the optic was cut through; the dilatation did not increase, but, however, the animal was apparently overcome. On another pigeon, section of the ophthalmic nerve, dilatation of the pupil; five minutes after division of the third pair, dilatation increased; and in another five minutes after section of the optic nerve, the pupils became dilated to its greatest degree. On a third pigeon, section of the optic nerve was succeeded by dilatation, which was not augmented by the subsequent section of the third and fifth. When the optic nerve of one eye is divided, the pupil on the opposite side is dilated, which does not happen after section of the third and fifth. Finally, in another pigeon, the right eye was experimented on, and the iris pricked, so as to produce a permanent contraction of the pupil, which was increased by the incisions practised to expose the nerves. Division of the fifth, then, produced no effect: that of the third caused some increase of the dilatation; but the bird died before the experiments could be carried any further. This was repeated on another pigeon, but the third pair was first divided, and produced slight dilatation; division of the fifth increased it a little; and that of the optic nerve made it still more sensitive; but the bird died. The same experiments were tried on rabbits and cats, but their results were neither as marked nor as constant. Section of the optic nerve was always followed by sensible dilatation. As for the contraction of the pupil after division of any of these nerves, it was never noticed in any of these experiments; much more, in one rabbit the author multiplied the irritation of the nerves, especially of the fifth pair, touched them with vinegar, and even with solution of caustic, without giving rise to contraction of the pupil, although this phenomenon was noticed as soon as the iris was pricked through the cornea with a cataract needle. The author allows that many objections may be made to his experiments, but they are such as to be common with all experiments of the same nature. The uniform result of his trials says much in their favour; and we may, at all events, conclude from them, that there is no sort of antagonism between the different nerves of the iris.

Encysted Ovarian Dropsy of the right side —Supposed extra-uterine Pregnancy— Cæsarean operation—Death.

BY M. BRICHETEAU.

A woman, 47 years of age, who had long been married, but had no children, came into Hôpital Neckar in the month of June. There had been suppression of the catamenia for nine months, and she stated that, at the time of her supposed conception, a violent quarrel had arisen between her and her husband. On her admission the abdomen was prominent, she experienced those pains which are the usual forerunners of parturition. A tumour in the loins on one side could be distinctly felt, resembling in its form the head of a child, in the opposite side, a prominence which could easily be imagined to correspond to the foot of the fœtus; the tumour could readily be displaced by pressure. The patient pretended that she could discern in her abdomen the motions of the child; there was also a *bruit*, which was attributed to the action of the placenta. On the first examination per vaginam, the neck of the uterus could not be detected; on the second trial, made the next day by M. Baudelocque, the os uteri was felt under the pubes in a contracted state; on a third examination which was made by the rectum and vagina at the same time, a fluctuating tumour was detected, which could be readily displaced by the finger, and was manifestly connected with that in the abdomen.

The pressure caused by the tumour rendered the use of the catheter necessary; the patient suffered severely, but at intervals, as in labour; she had no fever, nor was her skin hotter than natural. Whenever the abdomen was compressed, the pains assumed an expulsive character, and the woman exhausted herself in vain with repeated efforts. This state of things became more and more aggravated, notwithstanding the employment of the warm baths, fomentations to the abdomen, and blood-

letting. The unfortunate creature could obtain no rest, and her sufferings were so excessive, that she requested an operation might be performed to extract the child she supposed was in the uterus. The state of the tumour was again examined by the medical officers of the hospital; it was generally supposed that the patient had an extra-uterine pregnancy in the right ovarium, and that the only chance of relief could be afforded by opening the cyst, which was supposed to contain it. The surgeons consulted for some time together, as to what would be the most proper mode of treatment, if no relief was afforded to the tortures of the patient; they all agreed, that an incision into the vagina, for the purpose of exploring the contents of the tumour, was the only course likely to relieve the symptoms. The absence of peritonitis was thought to encourage this proceeding. At 3, P. M., on the 6th of July, M. Langier, in presence of several surgeons and a great many pupils, after a careful re-examination of the state of the patient, made a slight incision in the posterior wall of the vagina, which did not appear to cause much pain, but was followed by the discharge of about a pint of clear bloody serum; the index finger being introduced into the wound, a cyst was discovered, but no fœtus could be found. The patient was carried to bed, and fomentations were kept continually applied to the belly; fever diet alone was allowed. The next day she was much relieved; there was but slight pain in the belly; pulse frequent; skin cool. On the 8th symptoms remained the same, but the pulse had increased to 112 in a minute; both the retention of urine, and the *bruit* returned as before the operation; the patient could only lie on her back, decubitus on the side, bringing on anxiety with severe pain. The abdomen, however, was not at all pained by pressure. Fifteen leeches were applied to the perinæum, and emollient fomentations continued. (Gum water and fever diet.)

9th. Face anxious; pulse more frequent; melancholy forebodings, and continued shudderings.

10th. During the night symptoms of peritonitis supervened; twenty leeches were applied to the abdomen, which was so painful as not to bear the slightest pressure.

11th. Great depression; pulse extremely small; respiration hurried, and in the course of the night she died.

Autopsy.—The abdominal tumour was found to have descended in the pelvis, coagulable lymph had been effused about the inferior surface of the peritoneum; there was serum effused in its cavity, and the convolutions of the intestines were glued together by false membranes. The tumour was uneven, and appeared to be composed of several lobes; on the left side it was pyriform and bore some resemblance to an enlarged uterus; it proved to be this organ itself, in the cavity of which a structure of a lardacious nature, in size like a large pear, had developed itself; it was entirely covered by the uterus, which had, as it were, expanded into a thin lamina to cover its contents. It communicated with the vagina and with the cervix uteri, the latter being so thin as to leave only a small membranous opening of about two lines in diameter. The right portion of the tumour was composed of several lobes, uneven and ulcerated on its surface, which was here and there covered by loose portions of membrane. These lobes were formed internally by organic degenerations, such as carcinomatous and encephaloid structures, separated from each other by cellular or puriform septa, or by small cysts filled with a dark and ichorous serum. No traces of the ovarium remained, which had probably been destroyed by the pressure of the morbid surrounding structures; perhaps the ovary itself had been the first seat of the disease. At the inferior and back part of the pelvis was another mass, which had compressed the bladder against the arch of the pubes, and driven the rectum and the posterior wall of the vagina upwards and backwards. In this part of the tumour were serous cysts, of two or three inches diameter, in close contact externally with the disorganised mass. It was in one of these cavities that the incision had penetrated; another, a little behind it, had not been opened, but contained a great quantity of limpid serum. These two cysts having been distended by fluid, and pressed upon by the tumour above, had been doubtless the cause of the retention of urine, and the excruciating pains which had been complained of by the patient.

It will be important to notice, says M.

Bricheteau, that the peritonitis was confined to the external surface of the intestines, that it did not penetrate into the cellular tissue at the lower part of the pelvis, and that the wound made by the incision was beginning to cicatrise. From this it is evident that the peritonitis was not brought on by the operation, and that, notwithstanding the absence of prominent symptoms, the inflammation had previously existed, and was the cause of the dreadful pain; nor can it be said that the operation hastened the death of the unfortunate woman, for she was relieved for two or three days from sufferings so intolerable as to threaten dissolution. Had no peritonitis supervened, and only one cyst been present, a cure might have been expected, and even if there had been an extra-uterine fœtus, as seemed very probable, we might have hoped for such a result. The operation, though doubtful, was certainly preferable to an inevitable death. The other signs of pregnancy, coupled with the false placental bruit, which was probably owing to a compression of the aorta by the tumour, had led to the supposition of an extra-uterine pregnancy. The latter symptom, which is generally considered to be one of the most certain, is thus proved to be sometimes fallacious.

[Professor Montgomery and Dr. Kennedy of Dublin, have noticed the various positions which may cause the bruit de soufflet independent of pregnancy.—*Cyclopædia of Medicine, Obstetric Auscultation*, &c.—Eds.]

Reviews.

The Effects of Minute Doses of Mercury. By A. P. Philip, M.D., F.R.S., &c. 12mo. 1834. H. Renshaw.

On a former occasion we expressed our favourable opinion of this little work, but after a reperusal of it, we feel so convinced of its value, that we should not do justice to our readers were we not to give them such a specimen of the author's conclusions, as will enable them to judge for themselves. Moreover, there is no medicine so much used as mercury, and none whose mode of action is so little understood. Dr. Philip attests our opinion.

"It is now nearly thirty years since I first began to employ minute and frequently-repeated doses of mercury. I was led to them by observing that, in lessening the dose and increasing its frequency, in proportion as we lessen the immediate, we increase the alterative, effects. It had long been my wish to lay before the profession the whole of the circumstances which influence this practice; but these are so numerous, and some of them, from the nature of disease, so complicated, that I found it difficult to arrange the subject in a way that would give to others a clear and full view of it, and was thus till lately deterred from the attempt.

"Having, in the early part of this practice, met with a few fortunate cases, I imagined that it was difficult to assign limits to its beneficial effects in certain description of diseases. By degrees, however, these limits became apparent, but they have left a field more than sufficient to compensate for the pains I have bestowed on the subject. I have found, that with an attention to the circumstances which I am about to state, the minute doses never do harm; and this I believe, under any circumstances, cannot be said of any other mode of exhibiting mercury; and that in a wide range of cases, both original and sympathetic, they effect what cannot be effected by any other means with which we are acquainted. It is particularly grateful to my feelings that I have now obtained the testimony of many of my professional brethren, to confirm my belief that they have been the means of restoring many who could not otherwise have been restored.

"Large doses of mercury cannot be repeated at short intervals without often rendering the remedy as pernicious as the disease, and sometimes more so; and when they are given at distant intervals, the effect of one dose is frequently lost before another is taken; so that it often happens that little or no progress is made in the cure; and there is nothing but temporary relief to compensate for the debilitating effects of each dose; while, with respect to the minute doses, although each does little, this little it does without any strain to the constitution, and the next dose comes before the effect is lost; so that a gradual accumulation of the beneficial effect is obtained, and that, if the circumstances I am about to point out be attended to, without any injurious effects to deduct from it. The part affected is thus gra-

dually solicited to resume its functions, and, though slowly, at length effectually restored.

"There is no other medicine which has been, and still with many is, the subject of such strong prepossessions as mercury. Some, confining their attention too much to the beneficial effects resulting from it, and which it was found could not otherwise be obtained, were led to an incautious use of it; and thus it naturally happened that others, struck with the mischief it occasionally did in the hands of its admirers, had their attention as exclusively directed to its injurious effects; for, from the nature of things, all medicines capable of much good are also necessarily capable of much evil. Which of our most valuable medicines is not poisonous in larger doses?

"The public, which, possessed as it is of a thousand eyes and ears, seldoms remains long in error, has decided between these opponents; and no other medicine, in those countries where the practice of medicine is best understood, is now in such general employment. It therefore only remains for us to inquire how we can most effectually secure the advantages and avoid the injurious effects of so active a remedy.

"One of the chief means, we shall find, is lessening the quantity employed, which, as far as I am capable of judging, has in this country been at least ten times that from which its most beneficial employment results. The others are numerous. All who are accustomed to reflect on the endless variety of disease, the various circumstances in which we are placed, the difference of constitution in different individuals, and the power of habit in all, will perceive that the most beneficial employment of such a medicine is a question of a very complicated nature, and one relating not to it alone, but to all others, which, given in combination with it, tend either to improve its beneficial, or correct its injurious, tendencies.

"It is remarkable that, notwithstanding the general and long-continued employment of mercury, it should not have been known that all its constitutional effects, not excepting complete salivation, may generally be obtained by such doses as half or even the third part of a grain of blue-pill taken three times a day: that is a dose only equal to the twentieth or thirtieth part of a grain of calomel; for a grain of calomel is equal, whether we regard its purgative, or, when divided into minute parts, its alterative, effects, to ten grains of blue-pill. If such be the case, what should induce us to employ larger quantities, except the disease requires a more rapid effect than can be obtained from such doses, or, from some peculiarity in it or the habit of the patient, the sensibility to their effects is impaired? No other person, as far as I know, has been led to the use of these doses of mercury, which, I think it will be admitted from the facts I am about to state, constitute, in a great variety of cases, its most beneficial employment.

"To chronic disease the minute doses are peculiarly adapted. A disease which has become habitual, can only be counteracted by a remedy which, without injury, may be rendered habitual also; and in acute diseases, although they are not sufficiently active to effect the cure, we shall find them, in many cases, essentially aiding the more active, and consequently injurious means, and enabling us to lessen both their extent and continuance."

Our author next describes the sympathetic effects of mercury, and then proceeds to give his opinion of its mode of operation; which every medical practitioner must peruse with interest. The description is graphical, and cannot be abridged with justice to our readers or the author. It is as follows:—

"*Of the Modus Operandi of Mercury.*—It appears, from every thing we know of the effects of mercury, and the laws of the living animal body, that it acts in two ways. It has a local and general operation, and its general operation is of two kinds. Like all other substances capable of affecting the living animal, it at the same time operates on the part to which it is applied, and on the system in general through the nerves of that part. But, as it is one of those medicines which are capable of being absorbed, it also influences the whole habit, by circulating with the blood, and thus directly acting on the various organs, by its immediate application to them; and although, as we might have foreseen from the laws of the animal economy, it is capable, by its action on the part to which it is applied, of affecting every other part, the nervous system forming the living animal body into a whole, which cannot be impressed in any one

part without all others, more or less, feeling the impression, it is in consequence of its absorption, that it most effectually influences distant parts. Its operation is, more or less, that of a stimulant; for, according as circumstances direct it to particular organs, we find it exciting them to an increased performance of their functions. While it retains the active form in which it is introduced, it seems incapable of remaining in the system. If it be prevented from running off by one excretory, it finds its way by another; thus we see it exciting the skin, kidneys, salivary glands, &c. Like all other metals, in its metallic and insoluble form, it is inert. In the state of quicksilver it may be freely drank without any inconvenience but that which is occasioned by its weight; and it can only remain in the system when deposited in the cellular substance in that form, to which it is reduced by the chemical powers of the constitution; for in whatever state it is given, these powers always reduce it to its original metallic form. It is well known that gold and silver are amalgamated with mercury, if worn by a person whose system is impregnated with it.

"When taken internally it is doubly applied to the stomach and bowels, immediately, and through the medium of the circulation, for we often have to contend with its irritating effects on the alimentary canal, when it is only introduced by the skin. In this canal and the salivary glands alone, its passage excites sensible irritation, which, if considerable, causes inflammation; in the former only superficial, and generally in a slight degree, but in the latter often such as to affect all the neighbouring parts.

"In both cases, as it generally increases the natural secretion of the parts affected, the increased discharge, like all other discharges, tends to relieve the inflammatory action; it is where the discharge is least—that is, where there is some impediment to the free operation of the mercury in increasing the secretion from the part—that the inflammatory tendency is greatest.

"Such are the more prominent effects of mercury introduced into the system; but I have, in my *Inquiry into the Laws of the Vital Functions*, been at much pains to point out that there is no agent capable of affecting the living animal body that does not possess both a stimulant and sedative power with respect to it, according to the degree in which it is applied, and the state of the body at the time of its application; the stimulant arising from the less, the sedative from the greater, application of it; and that the degree in which agents possess the stimulant and sedative power, although in the same agent always in the same proportion to each other, is, in different agents, in no determinate, but every possible, proportion. Thus, spirit of wine possesses a great degree of stimulant, compared with its sedative tendency, which only appears when it is taken in excess; while tobacco possesses a great degree of the sedative, and little stimulant tendency, which appears only when it is applied in very minute quantity.

"The sedative effect of some agents, as of opium, is chiefly exerted on the sensibility; of others, as tobacco, on the moving powers of the animal system. While the influence of the former, therefore, may be salutary, that of the latter, except under very peculiar circumstances, is always pernicious.

"There may be some objection to using the term sedative for agents of both descriptions. In this sense, however, it is used by writers, although not constantly, but I think it is better thus to employ it than to introduce a new term, as after this explanation no ambiguity can arise from it. Besides, as both act by diminishing the vital powers, it is convenient that there should be an appellation common to both; and what I am about to say will be sufficiently distinct, without a term to designate either alone. By sedative, then, I mean whatever depresses the powers of the system, whether sensitive or motive, and whether it affects both or either, although the more common use of the term confines it to the agents which impair the sensibility.

"No agent can impair the sensitive without more or less impairing the motive powers, because the latter in many instances depend on the former: but it is very possible to impair the motive without causing any diminution of the sensitive powers, and even with the effect of a morbid increase in them, because the derangements which accompany the weakened power of life often prove to the sensitive powers a fruitful source of irritation. Thus, that class of sedatives whose operation

is on the motive powers alone, are often doubly pernicious.

" Mercury, like other agents, possesses the sedative as well as the stimulant property; and its sedative property appears to be wholly exerted on the motive powers—for when it appears to lessen the sensibility, this effect seems to arise merely from its removing some cause of irritation. Its sedative tendency is very different in different constitutions; and in some it exists to a degree that wholly precludes its employment. The sedative effects of mercury, then, as of all other medicines possessing similar properties, are known by its producing a state of debility, with or without more or less nervous irritation, according to the circumstances of the particular case.

" Thus the injurious effects of mercury may be divided into two classes—those which arise from an excess of its stimulant, and those which depend on its sedative effect. By the former it may cause all the evils of extreme irritation; by the latter it tends more directly to impair the powers of life; and these effects admit of every degree, from that of a very mild to that of the most destructive agent, according to the quantity employed, the form in which it is given, the nature of the disease, and the state of the particular constitution.

" Let us now consider what are the virtues of this medicine, which, notwithstanding its injurious tendencies, still render its use in this country more general than that of any other; for it would be absurd to suppose that it had obtained this general employment, without possessing some extraordinary beneficial powers to compensate for its evil tendencies.

" It will readily be supposed that a medicine, possessed of so great a power of exciting the various secreting surfaces, must prove a means of relief to many states of disease, especially those attended with a general failure of power in these surfaces. To this effect, for example, we are in a great degree to ascribe its beneficial operation in fever, particularly when it excites the bowels, or is determined to the skin, the most extensive of all the secreting surfaces; and in the various forms of dropsy, and other cases connected with failure of power in the extreme vessels.

" In most instances, however, the failure in secreting surfaces is but the secondary part of the disease, depending on some more partial and specific derangement. If, therefore, the beneficial effects of mercury were confined to its influence on the secreting surfaces, the relief afforded by it would in most cases be imperfect and temporary; and this is often the ease, when the original derangement is of a nature which it cannot influence.

" But we find in many such cases, that it is often capable of permanent relief; it must, therefore, possess some beneficial tendency besides that of a mere stimulant to those surfaces. It is necessary, therefore, in order to understand the nature of the extensive influence of mercury in the cure of disease, to look for some other principle of action; and in the peculiar effects of this medicine, compared with the well-established laws of our frame, we shall find such a principle.

" Although all substances capable of affecting the living animal act as stimulant or sedative, according to the degree in which they are applied, yet there is in the effect of each something peculiar to itself. Thus we have just seen that the proportion in which they possess the stimulant and sedative powers is different in different agents, and that the latter in some agents is chiefly exerted on the sensitive—in others, on the motive powers. These are differences easily observed and readily classified. But there is an infinite variety both in the stimulant and sedative effects of different agents, which, from their number and indistinctness, cannot be reduced to any general principle of classification; and physicians have attempted nothing further than to divide medicines into those best suited to influence the state of different organs. Thus we speak of aperients, expectorants, diaphoretics, diuretics, &c. and we have no means of knowing the peculiar properties of each particular agent, but by observing the effects it produces.

" The most remarkable of the effects peculiar to mercury, is its influence on the liver. It is not surprising that a medicine which so powerfully influences the secreting organs in general, should influence the secreting power of this organ; but, independently of this effect, it has a specific operation on the liver, a power not merely of exciting its functions, but of correcting the various derangements of that function in a way which it does not possess with respect to any other organ, and which no

other medicine possesses with respect to the liver; and that even to such a degree as not only to restore a healthy state of the bile in various deviations of this fluid, but often even to correct the most formidable change of structure in the organ which secretes it.

"In my Treatise on Indigestion, I have had occasion to point out at length the intimate sympathy which exists between the stomach, liver, and that intestine, which immediately receives the food from the stomach, and where it is mixed with the bile and pancreatic juice, the three chief digestive organs, which so constantly partake of the affections of each other, that all are injured or relieved by causes affecting any one. Thus mercury, possessing no particular power of relieving the affections of the stomach or duodenum, and even ungrateful to both, often becomes indirectly the best means of relieving their derangements, so often caused or supported by a disordered action of the liver.

"When, therefore, we consider that the sympathies of the digestive organs are more extensive than any other, so that there is hardly any disease of which they do not partake, and whose course is not influenced by them; we are at no loss to find one cause of the extensive effects of the medicine which so essentially controls them.

"But a principal cause of this extensive sympathy of the digestive organs is the peculiar sympathy of the liver itself with the chief source of nervous power,—the brain; in consequence of which all the affections of the one are immediately felt by the other. However severe inflammation of the stomach and bowels, the intellects remain unaffected. I have seen it prove fatal within twenty-four hours, the mind remaining entire to the last; while acute inflammation of the liver is generally attended with delirium. Melancholy even takes its name from a morbid state of the bile; and severe blows on the head are more apt to excite inflammation of the liver than of the other thoracic and abdominal organs.

"When it was supposed that the office of the brain was chiefly confined to the mental functions, and that its principal relation to other parts was that of bestowing sensibility on them—when it was supposed incapable of directly influencing either the heart or blood-vessels, on which the vital powers so evidently depend—we had a very inadequate idea of the importance of this organ in the animal economy; but when we know that it is not only capable of directly influencing the action of the heart and blood-vessels, and that to their minutest ramifications in every part of the system, and that the secreting and other assimilating processes are not merely influenced by, but wholly dependent on it and the spinal marrow, we can easily understand how its affections control all the functions of life; and can feel no surprise that whatever essentially influences it, should also extensively influence the phenomena of disease.

"These are fruitful sources of the influence of the liver in diseased states of the system; but even these are not its only sources. All other parts receive their blood directly from the heart; it receives the principal part of its blood from the other abdominal viscera. It is thus also, as well as by its sympathy with the brain, intimately connected with the whole tract of the alimentary canal, the internal surface of the body, and through it, in consequence of the intimate sympathy which exists between it and the external surface, with this surface also. No affection of either can take place, without more or less affecting it through both the nervous and sanguiferous systems; and by the state of these surfaces, more than any other cause, the phenomena both of health and disease are influenced. The great extent of the liver is also to be ranked among the causes which contribute to its influence in the animal economy, in consequence of which, whatever influences the distribution of the blood in it, more or less influences its distribution in every other part. Such are the conclusions respecting the influence of the liver, to which we should, *à priori*, be led by a knowledge of the structure and functions of our frame, and they are amply confirmed by direct observation.

"All who have had extensive opportunities of observing the phenomena of disease, must be struck with the manner in which the state of the liver influences, and is influenced by them, to whatever class they belong. It is unusual in any formidable disease, whether general or local, not to find the function of the liver more or less disturbed; and wherever it is influenced, the proper treatment of the disease more or less depends on the state

of this organ. It is by no means uncommon to find diseases, particularly of the vital organs, intractable till the accompanying derangement of the liver has been observed and corrected; and I have often in such cases seen, not only the patient, but the medical attendant, surprised at the immediate relief thus obtained.

"When, for example, inflammatory affections of the chest have been but imperfectly relieved by the usual means, and have constantly continued to recur; or the patient has laboured under an obstinate though languid fever, with confusion of mind, and sometimes a low muttering delirium, a fulness and tenderness in the region of the liver have been discovered; on relieving which, by the usual means, the whole of the symptoms have immediately and permanently yielded.

"Thus it is that in warm climates, where the sympathies of our frame are most active, not only in all febrile diseases, but even in all chronic deviations of health, affections of the liver become the leading feature.

"I have for many years past, in every case, whether acute or chronic, been in the habit of examining the region of the stomach and liver as regularly as that of the pulse; and I think all, who will take the trouble to do so, will confess that the one examination is often of as much importance as the other, and in many cases the former the most important of the two.

"It is the sympathy of the liver with the general source of nervous power, and the other circumstances relating to this organ which have been enumerated, that, even more than the sympathies of the digestive organs in general, gives to the medicine, that so powerfully controls it, its extensive influence in the cure of diseases.

"Such I conceive to be the causes which have rendered the employment of mercury so general in the practice of this country; which, resting on more extended as well as more accurate principles, it is not assuming too much to say, is more effective than that of perhaps any other.

"If the state of the liver be so extensively connected with that of all other parts of the system, and, in particular, so powerfully influence the other digestive organs, with all their extensive sympathies; is it surprising that a medicine, which has so great a power in controlling the affections of this organ, should hold a chief place amongst the means of cure; and that in the country where the practice of medicine is best understood, it should be found in the most general employment?

It will be admitted, from all that has been laid before the reader, that, to say nothing of its effects in the disease for which it was first introduced, the treatment of which chiefly belongs to the surgeon, it is well worth while to inquire into the best mode of employing so essential and powerful a means; and this is the more necessary, because, like other means, capable of great good, it is also capable of great injury. Its beneficial effects have naturally led to too incautious a use of it; by which much mischief has been done, and the remedy itself, with those who either lack opportunities or correct powers of observation, brought into discredit.

"The result of my own experience (and there are few whose attention has been more directed to the subject) is, that, although there are many circumstances under which large doses of mercury are not only beneficial but essential, the quantity, as I have already had occasion to state, employed in this country, has on the whole been at least ten times greater than that from which its most beneficial effects would accrue. It unluckily happens, that, in a large proportion of cases, its most beneficial employment is not always that which produces the most immediate benefit; and in grasping at too much, we often not only lose the advantage of the remedy, but convert it into a source of injury.

"It is a law of its action, that, when it is directed to one outlet, it is less inclined to pass by others; thus, when it is passing off rapidly by the skin, which is known by the scarcity of urine,—if, in consequence of taking cold, or an increased quantity of the medicine, it is thrown on the salivary glands, the usual secretion of urine is restored, indicating that it is no longer powerfully exciting the skin; or perhaps increased, for the salivary glands affording but a narrow outlet, it still in part tends to pass by other channels. It seems to be on this principle, that salivation renders it more powerful with respect to the disease, and particularly that diuretics which did not previously excite the kidneys, now

have this effect; but mercury seldom produces salivation unless the system be highly impregnated with it, and then—to say nothing of the irritation occasioned by the salivation itself, which is often great—its sedative effect is frequently much felt, and the whole powers of the constitution are, for the time, enfeebled by it.

"It was a maxim of the older practitioners, that its beneficial effects are proportioned to the degree of salivation it excites; and I have heard the late Dr. Monro, of Edinburgh, state the quantity of saliva which must be discharged daily, in order to eradicate particular affections. Can we be surprised that, when such maxims re vailed, the remedy proved sometimes worse than the disease, and that so strong a prepossession against it has arisen?

"I have said that before salivation takes place, the system is generally much impregnated with the medicine, for this is not always the case. In particular constitutions the smallest dose immediately affects the salivary glands. Thus, in general, although we find mercury most effectual when it produces salivation, in some habits this occurs so readily, as wholly to preclude its employment, and consequently to render it useless as a remedy. In others the same consequence ensues from the sedative effect, immediately arising from such minute doses, that, from this cause also, its injurious effects alone are attainable."

The succeeding chapter is on the modus operandi of minute and frequently-repeated doses of mercury, which is extremely interesting. But, as our limits will not allow us to copy it, we feel convinced that our practical friends will possess themselves of the original.

Pharmacopœia Homœopathica. Edidit à F. F. Quin, M.D., &c., &c. 1834. Londini: Veneunt S. Highley.

We have now before us the most extraordinary book of this age of intellect and reason; and, were its contents entitled to the slightest credit, our druggists, chemists, and apothecaries might abandon their avocations, inasmuch as the whole Materia Medica, according to this incomparable system of therapeutics, may be conveniently carried in the waistcoat pocket. A grain of magnesia or jalap is sufficient to cure a multitude—a standing army; and as to a grain of calomel, it is more than sufficient to mercurialise all Europe! Nevertheless, the parties practising this system are acquiring more fame and wealth than any physician or surgeon in London at the present moment. Long may they enjoy their reputation, say we, and diffuse the blessings of homœopathy, or, as an inveterate hypochondriac who was cured by it, after travelling through Europe, modestly terms it, the "gospel of medical salvation." Chemistry and pharmacy are no longer necessary, for all medicines are to be prepared by the addition of spirit of wine and sugar of milk. The composition of all medicines are termed attenuations. The first formula is one grain or drop attenuated with one hundred grains of sugar or drops of milk or spirit of wine, one drop or grain of which is again mixed with the above quantity, and so on for thirty times; and every grain of each admixture is a most powerful medicine. These medicines are classed as follows:—

1.	Prima attenuatio	Centesima pars
2.	Secunda . .	Decies millesima
I.	Tertia . .	Millionesima
II.	Sexta . . .	Billionesima
III.	Nona . .	Trillionesima
IV.	Duodecima . .	Quadrillionesima
V.	Decima quinta .	Quintillionesima
VI.	Duodevigesima .	Sextillionesima
VII.	Vigesima prima .	Septillionesima
VIII.	Vigesima quarta .	Octillionesima
IX.	Vigesima septima	Nonillionesima
X.	Trigesima . .	Decillionesima

Many of our junior readers may not clearly estimate the minuteness of the doses of this division. We must, therefore, remind them of the first principles of notation. Every one is aware of the terms tens of thousands and hundreds of thousands. The fourth place of a number is called the place of thousands (that is, any number of thousands under ten thousand), the fifth place is tens of thousands the sixth hundreds of thousands, the seventh millions (a million being ten hundred thousand), the eighth place tens of millions, the ninth place hundreds of millions, the tenth place thousands of millions, the eleventh place tens of thousands of millions, the twelfth place hundreds of thousands of millions, and in this order we may conceive places to be continued infinitely from the right hand towards the

left, each following place being ten times the value of the next preceding.

When it is required to write down more places than twelve, the period is called billions, the sixth thousands of billions, the seventh trillions, the eighth thousands of trillions, the ninth quadrillions, &c. Now we request our readers only to bear in mind, that the homœopathists are not content with the hundred thousand millionth part of a grain of any medicine as a dose, but they advise a thousand billionth, a trillionth, a quadrillionth, and so on nearly to an inappreciable proportion. Notwithstanding the obvious and unparalleled absurdity of this mode of dosing medicines, we have two medical men adopting the system, and a vast number of hypochondriacs proclaiming their miraculous cures by this plan of treatment. These are, of course, ordered to live regularly, and avoid every moral and physical cause of disorder, and then the trillionth of a grain of blue pill, taken night and morning, effects their cure.

There is another advantage in this system, that the prescriber supplies the remedies, and that these are so minute, that a month's medicine may be inclosed in a single letter to the country. Of all the gross kinds of empiricism this is the greatest,—it surpasses animal and metallic magnetism, metallic tractors, celestial beds, the rubbing system of St. John Long, and the puffs of the most notorious and unprincipled quacks that infest this country. Nevertheless, it is patronised as a novelty by the upper classes, and its practitioners, who are only two in this metropolis, are making a golden harvest; and one of them was so much engaged, that he could only take an hour's sleep during a week, so occupied was he in answering letters and furnishing his medicines by return of post. We shall dwell no longer on this humbug system of quackery, but leave our readers to form their own opinions on the subject.

MEDICAL SOCIETY IN THE WEST RIDING OF THE COUNTY OF CORK.

About five years since a medical society was formed in the West Riding of the county of Cork, by the practitioners in that district, and the members since its establishment have had several important meetings, as well for the discussion of professional subjects, as the keeping up a friendly intercourse. The rules of the Society are now before us, and appear to be based on liberal principles. The first meeting of the Society for the present year was held in Bandon, on the 6th inst., and the subjects submitted for discussion were, the Origin and Progress of Sarcomatous Tumour, of which a preparation was exhibited, and an exceedingly interesting case of Metastasis of Hæmorrhage, the details of which we hope to be put in possession of. The members of the Society have it in contemplation to publish a periodical (quarterly) for the province of Munster. We wish them success in their undertaking, and shall, when their embryo journal appears, be happy to give our candid opinion on its merits. We wish such societies were general throughout Ireland, as we are convinced they must tend to the benefit both of the profession and of the public.

THE

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PRIZES TO MEDICAL STUDENTS.

We have given in another part of this number an account of the successful candidates for the prizes bestowed by the St. Bartholomew Medical School. We are aware such prizes generally have been subject of comment elsewhere, and have been discouraged as an artifice for practising deception upon the public. It may be that the system of bestowing rewards at a particular school is bad,—that the pupil, who is rewarded as the best in a small class, may possess very little absolute merit,—and may, perhaps, be chosen by his teachers, if they are the examiners, from motives of partiality; and the suspicion of favouritism will always exist where the teachers dispense the rewards. All these allegations and suspicions may be well founded; but as we hold that emulation is the main spring operating upon a youthful and generous mind, we

conceive such a stirring motive to exertion should be introduced into the study of medicine, and fostered, and the defects of its application pointed out and remedied. It is not the successful candidate that alone derives all the benefit of the struggle,—superior merit, where it exists in a happy combination with animal energy, without which genius is trodden to the ground, will always force its way: the higher attainments of knowledge will be acquired by a few for the love of distinction and of science. It is mediocrity that requires to be stimulated; and the true and useful character of the profession will depend upon the skill, not of the few, but of the many.

For these reasons, which might readily be amplified, we are not churlish enough to refuse a few lines of our pages to the names of successful students. But should we find the confidence of young men in the fairness of their examinations abused, there is not an abuse in medicine, at which our indignation has been hurled, which shall have roused us into more bitter hostility than such a depraved dealing with the honesty and generous sentiments of youth. We are glad to see that St. Bartholomew's has imitated King's College and the London University in its resolution to bestow prizes. Private lecturers have been long in the habit of exciting the attention of their pupils in a similar manner.

There is another and no less important view of this subject which has occurred to us. On a former occasion we made some observations on the rules adopted at the College of Surgeons in Dublin for the examinations of candidates. Our readers are aware, that in the latter place the student is regularly examined in a class in each separate branch of his professional knowledge at distinct times,—so that every year of his course he undergoes an examination in the subjects of the year, and this for the purpose of his degree in surgery. Compare with this the system of attempting to examine a candidate in surgery, throughout his whole course of study, at a single sitting,—when it is left to the caprice of the examiners, who may happen to be present, what corner of the science it may please them to examine concerning:—the worst prepared may slip through, the best prepared may almost fail, and to none is his proper merit given, because the real extent and accuracy of his knowledge is unknown. We think it, therefore, a thing most desirable to engraft upon our system of instruction a system of periodical examination, preliminary to a degree; into which examination every student should enter in his course. These examinations might be also made subservient to the purpose of rewarding the most diligent students. Of course if, as we recommend, they were required of every candidate for a medical degree, they should be under the control and direction of the central medical power. Teachers would cease to be examiners of their own pupils. As to the distribution of rewards, that would depend upon the sources from whence they were derived. If a particular school contributed its own prizes, its own students should alone share them. But, at the same time, we have that confidence in the public spirit of enlightened individuals, that, in the course of a short time, we should expect to see rewards offered to general competition:—and we suggest a small portion of the funds of the College of Surgeons could not be more usefully applied. We know of so many instances of the abuse of College exhibitions, (by which College phrase is understood annual allowances of money for five or seven years generally to the

successful candidates in a certain examination,) that we are no great advocates for that manner of rewarding merit. A sum of money is always an agreeable present;—an annuity too often leads to neglect and idleness. Prizes of this nature are, however, upon a scale of magnificence beyond the measure of ordinary liberality. But as other branches of science, mathematics and so forth, have had their liberal encouragers and benefactors in the Universities, so we fondly hope medicine will not be destitute of liberal patrons, to whom our observations may be applicable.

We have said nothing of the encouragement to be given to those already within the profession, in order to promote and extend the practical knowledge of medicine, and enlarge its boundaries. We may engender very useful habits in the student, we may sow in him the seeds of discovery, we may rouse his inventive genius; but it is to the actual practitioner we must look for the augmentation of a practical science; and, although it may be said, in some measure truly, that the genuine disciple of Hippocrates is pretty sure of that best of patronage, the public support, still we believe more money has been made by the authorship of a popular work with a *very* popular title, whereof our Fellows have published not a few, than by the ablest treatise, purely medical, which is unknown, except to the members of the profession. To such obscurations of talent our profession is peculiarly subject. Of divinity we say nothing. Of law it may be said that, in general, those who enjoy eminent practice give public experience of their fitness; and besides, there is no demand for the power of philosophical deduction in the practice of jurisprudence—it is a system of mere logic. But in medicine, a science of observation never to be exhausted, the judgment of the public, as to the merit of the practitioners, is formed upon the most inaccurate grounds. In law, it matters little to a future race how much talent may have been under a cloud in a preceding age. But in medicine, humanity is interested in calling into action the greatest talents of every age. Prizes, as marks of distinction, may do something towards the due promotion of medicine as a science; and still more may be done by a proper disposal of what may be called medical patronage,—the offices of honour or dignity in the profession, which ought to be in the disposal of responsible authorities.

VALUE OF SCOTCH DEGREES IN ENGLAND.

It is very singular that at this moment a case is pending in the King's Bench, in which a question is for the first time raised, as to the value and effect of a Scotch Degree in this country. The case is Collins against Colnaghi. The plaintiff has, it seems, a St. Andrew's Degree in Physic, and brought an action against the defendant for some slanderous words in reference to his character as a Physician, denying that the plaintiff was a Physician, &c., &c. The point now awaiting the decision of the judges is, whether the circumstance of the plaintiff having a Scotch Degree would enable him to maintain an action for words spoken of him in reference to his character of Physician in this country.

This question is now no more interesting than that a decision upon it should be called for at such a moment.

SIR CHARLES WETHERELL AND THE LONDON UNIVERSITY.

We opened with some interest the authorised edition of the speech of Sir Charles Wetherell against the London University. We were well aware of the grotesque

humour of this eminent lawyer and statesman. We had often admired the strange melange of sound sense and extravagant incongruous conceits which abound in his speeches; and, upon such a subject, where ardent attachment to his venerable client, the University of Oxford, and as keen contempt of their antagonist and of its public supporters, alike influenced him, we expected no ordinary out-pourings of his peculiar spirit. Although there is enough of Sir Charles's idiosyncrasy in the speech to identify it, we are, on the whole, sadly disappointed in our expectations of a feast of fun for our readers. The best thing in it is the last. Sir Charles thus perorates:—

"My Lords, before I leave this subject, I cannot but remind you of the infinite danger of that principle of liberalism on which this London University is to be founded. It carries with it an absolute contempt of the national church, and what is still more dangerous, a contempt of those feelings of affection and attachment by which the people of this country are bound to it from a sincere belief in the purity of its religion. The King by his charter is to found an *atheistical* institution, which will operate like the liberal proclamation of indulgence which issued from that ill-fated monarch, James II., in conjunction with his coadjutor, Lord Chancellor Jefferies, sometimes the tool of the sovereign, sometimes misled, and sometimes misleading the sovereign, of whose great seal he had the custody. . . . . Let any man say whether this is less to injure and insult the established church than was the attempted intrusion of Catholicism by James II.; and not less will the public indignation be excited, and their feelings violated by an attempt to abolish all true religion, and to substitute *perfect infidelity*."

Should Sir Charles ever think of dedicating this work to the University of Oxford, in whose behalf he spoke, we would venture to submit, for a dedication, a form of sound words on a former occasion addressed to that learned body. He may say—"I have brought you some fine biscuits, baked in the oven of charity, carefully conserved for the chickens of the church, the sparrows of the spirit, and the sweet swallows of salvation*."

ST. BARTHOLOMEW'S HOSPITAL.

On Wednesday the 14th inst. the annual distribution of prizes was made, in the great hall of this Hospital, to the students of its medical school who had distinguished themselves in the several branches of medical and surgical science.

Sir Henry Halford, Bart., President of the College of Physicians, who received his early medical education at this Institution, was invited to take the Chair.

The following is the List of the Gentlemen to whom prizes were adjudged:—

MEDICINE.

Charles West, Amersham, Bucks, 1st Prize.

Honorary Certificates were adjudged to
H. P. Jones, P. Aldrich, and F. Bell.

CHEMISTRY.

Robert Falkner, Bath, 1st Prize.
Thomas Wilson, Congleton, 2d Prize.

Honorary Certificates.
Wm. Ilott, J. E. Henry, J. E. Beveridge, and A. B. Evans.

CLINICAL MEDICINE.

William Baly, Lynn, 1st Prize.

SURGERY.

John Gay, Wellington, Somerset, 1st Prize.
G. W. W. Firth, Norwich, 2nd Prize.
G. W. Bell, Edinburgh, 3rd Prize.

Honorary Certificates.
Percival Leigh and Frederick Bell.

ANATOMY.

William Moore, Plymouth, 1st Prize.
R. H. Meade, Bedford, 2nd Prize.
George W. Bell, Edinburgh, 3rd Prize.

Honorary Certificates.
John Henry Clark, Isaac Guillemard, H. P. Jones, W. J. Square, Thomas Taunton, and Thomas Wilson.

* Scott's Life of Dryden, new edit., p. 6.

CLINICAL SURGERY.

Henry Smith, 1st Prize.
Richard Allen, Leicester, 2nd Prize.

Honorary Certificate.

W. Thackwell, Birmingham.

MIDWIFERY.

Richard B. Ruddock, Stockland, Somerset.

Honorary Certificates.

J. F. Harding, T. Sawer, J. H. Clarke, T. Wilson, J. S. Birch, D. M'Nicholl, H. P. Jones, T. Holdsworth, J. C. Green, — Millar, — Rogers.

FORENSIC MEDICINE.

Prize—H. P. Jones, Pembroke, S. Wales.

Honorary Certificates.

— Aldrich and S. H. Evans.

BOTANY.

Prize—F. S. Taylor.

Honorary Certificate—Henry Taynton.

FRACTURE OF THE LOWER JAW.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—The following case of fracture of the lower jaw, with the means successfully adopted to obviate the difficulties which presented themselves, will, I trust, prove of sufficient importance for insertion in your valuable pages.

July 21st. J. H——, ætat. 9, was thrown from a horse, and received a violent kick on the chin. On examination, I found a perpendicular fracture of the lower jaw on the left side near its angle; on the corresponding portion of the right side was a comminuted perpendicular fracture. Two dentes cuspidati on the right, and the bicuspis on the left side, were knocked out; the front incisors, with their alveolar processes, were broken off and lay under the tongue, forming a horizontal fracture communicating with the perpendicular ones. On the posterior superior angle of the right parietal bone was a lacerated wound of the scalp, produced probably by the fall, and another under the left side of the chin. The intermediate portion of the jaw, drawn down by the action of its muscles, lay loose, and made the mouth appear as wide open as occurs in dislocation, from whence blood, mixed with saliva, was flowing copiously, presenting altogether an appearance most deplorable. I should add, there was considerable hæmorrhage from the right ear.

My much esteemed preceptor, the late Mr. Abernethy, when speaking of fractures of the jaw, used to say, "Well, what is to be done in such a case?—You must put the bone into its old situation, and then you must keep the jaw still. And for splints, get some thick pasteboard, soak it in water till soft, and shape it to the jaw, and keep it steadily compressed till the pasteboard gets dry." This was the plan first pursued in my case. The wound was dressed with simple cerate, and the bone being put into its "old situation," was secured in a pasteboard splint. The diet to consist of gruel, tea, or toast and water, sucked through a quill.

22nd. Has passed a very restless night. Saliva, mixed with blood, still continues to flow from his mouth. The alveolar processes and teeth have fallen into their former situation; they were again replaced, and the jaw bound up as before. Aperient medicine was given.

23rd. This morning there is considerable fever, with hot dry skin, heaviness, and stupor; the medicine has not acted. Ordered to take a powder of calomel and jalap every hour until stools are produced. The teeth, &c., had again become displaced, though an attempt had been made yesterday to secure them by ligatures of silk to other teeth; they required the same assistance as yesterday, and the intervening portion of bone was more displaced than hertofore.

24th. The bowels have been copiously evacuated, and the unpleasant symptoms of yesterday have disappeared; had some quiet sleep, and is perfectly sensible. A little veal broth was ordered in addition to his diet. The jaw again displaced, and again put into its old situation.

Failing in all my attempts to keep the fractured ends of the bone steadily *in situ*, I took a cast of the boy's jaw in wax, and had a metallic splint, as represented in the drawing, made by Mr. Felton, a very ingenious mechanic in this neighbourhood. In the centre is an upright piece of Britannia metal, which, being flexible, is easily adapted to the form required, and regulated in height by the screw (*c*).

On the morning of the 28th, the jaw-bone being accurately brought into its old situation, the splint (*a a*), well padded, was put on, and retained by a broad piece of leather, with two straps on each side, put across the head, and buckled to another piece fastened on the side of the splint at the holes *e e*. The teeth being also replaced, were confined by the centre

piece. The boy suffered very much from the pain occasioned by resolving the fracture, and pulling the teeth into their proper places; yet in less than half an hour after he was busily engaged sucking the part in his mouth: this had the effect of causing him to retain his saliva, which, up to this time, he had been unable to do. From this period his health continued to be good, and the case went on so favourably, that a cure was effected without leaving any deformity, a circumstance I could not at first have expected.

The apparatus was worn for six weeks, though at the end of five he could bite a hard crust, and masticate his food with as much ease and freedom as before the accident. It was kept on the last week at his own desire, to remove the apprehension which he entertained of the *possibility* of the fracture giving way when he was eating.

The instrument I consider applicable to all cases of fracture of the lower jaw, the centre piece of course being taken off where its use is not needed; and the great benefit derived from its application in the case related, leads me to hope that, in other hands, it will be found equally serviceable. With this hope, I send the instrument to my respected Demonstrator, Mr. Stanley, of St. Bartholomew's, where cases of this description are of more frequent occurrence than in private country practice.

I am, Gentlemen,
Your obedient servant,
JOHN LEE.

Market Bosworth, May, 1834.

Fig. 1.

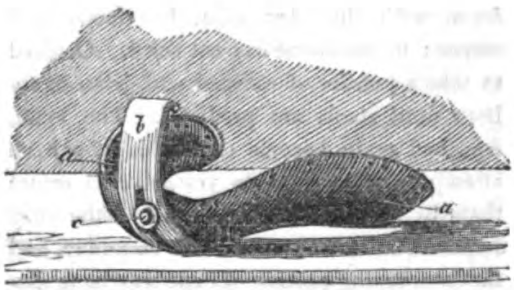


Fig. 2.

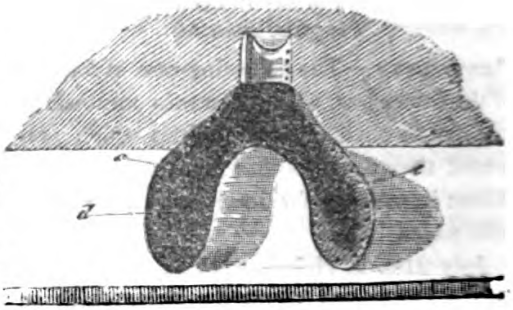
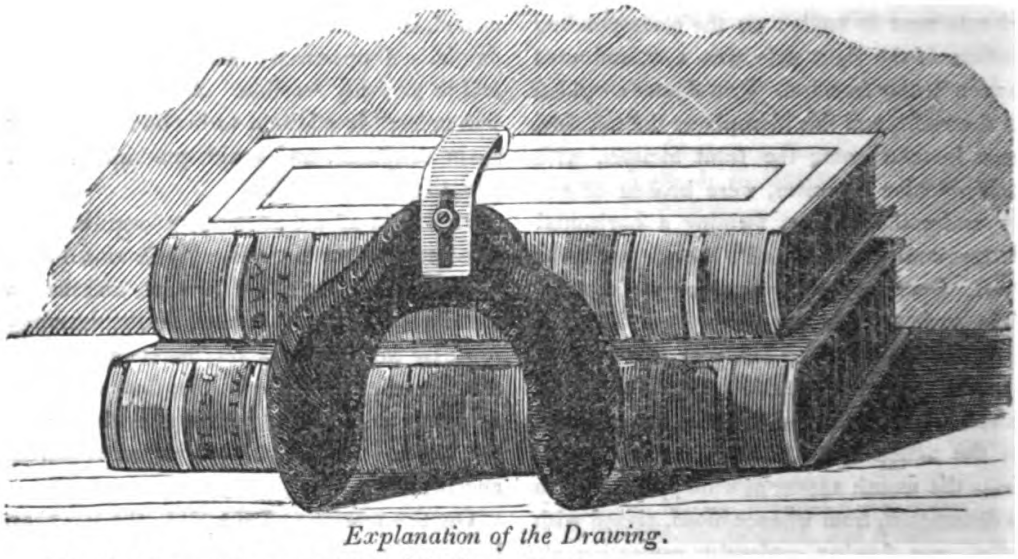


Fig. 3.



Explanation of the Drawing.

FIG. 1. Represents a side view of the Instrument.
a a The Splint.
b The centre piece curved at the top.
c A screw to regulate the height.
FIG. 2. Inside view of Instrument.
d The inside of the splint, hollow.
e e Holes by which the pad and side pieces of leather were fastened.
FIG. 3. Outside view of the splint resting against two books to show its form more accurately.

COURT OF KING'S BENCH.

Monday, May 26.

COLLINS *v.* COLNAGHI.

THIS was an action for slander, tried at the Dorset Assizes, and a verdict found for the plaintiff, with 10*l.* damages.

The plaintiff was a Scotch physician and accoucheur in full practice, and he complained of an injury sustained in his practice by words spoken by the defendant, who was also a physician. The words charged the plaintiff with being an impostor, ignorant of physic, and unfit to practise as a physician.

Sergeant Coleridge moved on a former day for a rule to show cause why the verdict should not set aside and a nonsuit entered, or a new trial had. The application was made on the ground that a Scotch physician was not entitled to practise as a physician in England without the licence of the College of Physicians in London. The jury, he contended, had given damages for an injury sustained by the plaintiff in his practice as a physician, and unless he was legally in the practice of physic, as a qualified M.D., he was not entitled to sustain this action. The prohibition in the universities with respect to degrees in medicine would be nugatory in case the plaintiff having a diploma from a Scotch university could practise in England without a licence. The Acts of Parliament were clearly a bar to such practice, and as the plaintiff had not held the rank of a regular physician he could not support the action.

Mr. Barstow showed cause against the rule, and submitted that the plaintiff, having produced proper evidence of his qualification, namely, a diploma from the University of St. Andrew's, was to be considered a physician, and consequently could maintain the action. The learned Counsel submitted that the evidence proving the plaintiff had obtained his diploma as a physician ought to be received and considered conclusive, unless proof could be shown to the contrary. A person sent to St. Andrew's had proved that he went to that University, where he saw the officer who held the seal of the University, which was the same as that affixed to the plaintiff's diploma. This was sufficient evidence that Dr. Collins was a physician from the College of St. Andrew, and that he was practising under that qualification when the slander was uttered.

Lord Denman.—You say it was *primâ facie* evidence of his practising as a physician.

Mr. Barstow.—I contend that it was sufficient to prove he acted as a physician.

Lord Denman said if a person brought an action for slander injurious to him as an attorney, he was bound to prove he was on the rolls of the Court.

Mr. Barstow cited the cases of Clark *v.* Davis, Moises *v.* Thornton, 8 Term Reports, and another case, to prove that evidence of a Scotch diploma would sustain the qualification of a physician, and therefore it was sufficient to enable the plaintiff to support this action.

Mr. Serg. Coleridge, in reply, contended that a person who complained of slander injurious to the exercise of his profession, was bound, by the practice of the Courts, to prove his qualification. The 3rd Hen. VIII., cap. 2, enacted "That no person within seven miles of the city of London should practise physic without examination before the bishop of the diocese." Subsequent statutes provided that none but graduates of Oxford and Cambridge should practise as physicians without the license of the College of Physicians. The Act of the 5th Anne, for securing the Protestant religion and Presbyterian government in Scotland, provided that the Scotch Universities should continue for the protection of the Church, but there was no provision to make Scotch diplomas legal qualifications to practise physic in England. Upon a general view of all the facts in this case, it seemed that the plaintiff was not in a condition to support the action.

Lord Denman said it was clear, when a person complained of slander injurious to him in the business he was carrying on, that he must prove he was carrying it on legally. The Court thought the learned judge who tried the cause was right in the admission of evidence of the diploma. Unless that evidence had been received great inconvenience would have arisen in a variety of cases. Whether the diploma without a license did not entitle the parties to act as physicians was a question of too much importance to be decided without further consideration.—Judgment postponed.

A similar action was lately commenced in the Common Pleas — Haycraft *v.* Benwell —

and was discontinued on the same grounds as the above; so that it is a question whether a Scotch graduate in physic who practises in England, not being licensed by the Royal College of Physicians of London, is legally entitled to professional reputation. Such a monstrous and unjust state of the laws should no longer continue; and we beg to direct Mr. Warburton's attention to the subject. A physician's reputation may be ruined by slander; it may be reported that he killed his patient; he brings an action for defamation, but the defendant pleads that he is not legally entitled to practise, and to bring an action he must have a legal right; to decide which, the judges must take time to consider, and his prospects may be blasted.

ECLAMPSIA OF YOUNG INFANTS.

M. Duges explained that this convulsive disease of infancy always depends upon some irritation of the encephalon; that it sometimes is followed by an apoplectic or asphyctic state, and at other times is consecutive to it *. Often while one side of the body is convulsed the other side is paralysed. There is also a strong analogy, if not an absolute identity between infantile eclampsia and the tetanus, which has been improperly constituted a peculiar disease, and said to be exclusively belonging to the West Indies. M. Duges has repeatedly witnessed cases of genuine general as well as partial tetanus in infants at home. There are, therefore, according to him, three species of eclampsia, viz. the epileptic, the apoplectic, and the tetanic.

* It not unfrequently happens that the symptoms of eclampsia, of apoplexy, and of asphyxia, are so blended and confused together in new-born children, that it is extremely difficult to distinguish the exciting from the excited disease, or to decide whether they are all of simultaneous occurrence. Very soon after birth, probably the apoplexy generally precedes the eclampsia; and in children more advanced, the latter seems to induce the former.

APOTHECARIES' HALL.

Names of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, May 22nd.

Charles Ilderton Croft .	London.
Christopher Browing Emmett	Hounslow.
Frederick Foaker .	Great Baddow.
Alfred Foote . .	
Thomas Hayes Jackson	East Cowton.
William Thomas Richardson	London.
James Wilkes . .	Birmingham.

BOOKS.

An Introductory Lecture on Diseases of the Eye, delivered at the Birmingham Eye Infirmary. By Richard Middlemore, M.R.C.S. 8vo. pp. 36. 1834. J. C. Barlow.

An excellent lecture, evincing great experience on the author's part with diseases of the eye.

CORRESPONDENTS.

The illness of the gentleman who reports Dr. Stokes's Lectures prevents us from giving one this week. We expect to resume them in our next.

METEOROLOGICAL JOURNAL.

MONTH. May, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
22	○	61	66	50	30·14	30·08	63	63	N.E.	N.E.	Fine	Fine	Fine
23		60	69	50	30·00	30·00	63	62	N.N.E.	N.	—	—	—
24		64	70	50	30·09	30·16	62	60	N.E.	N.N.E.	—	—	Cloudy
25		57	61	46	30·15	30·06	60	60	N.E.	N.E.	—	—	Fine
26		56	63	46	30·04	30·06	60	60	N.E.	N.N.E.	—	—	—
27		58	66	49	29·98	29·97	58	59	N.N.E.	N.	—	—	—
28		59	63	45	29·93	29·90	59	58	N.	N.	—	—	—

50, *High Holborn*. William Harris and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 123. SATURDAY, JUNE 7, 1834. Vol. V.

LECTURES
ON THE
PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE XCII., DELIVERED APRIL 22, 1833.

Gentlemen,—*Cancer of the tongue* commonly begins as an irregular, rugged, unyielding knob, generally situated in the anterior third of this organ, midway between its raphe and its edge, the mucous surface being puckered and rigid, and the patient experiencing severe pains in the part, which shoot towards the ear. Sometimes the knob acquires considerable size before ulceration commences. It is alleged, that persons, about the age of forty, are most subject to cancerous disease of the tongue. The glands of the neck after a time become swollen and indurated, and profuse bleedings are disposed to take place from time to time, whereby the patient becomes extremely weakened and reduced.

There are two methods of extirpating cancerous portions of the tongue; one by the knife; the other by a double ligature passed through the centre of the part by means of a sharp pointed curved needle fixed in a handle, one portion of the ligature being firmly tied over one side of the organ; and the other portion over the other side. In doing this operation, some surgeons first take hold of the tongue with a pair of hook forceps, so as to fix it. The objection to the knife is the hæmorrhage, which, if profuse, would require some extraordinary means for its suppression, such as the application of the actual cautery, or even securing the lingual artery as it passes over the cornu of the os hyoides. When the extirpation of a cancerous induration can be accomplished by removing a piece of this organ in the shape of the letter V; the best mode of stopping the bleeding is to bring the sides of the wound closely together with a suture.

Gentlemen, you should be aware that relapses are frequent after operations on cancerous tongues; a fact that will make you cautious in the judgment you give respecting the chances of a cure. Be sure not to promise too much.

Let me next speak of *dividing the frænum of the tongue.* I may at once tell you, gentlemen, that children are not so frequently tongue-tied as nurses and mothers imagine; and you may be sure, that when once an infant has been able to suck properly, whatever may be its present inability to do so, it does not proceed from the confinement of the tongue by the frænum, but probably from the large size of the nipple, excoriation of the lips, or other causes, which should be investigated.

When the frænum really ties the tongue too closely to the bottom of the mouth, the surgeon will find that he cannot raise the tongue to the palate with his fingers. Sometimes, however, the frænum is really so short that it interferes with the requisite movements of that organ in sucking, deglutition, and the articulation of words. The surgeon is then called upon to divide it, which may be done with a pair of sharp scissors, care being taken to direct the incision downwards, so as not to injure the ranine vessels.

An immoderate cut gives rise to two dangers; one is, that of hæmorrhage; the other, is that of the tongue being left so unfixed, that it may be thrown back into the pharynx in the act of deglutition, so as to cause suffocation. A similar danger has been exemplified after the operation of removing the lower jaw.

With respect to hæmorrhage, children are constantly disposed to suck and swallow whatever comes into their mouths, and hence they sometimes die with their stomachs full of blood, even when only the branches of the ranine artery are wounded, and not the trunk itself. Nay, it is alleged that the veins have sometimes yielded a dangerous quantity of blood, that has been swallowed in this manner.

Ránula is a tumour situated under the tongue, and commonly believed to arise from

a dilatation of the duct of the sub-maxillary salivary gland. The swelling is usually situated on one side of the frænum, and, when large, extends forwards under the apex of the tongue. Its contents are generally a glairy fluid, resembling white of egg; but if the tumour has been of long standing, their consistence may be much thicker, and even blended with calcareous matter. Neglected ranulæ may attain a considerable size, and not only obstruct the movement of the tongue, but even produce serious annoyance and mischief to the teeth and lower jaw-bone by their pressure. In general, however, when they have become as large as a walnut, they burst; the opening heals up, and then they fill and burst again.

No doubt some ranulæ do arise from obstruction of the duct, the orifice of which, therefore, should be examined; and if a piece of calculus can be felt with a probe, it should be removed; this alone would lead to a cure. In ordinary cases, you may cure the disease by opening the swelling and snipping off a portion of the sac, so as to prevent the part from closing again. Merely opening the cyst, without the excision of a portion of it, will not suffice. It is also a good plan to apply a bit of lint, dipped in a strong solution of lunar caustic, to its inner surface. I have lately been attending a young lady for a ranula, that would not yield to any ordinary modes of treatment. I opened it, and removed a considerable piece of cyst, filling the cavity with lint, but this plan failed. I then cut away a second piece of the cyst, and dressed the cavity with lint dipped in a solution of nitrate of silver: this also was followed by a relapse. I then passed a seton through the ranula, and kept it applied for two or three weeks in vain. Lastly, I made a small opening, and put into it a little silver tube, which was worn about five or six weeks, and the disease never returned. The latter treatment of ranula by puncturing it, and placing in the opening a small tube not quite half an inch long, and made with a rim, by which it is retained in the part, is frequently adopted by Dupuytren.

Tonsils.—When the tonsils are so considerably swollen, from an attack of acute inflammation, as seriously to obstruct deglutition and respiration, they should be freely scarified, after which, the bleeding from them, assisted by venesection, leeches, and other antiphlogistic means, will in general quickly bring down the enlargement.

If the same inconvenience should arise from the formation of matter, the abscess should be opened with a double-edged bistoury, the blade of which may be partly covered with lint to keep the edges from wounding the tongue.

Gentlemen, the tonsils are also liable to a chronic enlargement, more especially in scrofulous subjects. They may, indeed, swell to such a magnitude as to close the aperture between the mouth and pharynx, and create a total impediment to swallowing, and much difficulty of breathing.

If these enlargements resist the internal use of iodine, or small doses of sublimate with tinct. rhei et cinchon., and the application of lunar caustic, or nitric acid, the tonsils, or rather the redundant portion of them, should be extirpated by means of a ligature or cutting instrument. Chelseden's plan of passing a ligature through a diseased tonsil, by means of a crooked needle fixed in a handle, and with an eye near its point, is not a bad method; but the removal may be safely performed with a hook and large scalpel, for the hæmorrhage is never serious.

Elongation of the Uvula.—The uvula is sometimes thickened and considerably elongated, producing great uneasiness about the throat, and irritation of the epiglottis. If the disease cannot be remedied by astringent gargles, the best plan is to snip off the superfluous length of the part with a pair of scissors.

Diseases of the Gums.—The gums in the natural and healthy state are not very sensible: they may be divided with a lancet without much pain; and the pressure of hard substances against them in mastication is not productive of any injury. When, however, they become inflamed, in consequence of decayed teeth, a cold, or any other cause, they cannot be touched, or pressed upon, in the slightest degree, without the patient being put to a great deal of suffering.

Some of the diseases of the gums originate from those of the teeth, while others have no connexion with this cause.

The *Gum-Boil*, or *Parulis*, is merely an abscess of the gums, generally arising from the irritation of a diseased tooth, though sometimes from disease of the alveolary process, or from splinters of this part left after the extraction of a decayed tooth. These abscesses are to be treated on common principles, and opened with a lancet as soon as matter is formed; afterwards, when the part has become quiet, the decayed tooth, if there be one, should be taken out.

If the gum-boil becomes fistulous, it must be freely laid open, and a solution of lunar caustic applied.

Epulis; or, *Excrescence from the Gums.*—The fibro-vascular texture of the gums is much disposed to produce fungous and other excrescences. Any kind of irritation, as that of bad teeth, or a severe blow, will sometimes lead to the growth of considerable tumours from the gums; and occasionally they arise without any manifest exciting cause.

The texture of an epulis is generally soft, spongy, and vascular, but sometimes hard, fibrous, incompressible, and not endued with much vascularity.

A soft vascular epulis mostly originates from the gum itself; while that which has a

fibrous or fibro-cartilaginous structure frequently grows from the alveolary process. When the excrescence first makes its appearance between sound teeth, which it afterwards loosens and forces out, you may conclude, that the disease originates from the periosteum and interior of the socket.

As tumours of the epulis kind have no disposition to recede, and, when they originate from the periosteum or bone, are disposed to assume a malignant character, I cannot too strongly insist upon the necessity of an early operation for their complete removal. The knife is the best means for the purpose. Any teeth in the way should be first extracted; the whole substance of the swelling removed; the bone and periosteum scraped; and even a portion of the jaw removed with Hey's saws, or Liston's cutting forceps, if found to be diseased. In France, the cautery is usually applied after the removal of a cancerous epulis.

The manner of removing the diseased portion of alveolary process is, to make a perpendicular cut through the bone on each side of the tumour with a fine saw, when its separation may be completed with a strong pair of forceps. The bleeding is profuse, but may be stopped by pressing on the wound a dossil of lint dipped in the tincture of muriated iron, the application of which, or of a solution of lunar caustic, may be repeated, if necessary, at each succeeding dressing.

Polypi of the Nose.—They are swellings arising from the mucous membrane of the nose, and generally consisting of a soft substance easily torn, streaked with a few vessels, and of a light yellowish or grey colour, and not endued with much sensibility. The disease is most common in persons between forty and fifty, though occasionally met with in younger subjects. The mucous membrane of the nose is particularly often the seat of them. The polypi, which have the character now enumerated, are not of a malignant nature, and whatever inconvenience may be produced by them is caused by their obstructing the nostril, and by their pressure on the adjacent parts. They are commonly of a pyriform shape, though, if they are large, their figure is in a great measure determined by that of the cavity in which they grow; but whatever may be their shape, they are invariably connected to the mucous membrane by a narrow stalk or pedicle, sometimes termed their *root*. They rarely or never grow from the septum nasi, but usually from a point at or near the upper os spongiosum.

The polypi, whose texture corresponds to what I have mentioned, are those mostly met with, and often named *soft* or *gelatinous polypi;* or occasionally *mucous polypi*, from their structure bearing a considerable resemblance to the mucous membrane from which they originate; or *benign polypi*, in consequence of their having no disposition to assume a dangerous morbid action. Sometimes they are of a firmer consistence and fibrous texture, when they are termed *fleshy polypi;* but these are more frequently noticed in the uterus than in the cavity of the nose. Another kind of disease, gentlemen, is improperly called the *malignant polypus*, because it is not truly a polypous excrescence at all, but a tumour, partaking in every respect of the nature of fungus hæmatodes, or medullary sarcoma.

In many cases, several polypi of different sizes occur in one or both nostrils. Sometimes you meet with only one; and, in particular examples, the nostrils are filled with a peculiar kind of polypi, consisting of cysts or vesicles, filled with a colourless fluid: these are *vesicular* or *hydatid polypi*, as they are termed, and are not uncommon in children, and very young persons.

Truly cancerous polypi are said, occasionally, to take place in elderly persons. I believe they are very uncommon: the malignant polypi, which I have seen, were evidently specimens of medullary sarcoma.

The common pendulous soft benign kind of polypus, as I have already informed you, generally grows from the external side of the cavity of the nose, and, in many examples, from the mucous membrane covering the ossa spongiosa. The growth of a polypus from the septum narium, if it ever occur at all, is so uncommon, that some surgeons of the most extensive practice have never seen an instance of it. The commencement of the disease is attended with a feeling of obstruction in the nose, like what is usually felt in an ordinary catarrh, the obstruction being more considerable in wet than in dry weather. These polypi, when under a certain size, may be made to advance or recede by the force of the breath in inspiration and expiration. The sound of the voice is nasal, and there is generally some uneasiness felt about the frontal sinuses.

Sometimes, when a polypus becomes large, it passes towards the velum pendulum palati, over which a part of it hangs towards the pharynx; or if it originate towards the back of the nares, it may take the same direction, instead of towards the nostril. In certain examples, you will see polypi projecting in both directions.

Common polypi cannot be cured by local applications; caustic only acts upon their surface, and cannot get to their root. They grow indeed faster than any caustic can destroy the superficial parts of them.

Extraction, *excision*, and the *ligature* are the three means of curing nasal polypi. Extraction is the method usually preferred, and is accomplished with forceps made for the purpose, and of different shapes and sizes. Some are slightly curved, and formed with oval excavations on the inside of the ends of the blades, and also with an aperture in each of them. Others are straight, and the inner surfaces of the blades furnished with projections, or teeth. Occasionally polypus forceps are made with serrated blades, which, when

shut, meet in the manner of a suture of the cranium.

The patient being seated opposite a strong light, the surgeon first examines the extent and situation of the polypus with a probe, endeavouring in particular to make out the point of its attachment and the place of the pedicle. This cannot always be done, but you know that the os spongiosum superius, and the outer and upper side of the nostril, are the common situations for the attachment of the polypus. You, therefore, convey the forceps in that direction, and endeavour to seize the pedicle. If you succeed thus far, the best plan is not to pull it directly outwards by a jerk, but to twist the tumour from its connexion.

The hæmorrhage from soft benign polypi is never dangerous, though sometimes copious.

As this is a disease very likely to return, and, unless a layer of bone come away, we are never certain that a portion of the root may not be left behind, it is prudent, after the operation, to direct the patient to inject two or three times a-day up the nostril a strong astringent lotion, containing alum, or the muriate of ammonia.

When a polypus projects backward, towards the throat, it is sometimes taken hold of with a pair of curved forceps, introduced from the mouth, and extracted. But you will frequently find another part extending forwards, which you may first begin with. In this manner you may perhaps succeed in breaking the pedicle, and both portions may then be readily extracted. Much of the operation is necessarily performed, as it were, in the dark; for, after the bleeding begins, nothing can be seen.

Supposing you get out only a fragment of the polypus at first, you should not stop, but try to extract the rest, either piecemeal or in one mass, just as you find practicable.

Excision is a plan occasionally applied to large polypi extending back towards the throat, and having a pedicle, the situation of which can be felt and reached with a pair of long probe-pointed scissors. The bleeding need not be feared; but, as far as my experience goes, you seldom know the precise situation of the pedicle, or can reach it sufficiently well with scissors, to make this method very advisable.

The *ligature* has also been applied to similar polypi extending towards the throat. The noose of a ligature, or piece of wire, is introduced through the nostril to the back of the throat, where it is put over the tumour with the aid of a pair of forceps. The ends of the ligature, or wire, hanging out of the nostril, are then passed through a double canula and twisted. It is a practice rarely adopted in this country. The best instruments for this operation are those of Graefe.

Vesicular or *hydatid* polypi generally grow again. You may clear the nostril from them but they return. One plan, to which they will sometimes yield, is that of applying strong astringent lotions to them. They should first be removed, and the lotion then applied by means of lint.

With respect to the malignant kinds of polypi, they are out of the power of surgery; all that can be done is to lessen the patient's sufferings by narcotic medicines, opium, hyoscyamus, and hemlock.

Wounds of the Throat are cases of frequent occurrence in persons who attempt to commit suicide. Some merely penetrate the integuments, and are not of any particular importance. Others extend more deeply, and divide some of the primary branches of the external carotid, especially the lingual and the superior thyroid arteries. Others make an opening into the mouth by separating the os hyoides, tongue, and epiglottis, from the thyroid cartilage; while others are situated lower down, so as to penetrate the thyroid cartilage, or betwixt that cartilage and the cricoid, and sometimes through these into the œsophagus. You will meet with more wounds of these parts, than of the trachea itself; for persons who aim at suicide generally make the wound high up in the neck, and, unless they cut with great determination and violence, they do not reach the carotid, or internal jugular vein. Some individuals, however, in a desperate state, reach these vessels, even high up in the neck, dividing nearly every thing down to the vertebræ. Under these circumstances, they are, of course, immediately destroyed by hæmorrhage.

In ordinary cases, when there is much bleeding, it is from the lingual, or superior thyroid artery. Then also the patient, if not promptly assisted, may die from loss of blood, but more frequently he faints, and this is followed by a temporary stoppage of the hæmorrhage; and time is thus afforded for a surgeon to be sent for.

I have known a patient die in about twenty minutes after cutting his throat, though no artery of any size was wounded, and the hæmorrhage on the whole was very trifling. Thus one of my patients in the King's Bench cut his throat last autumn, dividing the trachea, and the external jugular vein. As he did this when he was alone in his room, the occurrence was not known to any other person for nearly twenty minutes after it had taken place, and when the gentleman who assists me in the duty arrived, the patient was at his last gasp. On examination after death it was found, that no large artery was cut, but the stream of blood from the external jugular vein had passed into the trachea, and caused suffocation.

I have also lately had another patient in the same place, who, after the nurse had retired to rest, took out his razor and cut his throat. A girl accidentally entered the infirmary directly afterwards, and seeing the stream of blood which went as far as the middle of the room, she gave the alarm, and a surgeon in the prison immediately secured the superior thyroid

artery that had been divided. In all cases of this kind the bleeding vessels are to be secured by ligature. The edges of the wound are then to be brought together by position. For this purpose the patient is to be put in bed with his head and shoulders raised, and the chin inclined towards the sternum. This posture is to be maintained by a bandage passed round the night-cap, to which it must be fastened, while its ends are to be sewed to a band round the chest. Gentlemen, I scarcely need say that the patient requires to be continually watched in order to prevent him from doing further violence to himself.

Sutures for keeping the edges of a wound in the trachea together on account of the irritation which they cause, and the impossibility of uniting wounds of that tube by the first intention, I think, are not so often employed by modern surgeons, as by their predecessors. When the division of the trachea is extensive, one or two stitches may, however, be passed, without transfixing the mucous membrane; but, generally speaking, position is the great means of keeping the parts together.

When the wound is a severe one, or when it penetrates the mouth, or œsophagus, an elastic gum catheter should be passed down the latter canal, and all food and medicines introduced into the stomach by means of a syringe. You will thus prevent the disturbance of the wound that would otherwise be produced by the action of deglutition. Bleeding and other antiphlogistic means are frequently necessary.

During my service in the army, I had opportunities of seeing many extraordinary wounds of the throat and neck. Thus, after the battle of Waterloo, one man was brought into my hospital, who had received the thrust of a lance in the throat, by which the mouth was laid open, the tongue dreadfully lacerated, and all the primary branches of the external carotid were wounded, and consequently it became necessary to tie the common carotid artery. This operation, performed by Mr. Collier, succeeded in suppressing the bleeding, and the patient recovered. At the attack on Bergen-op-Zoom, I saw a soldier the whole of whose lower jaw, with the soft parts attached to it, had been carried away by a grape-shot. This poor fellow recovered, and was much indebted for this favourable result to the aid derived from elastic gum catheters. In another example, a musket-ball had injured the carotid, in the lower part of the neck, which gave way about ten minutes after the soldier had been placed in the hospital, and he died of the pressure of the effused blood on the trachea, so suddenly, that there was no time to make any attempt to save him.

LECTURES

ON THE

PHYSICAL EDUCATION AND DISEASES OF INFANTS AND CHILDREN,

BY DR. RYAN,

At the Westminster Dispensary, 1833.

LECTURE XIX.

Influence of Morals, Seasons, and Climates on Infantile Mortality—its State at Different Periods—Causes of its Diminution—Decrease of Small-pox—Proportional Mortality of the Sexes—and of Infants and Adults—Infantile Therapeutics—Difficulties of determining the proper Doses of Medicines—Medical Posology—Ancient and Modern Doses—Rules for Prescribing Medicines.

Gentlemen,—The most fertile source of infantile mortality is illegitimate unions. In such cases proper parental care is scarcely ever afforded to infants, and debility, disease, and death, are the usual consequences. It is difficult to ascertain the proportion of illegitimate to legitimate births in this country, but it must be very considerable. According to Mr. Roberton, it is 1 in 12 in Manchester, 1 in 20 in Sweden and Finland. 1 in 3 at Stockholm, 1 in 11 after the revolution in France, and since that period, above 1 in 3 in Paris, or 36 per cent.

The mortality of illegitimate infants is immense. According to Dr. Caspar, it was 15 per cent. at Gottingen, 1 in 12 in Berlin, from 1819 to 1822. "For 10 legitimate infants who die in the first month, there are lost 24 natural children. In the second and third months the proportion is 2 to 1. In the second quarter it is $1\frac{3}{4}$ to 1. In the two remaining quarters of the first year, it is $\frac{1}{2}$ to 1. In the second year $1\frac{2}{3}$; in the third and fourth $1\frac{1}{3}$; in the fifth, sixth, and seventh, $1\frac{1}{4}$; and of the total number of natural children, only one-tenth or one-ninth pass the age of puberty."

The comparative mortality of the sexes after birth may be estimated from the following statements. Of 20,117 births in the Dublin Lying-in Hospital, 10,647 were boys, and 9,470 girls. The deaths of the males exceeded that of the females by 694.

Infantile mortality is influenced by sea so and though accurate returns have not been obtained, it appears by tables kept in London, at Glasgow, and Liverpool, that the greatest number of deaths occurred in the following order of the seasons:—in London, autumn, spring, winter, summer; at Glasgow, winter, autumn, summer, and spring; at Liverpool, autumn, summer, winter, and spring. The largest mortality of autumn may perhaps be attributed to the great prevalence of bowel complaints at that season, to which children are so very liable.

The seasons have much influence upon

fecundity, and an immense number of facts have proved that there is the widest difference between the seasons of the greatest fecundity in different climates. It is generally considered, however, that autumn is the least favourable period of the year to the reproduction of the species. The end of winter and beginning of spring are the most favourable periods of the year to conception. The mortality of infants in savage countries is, of course, much greater than in civilised nations, and it is also larger among dry-nursed or hand-fed children, and those of hired wet-nursed, than among those who are suckled. In proof of this statement, the deaths have wonderfully diminished in foundling hospitals since lactation is afforded.

If we contrast the comparative mortality of children before and since the commencement of the present century, we shall find the actual deaths, under the age of ten years, universally less than they were in the former period. On the average of the six years preceding 1803, 1 out of 43,666 died annually in this country; but on the average of the ten years preceding 1811, the mortality had fallen to 1 out of 47,697. Mr. Milne ascribes the improvement to vaccination. In 1821 the annual mortality was 1 of 52.7.

"So great an increase of infantile life," says Mr. Roberton, "does not depend alone on vaccination, but upon many causes, of which, nevertheless, vaccination is the most prominent; of other causes, improved habits of living, and cleanliness among the lower orders, the more enlightened domestic management of the sick, particularly in febrile cases, and better medical treatment, are the most remarkable."

The decrease of mortality under the age of ten, is equally remarkable in France. In 1780 half the children died within the first two years. In 1825 the proportion was 38.3. In the former period 55.5 died under the age of 10; in the latter 47.7 only. Of 100 births 21.5 attained the age of 50 in the first period, and, in 1826, 32.5. (Arch. Gen. de Med. 1826)

Since the introduction of vaccination, the mortality in the registers has diminished under the age of two years; and increased between 2 and 10. This is accounted for by the fact, that, as small-pox generally committed its ravages under two years of age, a greater number of children now survive to the age of four or five, and the number of this age being greater than before, measles, scarlatina, hooping-cough, and croup, which always occurred later than small-pox, find proportionally more victims. Dr. Watt, of Glasgow, considered that, as small-pox was now nearly extinct, measles had become more dangerous. He supposed that small-pox improved the constitution, and eradicated deviations from health, and secured the system from other diseases. It is surprising to observe that Sir Gilbert Blane, Mr. Milne, and the late Dr. Duncan inclined to this opinion, though every one's experience and observation must have proved it erroneous. Most medical practitioners, I imagine, must have observed the evils resulting from small-pox, the evolution of scrofula, the formation of abscesses in different parts, the excitation of tubercles in the lungs, the suppuration of the joints, the loss of vision, &c., consequent to that horrible disease. Besides, the fatality of small-pox was often as great as that of plague; and the profession in all countries have hailed the Jennerian discovery as one of the greatest ever made. Those, who have written on small-pox, adduce the amplest proofs of its fatality, and of its evil consequences or sequelæ. I might cite many writers, but I shall content myself with one of the most eminent, whom I am proud to call my friend. Dr. Sanders, of Edinburgh, in his account of a variolous epidemic, observes, "great numbers, whom the disease did not deprive of life, were much disfigured, and rendered irrecoverable invalids. In some were hideous scars; in others the eyes, ears, and mouth were destroyed; some were lame from inveterate ulcers; others laboured under pernicious internal disorders; and it is certain that water in the head has suddenly destroyed many who seemed to be recovering from the most benign small-pox." If this be true, and no practitioner of experience will, I believe, deny it, we cannot admit the opinion, that "small-pox, when in full force, improved the constitution." For myself I am astonished that any eminent member of the profession could maintain such a doctrine, neither can I assent to the opinion of the above authorities, that the increased mortality of measles is the effect of vaccination.

I feel convinced that vaccination produces no permanently morbid effects upon the constitution; and the concurrent testimony of the Vaccine Boards has long since established the validity of this position. Those who entertain the opposite opinion should have shown (and they have not as yet done so), that a greater number die of measles now than before the discovery of vaccination.

M. Roberton well observes, that small-pox cut off all the delicate children and left the strong and vigorous only to encounter other diseases. But now vaccination preserves all children, and leaves the delicate to survive, consequently these will suffer most from infantile diseases, whether measles, scarlatina, croup, hydrocephalus, &c. There cannot be a doubt, I imagine, but many infirm children are now attacked by measles, &c., who formerly would have been destroyed by small-pox. Moreover, the measles does not now destroy nine-tenths of the children attacked, as was the case with epidemic small-pox; it therefore is not such a formidable disease.

It is lamentable to know that there are persons who diffuse the poison of small-pox, and that medical men are found to participate in this outrage on society. This is an indictable offence, but prosecutions are so seldom

instituted, that the law is scarcely enforced. Some assert, that the legislature could not think of interfering with the liberty of the subject, by enacting a law for the diffusion of vaccination and the extinction of small-pox; but I feel convinced such a law would be most beneficial to society; and there are several precedents in favour of it, which, in many civil and criminal cases, are much more outrageous to the liberty of the subject. I need scarcely observe, that there was no hesitation in passing a law for the prevention of cholera in 1832, founded on the erroneous notion of the contagiousness of that disease, and which outraged the best feelings of humanity. But owing to the supineness of our corporations, the state of medical police is the most imperfect in Europe; and we therefore cannot be surprised at the numerous abuses which are allowed to exist, to the great injury of the public.

It is true, that the heads of the profession have patronised vaccination; and it is the bounden duty of every practitioner to encourage it,—to point out the evil consequences of small-pox,—which cannot fail to convince parents of the danger of that disease, and to impress upon their minds the mildness and anti-variolous property of vaccination.

It must be admitted, that a modified kind of small-pox may occur after vaccination; but it is a mild disease, does not deform the countenance, or destroy the eyesight, or induce the long catalogue of distressing and dangerous complaints already detailed.

There is another interesting topic connected with the comparative mortality of infants, which deserves to be noticed.

It appears, by the registries of births in most countries, that more males are born than females; and also, that more of the former die under the age of ten years than of the latter. In England and Wales, for a period of twenty-nine years, for every 10,426 males there were 10,000 females born; in France, 1000 to 938; in the Low Countries, 1000 to 947; in Naples, 1000 to 956. The greater proportion of males was observed wherever the subject has been investigated. It is to be remembered, that more males than females are still-born, and therefore the mortality is greater than the above.

It is generally admitted that polygamy perpetuates a superabundance of the female sex, and this was urged as a reason for the sanction of a plurality of wives. It is also determined that polygamous animals produce more of the female sex — ewes, she-goats, heifers, than rams, he-goats, or bulls. The same result is observed among birds. (Harvey, *de Generatione*; Willoughby, *Ornithol.*) "A man," says M. Virey, "who cohabits with several women is enfeebled by multiplied enjoyments, whilst his spouse, who, if I may use the expression, does not possess more than the fourth or third of a man, ought to predominate in the act of generation. It therefore results, that she furnishes the advantage of her sex in propagation, and produces more females than males. This is the effect which generally follows in those unions in which the husband is relatively the most feeble." (Dict. des Sciences Med., Art. Fecondation.) Hippocrates was of this opinion. (De Geniturâ.) Forster gives many examples of this fact among the different polygamous nations which he visited. (Obs. on the Human Species, in the Second Voyage of Capt. Cooke.)

In those countries, on the contrary, where the people live without wars, emigration, or excessively laborious employments, and enjoy naval and other commerce, there is a superabundance of males among the monogamous, more especially in cold climates. This predominance is observed in all northern nations; and wherever Europeans pass into other countries.

It is held by some, that the sex of the most vigorous parent is transmitted to the fœtus (Virey, Marc, Velpeau, Duges, Girou); and that males are procreated by vigorous and well-nourished parents, and females by those who are feeble and delicate. (Leroy, Bailly, Velpeau, &c.) This may be true as a general rule, but it is liable to many exceptions. I have enquired about the comparative number of male and female children in different families, and have frequently been informed that, though the ladies appeared more delicate than their husbands, females predominated.

Mr. Milne is of opinion, that females are more numerous when the parents are young, and when the offspring is illegitimate; and he instances Wales, where marriages are contracted late in life, compared to England, and the proportion of male births to female is greater in the latter than in the former.

The number of births for twenty-seven years in the Dublin Lying-in Hospital was 20,117, of which 10,647 were males and 9470 females,—a proportion about 9 to 8.

From the preceding statements, it appears that the average mortality of children is in the proportion of 1 in 4 or 5, while, according to a late writer on medical statistics, that of adults is the following:—

"The annual deaths, on an average, throughout the whole of England and Wales, are nearly one for every sixty inhabitants. In the Pays de Vaud the average mortality is 1 in 49. Sweden and Holland present the same standard, or nearly 1 in 48. Next on the list is Russia, where the mortality is 1 in 41. In France 1 dies annually out of every 40—a proportion similar to that of London. It is calculated, that in France about one half of those born live to 20 years, while a third live to 45 years. The lowest annual mortality is at the age of 10, when it is only 1 in 130. At the age of 40 it is 1 in 53. The probable duration of life in France, at the age of 50, is 23 years. The mortality increases among the poor, and diminishes among the

affluent. In the wealthy departments of France, life is protracted 12 years beyond its course in those who are poor. According to Dr. Hawkins, a recent writer on medical statistics, the conservative tendency of easy circumstances is strongly evinced in England. In proof of the same, is the very inferior degree of mortality and disease which occurs among persons insured at the various life-offices. It was found in 1810, that the deaths, which had occurred among 63,000 persons, insured during 30 years, were only 1 in every 81, 12 being in the proportion of only 2 to 3 of what had been anticipated from the ordinary tables of the probabilities of life. Among these *selected* lives, the mortality of the women was still less than that of the men; females in the middle classes enjoying a remarkable exemption from fatigue and harrass. Of 1000 members of the University Club, only 35 died in three years, or about 1 in 90 annually. It is stated, that of 10,000 pupils, who passed in different years through Pestalozzi's institution, in Switzerland, not one died during his residence there. They were chiefly youths, but of all countries, constitutions, and ages; generally, it is to be observed, in easy circumstances. Pestalozzi, also, paid particular attention to their bodily exercises. On the scale of comparative mortality, Austria follows France; the annual mortality being in the proportion of 1 in 38. In Prussia and Naples it ranges from 1 in 33 to 35. The average mortality of the principal cities of the south of Europe is as follows:—Leghorn, 1 in 35; Madrid, 1 in 29; Rome, 1 in 25; Palermo, 1 in 31.

"At Geneva, in Switzerland, correct tables of deaths have been preserved since 1560, and the results are in the highest degree curious and satisfactory. It appears that, at the time of the reformation, half the children born did not reach 4 years of age: in the 18th century it increased to above 27 years. We arrive hence at the remarkable conclusion, that, in the space of about three hundred years, the probability of prolonged life to a citizen of Geneva at his birth, has become five time greater. The *mean life* was thus: in one century, eighteen years; in the next, it grew to twenty three; in the middle of the next, it rose to thirty-two; and, finally, during the present century, from 1815 to 1826, it amounts to thirty-six years."—*Journal of Health, No.* 7, 1830.

The following account was presented to the Academy of Sciences in Paris, in September, 1833.

"M. Moreau de Jonnes stated some interesting results of his inquiries. It appears that the difference in the mortality of different countries is much greater, than the difference in the number of births—the maximum of the former exceeding the minimum nearly threefold [22, 59], whereas the maximum of reproduction is not higher than double the minimum. The mortality in the Roman states, in the old Venetian territories, in Greece and Turkey amounts to 1 in 30,—in the Low Countries, in France and in Prussia, 1 in 39--in Switzerland, Austria, Spain and Portugal, 1 in 40—in Russia and Poland, 1 in 44—in Germany, Denmark, and Sweden, 1 in 45—in Norway, 1 in 48—in Ireland, 1 in 55—in England, 1 in 58—and in Scotland, 1 in 59. The two leading causes which influence the population of a country, are its climate, and the degree of its civilisation. A cold climate is certainly more favourable to life than a warm one; and if we examine the rate of mortality in countries within the torrid zone, it is much higher than in one of more temperature; thus in Batavia, it amounts to 1 in 26—in Trinidad, 1 in 27—in Martinique, 1 in 28—at Bombay, 1 in 20—at Havannah, 1 in 33. Heberden rated the mortality in the island of Madeira at 1 in 50. To illustrate the beneficial effects of civilisation, the following details are very interesting. In Sweden, from the year 1754 to 1763, the mortality was 1 in 34; from 1820 to 1825, it was only 1 in 45. In Great Britain, from 1787 to 1789, it was 1 in 43. In France, in 1776, it was 1 in 25½.

"The medium of mortality throughout Europe was calculated many years ago at 1 in 36."

I have said that the seasons have great influence on the bills of mortality. This was observed by the Father of Physic and all his eminent successors. It is admitted on all sides, that the greatest mortality in this country is in spring and in the month of April, and in July and August the number of deaths for the year are fewest.

A great deal will depend on abundance or famine, warmth and cold, and the prevalence of epidemics, but no certain results on mortality have as yet been arrived at in this country for the want of accurate registries.

It is highly gratifying to observe the decrease of mortality in all civilised countries during the last century, which is chiefly to be ascribed to the diffusion of knowledge,—the great source of the improvement of the moral and physical state of mankind. The comforts and happiness of mankind have been greatly augmented, the science of medicine vastly improved, and many formidable and destructive diseases completely prevented.

Scurvy, plague, small-pox, syphilis, rickets, scrofula, dysentery, miliary, spotted, and intermittent typhus fevers are greatly diminished, and some of them seldom noticed.

Great are the improvements which have been made in the healthfulness and comforts of the people of this country, but much remains to be done.

"There are," says Mr. Roberton, the laborious author, from whose valuable work I have derived so much information, "many hurtful prejudices to be eradicated, especially in the domestic management of children and of the sick. There is great room for advance-

ment in the knowledge and treatment of diseases, but particularly in the cultivation of infantile medicine. Our medical police, too, if it be worthy of the name, is singularly defective; in this respect we are behind every other European state, a circumstance too well illustrated, among other proofs, by the continued prevalence of the small-pox in all our large towns, when it has for some years been wholly, or nearly, extinguished in most civilised countries. To these might be added grave defects of an economic kind, particularly in the parochial management of the poor, the administration of many of our public charities, and in the want of a general efficient system of education; what has been done in this latter respect being in a very great degree inadequate, at least in popular districts. We should hardly err in affirming, that the rate of infantile mortality will be found to be, cæteris paribus, in the ratio of the ignorance and improvidence of the population; a consideration which gives no little weight to the defects above mentioned."

It must be highly consoling to the philanthropic mind of this writer, that the legislature is at length about to remodel the medical police of this country, and to correct the manifold defects which he has so graphically described. But the evils he so graphically deplored were, in his opinion, capable of mitigations, or removal. He says, "It is consoling to reflect, that, where so much remains to be done in the great cause of human improvement and happiness, every one may do something. Whoever, in his particular sphere, assiduously inculcates sobriety, cleanliness, industry, and forethought, and is on the watch to correct hurtful prejudices and practices, especially in all that concerns the physical education of the young, performs duties which are not less important, because they are humble and unobtrusive. It certainly does not thence follow that their effects will be limited. The most effective virtues are those which operate at first in small circles: for, as he that is guilty of a moral injury, to even a single human being, can never calculate what may be the extent and duration of the evil to which he has given impulse; so he who is instrumental in improving one individual, however lowly that individual's condition, can as little estimate either the extent or duration of the benefit."—(Observations on the Mortality and Physical Education of Children. By John Roberton, M.R.C.S., Surgeon to the Manchester Lying-in Hospital. 1827.)

The next part of our subject is the consideration of the rules to be observed in the administration of therapeutics to infants.

I have been repeatedly solicited by the gentlemen who have attended these lectures to arrange a table of doses of medicines for children, but this cannot be done. The doses of remedies for adults are by no means determined, nor can they ever be rendered absolutely fixed, on account of the differences of temperament, habit, and constitution. The effects of medicines vary according to age, sex, habit, temperament, in consequence of peculiarities of constitution, state of health, stage of disease, sensibility, climate, and season. Hence the great difficulty of determining or fixing the doses of medicines. There are some constitutions which suffer severely from the ordinary doses, while habit will enable us to increase the quantity to an extraordinary extent. The extract of hemlock has been given to the extent of an ounce daily in cancer, though the dose fixed in books is from 3 to 20 grains. It is also recorded, that nine fluid ounces of laudanum were taken daily without inducing sleep. Again, salivation has been caused by a grain of calomel, and another patient may take 500 without a similar effect. M. Cottereau saw a patient in the hospital at Tours, who was poisoned by the sixteenth part of a grain of tartarised antimony, though we now give large doses of this remedy in inflammation of the lungs with the best result.

The ancients were unacquainted with chemical analysis, and gave medicines composed of many ingredients, which they supposed to be simple, though the active principle was combined with a great quantity of useless matter.

Hippocrates employed simple remedies for the most part, which are now found to be compound by analysis, but he did not give a table of quantities.

Dioscorides was one of the first writers who attempted medical posology, or doses of medicines.

Galen did much for pharmacy, but his compound formulæ were very much increased by Ætius, Rhazes, Avicenna, Averrhoes, and others, who adopted the poly-pharmacy of the Egyptians and Arabians. Nevertheless the doses were not fixed, and were so uncertain as to be ridiculed by Paracelsus, whose gross prejudices, confident ignorance, and superstitious ideas led him to offer the most violent diatribes to them. The introduction of alchemy complicated pharmacy more than ever, and its progress was very slow, notwithstanding the advance of chemistry, since the time of Stahl and Boerhaave. It remains for the moderns, aided by chemistry and pharmacology, to perfect the art of dosing medicines.

It appears very easy at a first view to compose a medical posology, or exact table of doses, and that it ought to be sufficient for the attainment of this end, to compile from works on materia medica, practice of medicine, pharmacology, and selections of formulæ. But the doses of most medicines are very uncertain, they differ in different works, though most writers copy each other, and follow a blind routine. All of them adopt the table of Juncker, given by Gaubius, and there are many solid reasons to prove that this is liable to numerous exceptions. The vague appreciations of doses, mentioned by writers on materia medica, are of little use in practice, unless for

the guidance of students. Every country has its pharmacopœia, but not one contains the whole of the medicines in use, or the same doses. The difficulty of determining correct doses arises from the modifications which medicines undergo by age, sex, climate, &c. Some writers fix the dose of calomel from two to six grains, others from two to twenty, more advise it, under certain circumstances, in scruple doses. In general it is said, that a grain or two is sufficient for an infant, and that a larger quantity is hurtful; but should croup or hydrocephalus attack it, then the remedy has been urged to the amount of one hundred, or five hundred grains. I might adduce a vast number of similar illustrations, which show the inaccuracy of doses given in books. These in general are too small, but they are enormous if contrasted with the homœopathic quantities, with the hundreth thousandeth millioneth part of a grain, or drop of our medicines. While different ages, sexes, constitutions, idiosyncrasies, diseases, climates, and seasons exist, we must vary our doses of medicines. Posological tables cannot remove our difficulties. It is of little use to us to follow any one of them, except to those commencing the practice of medicine.

Juncker gives the following general rules for internal medicines, according to Gaubius. (De Methodo Concinnandi Formulas Medicamentorum, 1739):—

Fix the efficacious dose for a man of adult age at—	1	or 1 drachm
From 14 to 21 years	$\frac{2}{3}$	or 2 scruples
7 to 14	$\frac{1}{2}$	or half drachm
4 to 7	$\frac{1}{3}$	or 1 scruple
4 .	$\frac{1}{4}$	or 15 grains
3 .	$\frac{1}{6}$	or half scruple
2 .	$\frac{1}{8}$	or 8 grains
1 .	$\frac{1}{12}$	or 5 grains

This table is generally adopted by British writers on Materia Medica, while the French modify it in a slight degree.

MM. Bricheteau, Chevallier, and Cottereau, in their work entitled. L'Art de doser les Medicamens, selon des differens Ages, &c., 1829, propose the following posology. During 1 year, $\frac{1}{12}$ of the dose of adults, from 1 to 3, $\frac{1}{6}$, from 3 to 7, $\frac{1}{3}$, from 7 to 14, $\frac{1}{2}$, from 20 to 60 the dose for adults.

MM. Edwards and Vavasseur, in their Nouveau Formulaire Pratique des Hopitaux, &c., 1834, fix the doses as follow:—

The dose for an adult	1
Under 1 year .	$\frac{1}{12}$ to $\frac{1}{12}$
At 2 years . .	$\frac{1}{6}$
3 years . .	$\frac{1}{6}$
4 years . .	$\frac{1}{4}$
7 years . .	$\frac{1}{3}$
14 years . .	$\frac{1}{2}$
20 years . .	$\frac{2}{3}$
From 20 to 60 years .	1

Above this age we follow the inverse gradation.

There are certain rules with regard to prescribing medicines which have been given with great precision by Gaubius, which I shall notice succinctly, as they are generally adopted, and must be referred to in infantile therapeutics.

A prudent physician prescribes nothing unless he can assign a satisfactory reason for doing so; hence he never acts at random, or until he has first accurately deduced the indication of treatment.

He first determines whether the diseases require medicines or not.

When he judges that the powers of nature are sufficient to effect a cure, that the disease is incurable, or that the cure would bring on a greater disease, he refrains from prescribing, lest he should either injure the patient, or uselessly torment him. Medici, plus interdum quiete, quàm movendo et agendo, proficiunt.

In many chronic and incurable cases, medicines are necessary, as it would be inhuman to desert the sick. This precaution is particulary to be observed in the treatment of diseases of women and young girls.

If the indication commands the physician to act, he is to determine what he is to do, the means he is to employ, &c., which he will know by the established precepts of science.

He is always to bear in mind that the great and first end of his art is, that the cure is safe, quick, and agreeable (Tutò, Cito, et Jucundè *). Hence the most efficacious and appropriate remedies, not only in substance but in form, are to be chosen.

Those only whose action is safe and without danger are to be prescribed; sometimes, in desperate cases, dangerous remedies may be tried, but always with caution and judgment, and with the prediction of the uncertainty of the result.

So, new medicines not sufficiently explored are not to be ordered, when the same effects can be obtained by the aid of remedies which practice has sanctioned; the former must be used with great prudence, lest the prescribers incur censure.

We ought to avoid as much as possible all effete, obsolete and decomposable medicines, lest nausea should be produced, the effect frustrated, the sick uselessly fatigued, or dangerous accidents produced. It is therefore better to order medicines from the most celebrated shops; because, in such case, their sale is quicker, they are better prepared, and the integrity and skill of the apothecary commend them.

Those which are prepared with difficulty ought not to be prescribed unless we are cer-

* All Doctors in Medicine are sworn, on obtaining their degrees, to practise in this manner. The members of the College of Surgeons and Society of Apothecaries in this country are not.

tain of the honour and dexterity of the compounder.

We should be sparing in the use of expensive medicines, when cheaper ones are equally efficacious. The rich sometimes estimate the value of a remedy from its price, and the influence of the imagination is not to be despised.

Exotic medicines should not be preferred to indigenous, when both are equally efficacious, for these are less liable to adulterations.

Those whose names, tastes, and qualities are generally known, ought to be mixed with others, lest they frighten the sick, or diminish their confidence. Disagreeable, nauseous, and unpleasant medicines are to be avoided, or combined in small quantities with others, so that their properties may be disguised as much as possible. It is better not to exhibit any remedy at all than one which nature abhors; a rule that is to be particularly observed in cases of delicate women, infants, &c. The idiosyncrasy or peculiarity of the constitution should be known. Castor oil acts as a poison on some persons, as attested by Edwards and Vavasseur; and powder of crabs-eyes acted in the same manner, according to the testimony of Gaubius.

The physician should study simplicity in prescribing remedies, avoid bulk and number, for nature is the parent of simplicity.

It is, in general, objectionable to combine a great number of medicines in one compound, as they may decompose each other, and destroy their usual effects.

Whatever form of medicine the sick prefers, it should be prescribed. Some object to pills, powders, &c., others prefer them. There are some medicines which must be prescribed in a certain form, as calomel, which cannot be given in a thin fluid. Infants should not be ordered pills, bulky powders, or medicines with a strong odour or flavour, and all their medicines should be sweetened when this can be done.

The temperaments modify the progress and characters of diseases, and also medicines. Individuals who are strong and robust are generally of a sanguine temperament, and require bleeding and antiphlogistic treatment, which would be highly injurious to the delicate, irritable, and nervous, who are mostly of a lymphatic or nervous temperament, and who generally stand in need of tonics and antispasmodics. This rule, however, is far from being invariable.

Habit has also a great influence on the doses of medicines. Every one knows that opium may be gradually increased to an enormous quantity, and so with other medicines.

When a medicine does good, it ought to be continued until another is indicated, and it is bad to change it without reason. Some persons are constantly changing medicines before they have given them time to act, which gives rise to the impression that they do not understand the nature of the disease, and are trying experiments. In chronic and nervous cases, it is sometimes necessary to change the appearance of the medicine.

"A physician should write his prescription legibly," says Gaubius, "for now-a-days the art of compounding medicines is entrusted to mere tyros, clerks, shopmen, and other incompetent persons; and hence there is great danger to the patient, and injury to the reputation of the physician."

In all cases before we prescribe, we should maturely consider the physiological and pathological condition of the alimentary canal, for a medicine which would be inoffensive at one time, might induce fatal consequences at another.

The doses of medicines are different, according to the power of each; and no fixed rule can be established with respect to them, for experience alone is our guide. The quantities must vary according to the effects they are intended to produce; and according to age, sex, temperament, climate, season, disease, &c. Tartarised antimony may be given as an emetic, diaphoretic, aperient, or nauseant. In all cases the dose must be proportioned to the age and strength of the patient. The body is more feeble in infancy, childhood, and adolescence, than at the adult age, and therefore the doses must differ to obtain the same effect in a man and in an infant. In all cases we should begin with a small or a medium dose, for it is much better to be obliged to repeat it, than to treat its excessive effects.

The constitution of woman is weaker than that of man, and the dose of medicine must be smaller for her, though it is not easy to fix the proportion. The smallest dose may excite great disturbance on account of the varied peculiarities of constitution. These can only be discovered by accident or time; but, when known, they should always be attended to.

Medicines ought to be administered when the stomach is empty; according to many, an hour before a repast, or when digestion is over. If taken immediately before food or drink their effects will be modified or nullified. The dose should be repeated before the effect of a former one has ceased, for otherwise we should be always commencing a cure, but never accomplishing it.

Those patients, who do not take their medicines regularly, are often astonished, when persuaded to do so, at the beneficial effects which are speedily produced. This is remarkable in cases of dyspepsia accompanied by constipation.

Every experienced practitioner is aware of the powerful effects of alterative medicine, or of small doses when taken regularly.

At our next meeting I shall describe those rules respecting therapeutics which apply to infants, and the best mode of prescribing for them. I shall also give the best formulæ for infantile diseases, and attempt to arrange a Pharmacopœia Infantilis.

CLINICAL LECTURES

ON THE

SURGICAL ANATOMY AND TREATMENT OF THE UTERUS AND ITS APPENDAGES.

BY M. LISFRANC,

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LECTURE III.

Diseases of the Uterus—General Considerations on the Symptoms and Treatment—Sub-Inflammation without Engorgement—Simple Hypertrophy of the Uterus—Simple Engorgement—Scirrhous Engorgement—Curableness of Scirrhus, &c., &c.

I SHALL finish my remarks on the diseases of the uterus, and their treatment, by dividing them into two parts: first, I shall speak of the sub-inflammations and engorgements of this organ, and afterwards of its scirrhous state; secondly, of the different ulcerations, vegetations, and different tumours to which this organ is liable.

I. *General Considerations.*—It has been frequently repeated, that diseases do not always betray themselves externally by symptoms equivalent to their severity: this general remark is more particularly applicable to affections of the uterus: this organ is frequently found excavated by deep ulcerations, and in such a state of degeneration, that all aid is useless; at which time the general health does not appear to be affected, the skin continues natural, the countenance blooming, and scarcely any external symptoms exist, which indicate disease about the organs of generation. There have been many patients in the ward of St. Augustin, who have presented horrid examples of this description. On the other hand, I have known women, with very slight disease, become thin, experience severe pains, and rapidly decay; demanding, at the commencement, a minute exploration of the indications of the disease, which, in general, begins in the following way:—

The female, from time to time, experiences a slight flooding, unattended by pains; at other times she suffers from leucorrhœa, which continues during the intervals of menstruation; the breasts become slightly tumefied, which symptom the patient very frequently believes to be an indication of health; she feels, after walking, or riding for a short distance in a carriage, pains about the loins; such great uneasiness is felt in the erect position, accompanied with twitchings in the lumbar region, that she is obliged to sit down; coitus is sometimes followed by a small sanguineous discharge, and determines slight pains, which either in a short time disappear altogether, or continue during one, two, or even three days.

The disease will sometimes stop here, and spontaneously disappear; but more frequently the leucorrhœa increases, pains supervene, and are rarely felt about the uterus itself, but generally towards the broad and round ligaments, about the loins, and even extend to the posterior part of the thigh, and the back part of the foot, and which more than once have been mistaken for sciatica. They extend also towards the umbilical and lumbar regions, and frequently towards the rectum: they take place especially when the cervix uteri is carried backwards by a slight antiversion of the uterus, and presses on this intestine. The floodings return at shorter intervals, the tumefaction of the breasts subside, and they at length become atrophied; symptoms of gastro-enteritis appear, the patient becomes affected with intermittent fever, the accessions of which return more or less frequently, or there is nervous lassitude, with true hysterical paroxysms; the skin is parched and yellow, the digestive function becomes deranged, corpulency disappears, and the countenance changes.

It is seldom that the disease advances thus far, without some practitioner being consulted, after which the patient follows a certain and regular course. But at other times, as I have before said, though the general health appears good, the latent disease rapidly proceeds, and often very unexpectedly declares itself in an alarming manner. There is loss of appetite, severe pains, which cause restlessness and deprive the patient of all sleep, frequent floodings, the skin becomes dry and terrestrious, and in seven or eight days we see those females who, not long before, were so plump and ruddy, become in an anæmiated state. Lastly, a colliquative diarrhœa arrives to terminate the scene, which is protracted, rarely more than one or two months after the first appearance of the symptoms. Death will sometimes take place in twenty-four hours from perforation of the uterus and peritoneum.

I meet with at least twenty examples every year of affections of the uterus, which take this invidious character. I was called this year to visit the wife of a professional man. This lady, still young, was healthful and blooming, and might be considered as one of the finest women in Paris. Professor Moreau, who had already examined her, expressed his desire for my advice. On the introduction of the finger, I found the uterus reduced to a state of putrefaction, presenting one mass of fœtid slough, into which it was easy to penetrate. There no longer existed any resource. It was necessary to inform the family of it, who imagined our prognosis to be unfavourable, and that we were ignorant of the disease. However, in a few months afterwards, they unfortunately became convinced of the accuracy of our judgment, by the patient falling a victim to this affection.

Let us suppose a practitioner is consulted, whatever are the affections revealed to him by

vaginal examination, or the speculum, there are different kinds of discharges. But if the patient complains of pain or weight about the pelvis after their cessation, which indicates uterine congestion, a revulsive bleeding, with an anodyne injection, frequently carries off, as if by enchantment, these pains.

If the pains, in place of following the menstruation, precede it, we must wait until the middle of the month. When the pains are independent of menstruation, and return in its intervals, we may repeat these bleedings two or three times in the month. The weakness resulting very frequently from the pains, which deprive the patient of appetite and sleep, far from being a contra-indication, requires bleeding as the best remedy.

There are certain idiosyncrasies which compel us to modify these precepts. Thus we have seen, in treating of proper remedies for the reproduction of menstruation, that, in some robust women, bleeding frequently promotes it immediately, whilst in others a revulsive bleeding will produce flooding. I am at the present time treating a lady, from whom taking a few ounces of blood produced this result. These are rare exceptions without doubt; nevertheless it is necessary to bear them in mind, since, in these instances, both general and local blood-letting should be rejected.

Some women, naturally nervous, cannot lose blood, without experiencing many disordered symptoms. We must then diminish the blood to the fourth of a palette (five ounces), and by this means occasionally succeed; but if, nevertheless, these symptoms supervene, it is necessary to renounce altogether the emissions of blood.

Putting aside these cases, bleeding, combined with narcotics, is a sure remedy for dispersing these pains;—I will say even it is the best of narcotics. This opinion is by no means new; for Stahl has observed, that in all cancerous affections, in which the veins became ruptured, the patients always found remarkable alleviation from it. You must have frequently seen me in the wards prescribe a revulsive blood-letting for twenty females, and at least fifteen have found much ease from it. Their pains cease for a time, of greater or less extent, unless some unforeseen circumstances, such as a moral affection or change of weather, arrive to counteract its effect. In this same ward, I kept alive for the space of two years a patient who was attacked with a very extensive disease of the uterus, in calming the pains much less with narcotics than by small bleedings, varied according to the strength of the patient, from a quarter of a palette to a palette.

When there exists an advanced disorganisation, accompanied with a discharge of a cancerous ichor, extremely small bleedings are indicated, for fear of favouring the absorption of this ichor. If the female be very debilitated,—if she present any indifference to surrounding objects,—a tendency to repose or stupor; in short, if there be reason to suspect a commencement of adynamia, bleeding might precipitate the fatal termination; and hence it is absolutely incumbent on you to abstain from its employment.

Cupping, blisters, &c.—I shall repeat here what I have previously said on local blood-letting. Employed in the acute stages, cupping and blisters only add to the congestion, which is plainly shown by their efficacy in the reproduction of the menses. Other counter-irritants merit the same reproach; and are scarcely adapted, even for the chronic state, either to disperse a simple congestion, unattended by pain, or to excite the vital properties in indurated tissues.

We place, then, the seton on a level with, and a little above, the anterior superior spine of the ileum, through the abdominal parietes, and the issue or moxa at the inferior and lateral part of the spinal column. Great precaution is necessary in the employment of these remedies, for, in some nervous women, the general irritation, which they produce, proves more injurious than beneficial.

Compression.—This is a useful remedy, but difficult in its application, and requires a thorough knowledge of its indication. Pessaries have been recommended in chronic engorgement of the uterus, into which the uterine neck protrudes, and the womb is compressed by its own weight; but, before the application, it is important to be certain that there exists neither inflammation of the vagina, bladder, or uterus, that would be aggravated by the presence of a foreign body. Such are the precautions necessary to bear in mind: if there exists pain it is necessary to abstain from it, and should the application of the pessary renew the pain and excite fever, it must immediately be withdrawn.

Beverages and the internal employment of medicines.—In the acute state we prescribe emollient drinks in abundance; in the chronic, decoctions of the saponaria officinalis, scabiosa arvensis, rumex patientia, or even extracts of these plants, provided they can be borne by the digestive organs. You can also in these cases have recourse to iodine, with advantage, conium, and other discutient preparations; but it is important, then, to watch, with the greatest care, the state of the digestive organs. Very frequently gastro-enteritis accompanies affections of the uterus, sometimes latent, but at others so severe as to obscure the diagnosis of the principal affection; it is here that discutients become dangerous. In how many instances have incurable patients, who might yet have lived a long time in comparative tranquillity, fallen victims to active preparations administered by empirics! I so much dread this complication of gastro-enteritis, that I even dare not administer the mildest laxatives by the mouth. In a number of cases, fearing to carry this apprehension to too great an extent, I have endeavoured to employ for ex-

ample, discutients in larger doses than ordinary, and in almost every case supervening symptoms have recalled me to my first reserve.

The employment of discutient frictions are less dangerous when of the hydriod. of potass or mercurial ointment, &c.; but it is important to wait always for the chronic state, for fear of aggravating the inflammation, if it still exists.

One word in conclusion concerning the exhibition of conium. We employ it as a discutient and narcotic; and for this purpose in general, its extract is preferred. Nothing hence is more treacherous, for in three-fourths of the druggists' shops these extracts of plants are composed of materials chiefly carbonaceous, and consequently possess no virtue; and it is well known, that M. Orfila has been able to swallow thirty grains with impunity. I prefer the powder, which I commence with at first in grain doses, doubling this quantity at the expiration of fifteen days, and subsequently increase it to as much as three or four grains. Sometimes it produces a slight inconvenience at the throat, and even occasions slight diarrhœa. It is then necessary to discontinue it, and endeavour above all things to prevent an attack of gastro-enteritis.

II. *Sub-inflammation without perceptible engorgement of the Uterus.*—You will be frequently consulted by women who experience darting pains about the region of the womb, in whom the least exercise, standing in the erect position, walking, or even riding in a carriage, fatigues excessively. Coitus is extremely painful; they complain of a sensation of smarting, accompanied with a burning heat within the pelvis, or, to use their own expression, *they feel as if they had fire in the womb.* There exists, besides, a turgescence of the abdomen, a sense of weight in the lumbar and iliac regions; even the efforts in the water-closet frequently cause pain. It appears to these women that they have some foreign body which incommodes them, and would, as it were, be expelled; nevertheless, there is neither prolapsus nor deviation of the uterus; the menstruation continues as ordinary, and there exists no other discharge; and the pains are sometimes remitting, but more frequently intermitting.

If, in this condition, we have recourse to vaginal examination, we find the neck a little more dilated than ordinary, but the consistence and volume of the uterus are not at all altered, neither does the application of the speculum point out any ulcerations about the neck, but its introduction, as well as that of the finger, produces pain, either at the same moment or shortly afterwards.

This affection is frequently considered as a simple result, from an idiosyncrasy of the patient, which are declared to be purely nervous, practitioners confine themselves to palliatives, or even abstain from these altogether, and the disease makes progress. But then, should this be only a nervous affection, is it less urgent to combat it? Do we not frequently see, in some organs, a fluxation determined by nervous pains? I regard this state as a sub-inflammation without engorgement, and lose not a moment in its treatment, but have recourse to the antiphlogistic and narcotic system, as I have just been stating to you.

III. *Hypertrophy.*—Simple hypertrophy of the uterus gives rise to the general symptoms already noticed; but other indications are necessary to recognise its existence, which are especially shown by the examination per vaginam. Thus we discover excessive heat about the internal surface of the vagina and uterine neck; the parts are, in general, very sensitive, much more so than in scirrhous engorgement; the uterus gives the same sensation to the finger as when it contains an embryo of four or six weeks; in fact, pregnancy, attracting the fluids towards this organ, determines in it a physiological hypertrophy, which may guide us in detecting a morbid hypertrophy. If you wish to obtain a comparative idea of the sensation by vaginal examination under these circumstances, you must remember that which is given in undegenerated lipoma; or by the breast of a young female who has suddenly expired; or, finally, that of a body slightly compressible, consistent, elastic, and of a spongy nature.

Engorgement may exist at the same time, both on the body and neck of the uterus, or separately on either of these parts, but not diffused so as to present little lumps, as in scirrhus; and, in every case, the weight of the organ is more or less augmented.

Here a question, sufficiently important, presents itself for discussion. The increased weight of the uterus fatigues, and elongates the broad ligaments, and these, participating in the diseased action of the uterus, have lost their elasticity, and consequently increase the weight of the organ. Hence it follows that every kind of engorgement, whatever may be its nature, is always accompanied with more or less prolapsus of the uterus, this prolapsus being the immediate effect of engorgement. This, then, is what is necessary for us to combat, and, in the majority of cases, by overcoming it you replace the uterus to its normal position, or very near it. I strongly urge this point;—therefore beg particularly to call your attention to it, the more so, as in ordinary practice practitioners act contrary, and treat solely the prolapsus, which they attribute to a relaxation of the broad ligaments; hence there may be a species of prolapsus without preceding engorgement, which I cannot absolutely deny, but these cases must be very rare, since the immense number of diseases of the uterus that I have treated, I have not yet met with one example.

The healthy uterus may otherwise be easily displaced from exertion of the female. Thus, when the speculum applied and kept in proper position merely by the thumb, in order to prevent its falling from its own gravity, and

the female bears down, the instrument becomes expelled with force, and the neck will sometimes descend to within an inch of the orifice of the vagina; consequently, in engorgements, it is essential to prevent the women from making efforts on going to the water-closet, and recourse must be had to clysters, since the prolapsus, already established, may continue through the influence of this pathological condition.

You must not confound simple hypertrophy of the uterus with a contrary condition of this organ. It is such an extreme softening of this tissue, that it sinks under the pressure of the finger, as an atheromatous tumour, or as the rind of a rotten apple; there no longer exists that spongy elastic tissue, giving the sensation of a fatty tumour, or breast. It is something of a pultaceous liquid substance; the tissues are converted beneath their envelopment into a sort of reddish brown pap, analogous to that which results from the friction of a cannon-ball. Sometimes this state is accompanied with superficial ulceration, at other times it exists without it. This is the latent cancer.

An accurate diagnosis is here of the highest importance, since simple hypertrophy does not require operation, but the latent cancer, rapid and fatal in its march, leaves no other resource than a complete extirpation of the affected parts; we may combine also to the differential symptoms already spoken of, that hypertrophy is generally of recent date, whilst, on the contrary, cancer is of long duration. Hypertrophy, too, frequently attacks the neck, and even the entire surface of the uterus, and cancer is limited for a long time to one spot of this organ. I shall urge this point on the uterine pathology the more, as I believe it to be essentially new, and moreover as the facts on which it has been founded, have been verified in this operating theatre, where I have frequently pointed out, and even placed in the hands of my hearers the anatomical parts, after the extirpation of the neck of the uterus, necessitated by cancer.

Simple hypertrophy may exist either with or without pain, consequently presenting two therapeutical indications. In the first, it is necessary to have recourse to antiphlogistics, total repose, emollient clysters nearly cold, injections also emollient of the same temperature, general baths, small bleedings from the arm, emollient beverage, &c. &c.; and, above all things, tranquillity of the diseased organs; the diet should consist of milk, vegetable, poultry, and fish; of course taking into consideration the habit and temperament of each individual.

This is simple treatment, but ought to be scrupulously and tenaciously observed. Diseases of the uterus are much more tedious to combat then those of all other organs; for, in the first place, you can do nothing the seven or eight days previous to the menses, or during the presence of this discharge, and moreover this periodical congestion, although it physiologically influences in an unfavourable manner, increases the diseased and permanent action. The female and her medical attendant must therefore possess great patience, as the time necessary to effect a cure varies from one to three months. I will observe to you here, that you must not judge of the progress of cure by the state of the pains, for I have often seen the latter increase in proportion as the engorgements diminish. When hypertrophy is unaccompanied with pain, and there only remains a slight sense of uneasiness and weight within the pelvis, the disease has arrived at its chronic stage; here, also, it is necessary to employ general bleeding and cold-baths if they can be borne, ascending shower-baths, at first simple and afterwards medicinal.

It is in this case, that about fifteen leeches, applied around the uterine neck, are useful in hastening resolution, whilst recourse must be had to moderate exercise, simple or dry-cupping, and shower baths directed about the pelvis. Inasmuch as there is induration, bitter, but not discutient decoctions, may be prescribed. If excoriations be suspected, the speculum may be introduced without danger, since it is no longer counter-indicated by the presence of inflammation, and their cauterisation will prove a beneficial remedy.

In a word, the treatment should be altogether antiphlogistic in the first case, and in the second, stimulant and revulsive; the only precaution necessary to be taken, is to ascertain that the excitation does not pass beyond a certain limit, reproducing the chronic stage, and reclaiming a repetition of the antiphlogistics.

Simple engorgement—scirrhous engorgement.—I shall describe these two diseases together, inasmuch as the treatment is the same for both, and differential diagnosis is important only as regards the prognosis. In both cases vaginal examination reveals an uterus increased in size, either in totality, in its neck only, or in the body of this organ; its volume sometimes becomes enormously augmented, pain may be absent, or present itself equally severe in both instances, so that the destructive symptoms are limited to the following:—

1st. Simple engorgement is less hard, and presents on examination an uniform surface, whilst scirrhous offers little tumefied inequalities.

2nd. In scirrhous the mucous membrane of the neck is of a dull white colour, which I have never observed in simple engorgement.

3rd. Scirrhous is more slowly developed; thus, if the disease be only of two months' duration, particularly if it succeeds an abortion, natural labour, sudden suppression of the menses, I immediately know it is not of a scirrhous nature.

4th. Lastly, simple engorgement requires only a treatment of one month or six weeks, whilst scirrhous demands a much longer

time for its cure, even if the most appropriate remedies be administered.

The treatment varies according as the affection be acute, that is to say, accompanied with pains, smarting, and heat, or be arrived at its chronic stage. In the first, antiphlogistics must be employed; in the second, resolutives, and discutients administered, either externally or internally; should the disease prove obstinate, I have recourse to moxas, setons, and issues.

Is scirrhus really capable of being cured?—I myself have not the slightest doubt on this subject. Do we not see tumours of the breast and lymphatic ganglion, presenting all the characters of scirrhus, yield daily to an appropriate treatment? Hence these cures may be as readily obtained in uterine affections.

Doubtless it would be wrong to designate by the name of scirrhus every species of hard and unequal tumour, exciting pain only from the pressure and traction it exercises on the neighbouring parts. In fact, these indurations, these inequalities, accompanied even with vegetations and tubercles, are found in certain ulcers of the legs in old people, without implying the existence of cancer. Why, therefore, should not the same thing occur within the uterus? I confess, for a long time I participated in this error, but experience has now completely undeceived me. Six years since I condemned two females for an affection of the uterus, which presented all the above named characters. They are now perfectly cured, and enjoy an excellent state of health, and that which is more remarkable, is that nature alone effected the cure *.

Simple as well as scirrhous engorgement may be complicated with vegetations, ulcerations, &c. But, however, even when the diagnosis is obscure you must not be discouraged. I was sometime since consulted by two females labouring under an enormous uterine engorgement, accompanied with all these affections, in whom I ultimately succeeded in obtaining a radical cure.

SECRET SPECIFIC FOR SCROFULA.

"There are numbers of medical secrets which are very much boasted of, but as they are out of my line, I can form no opinion if they are really of value. I know of one medical secret, which is of great importance; and as its value has happened accidentally to come fully to my knowledge, I can speak very positively upon it. It is a peculiar medicine and a mode of treatment, by which the king's evil, or scrofula, is effectually and certainly cured, so as never to break out again. My only child was so afflicted with scrofula, as to be in danger of becoming blind, and crippled in his limbs; I had the best advice, and followed it strictly, until I found that his case was quite out of the reach of any medical assistance in England; and then I took him to France, to try the skill of that school, but it proved no better, and I was quite in despair. Hearing of this secret treatment, which is practised by a Mrs. Anne Knight, at Dover-house, near Arundel, in Sussex, I made very full inquiries into its efficacy, and found that she possesses a certain specific for all scrofulous cases which are not of too long standing. As I felt very averse to submitting my child to any secret treatment, I took great pains previously to satisfy myself of the results of former cases. One was a woman, who had been cured thirty-six years ago by Mrs. Knight's husband, and has never had any return of illness; she has since married, and had two children, now grown up, and quite healthy; one of them has a large family, all very healthy children. Another woman was cured permanently by Mrs. Knight about twenty-eight years ago, and has since married, and had eleven children, of whom nine are living and grown up; they are all most healthy persons. A young man, now twenty-three years of age, was perfectly cured when a child of between three and four years old, and has ever since been quite strong. A young lady, about twenty-five, daughter of a very respectable man in London, was cured thirteen years ago, and has enjoyed very good health ever since. A young man was cured about the same time as the last, and is now twenty-five, a very fine healthy person. I visited the above individuals, and each one told me of several other cases of persons who had been patients of Mrs. Knight's at the same time with themselves, and were all, to their knowledge, cured permanently; and none could tell me of any instance of failure or relapse. Cases of cures of less standing, but equally certain and effectual, were very numerous. The marks and scars that I saw on these persons, showed that they had been severely afflicted; they all stated that they have now very strong health. My

* These observations prove the great difficulty which exists in recognising the existence of scirrhus, and consequently in deciding in so positive a manner on the question of its curability.

child has been under Mrs. Knight's treatment more than a year, and is now nearly cured, and a number of other patients have, to my knowledge, been cured by Mrs. Knight, during the time I have attended her with my child. This valuable secret is in the sole possession of Mrs. Knight, who is arrived at an age when she is very likely to die without making any disclosure; and without the communication of that skill and discrimination which she possesses (and which I believe to be necessary for the successful practice), the mere disclosure of the secret of the medicines she uses, would be only a part of the advantage that would arise from complete instructions being given to all medical practitioners, none of whom can now cure the scrofula at all. The secret has been in her family for a great number of years; but she has given it perfection, by finding out how to apply the peculiar medicines more successfully than her predecessors. Mrs. Knight has not communicated it to her children, because they have not had a medical education, and they would not be allowed to practise by the College of Surgeons. She was herself in practice long before their Act of Parliament was passed, or else she would not be allowed by law to do what no physician knows how to do. I would recommend most strongly to Parliament to direct an inquiry respecting this secret, that when its value is proved, as I know it can be, a purchase may be made, and all medical men instructed in it, for the public benefit.

"It would be a very good measure to reserve a portion of the revenue derived from the granting of patents, to accumulate and form a fund for the purchase of valuable secret inventions, like Mrs. Knight's, which are not likely to be disclosed by the inducement of any patent law, however complete; and also to reward individuals like Mr. Woolf, whose inventions have not come into use during the terms of their patent, but afterwards become of national importance.

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"Independently of the risk of such secrets being lost altogether, it is a great public loss to keep them locked up; for they cannot be extensively practised in secret, and the possessors must lay a very heavy tax on the little business they do execute in secret, with their own hands; also, the processes would be more likely to get improved, if they were made publicly known; and new applications of the inventions would be made, which are not done whilst they are kept secret. Hence, I think, that public purchases of many inventions should always be contemplated, and a fund should be provided for that purpose. There are many other inventions where a secure patent would be preferable to attempting to preserve secrecy, although a patent, under our present law, is not preferable. It is scarcely possible to practise some secrets to a profitable extent, for any length of time, without losing them in the end; for the precautions that must be taken to ensure the secrecy, must tend to cramp and limit the exercise of the invention so much, that only a small proportion of the profit can be realised, that might be made by an open use of it, under a patent, if it were secured by law and for a long term. The medical secret of Mrs. Knight is an instance of the pernicious tendency of secrecy; for although the secret has been safely kept in that family for the greater part of a century, they have taken every possible precaution, and by that care have so limited their practice, as to have only gained a very common maintenance by it; they have refused to send out medicines, for fear of analysis, but stand by to see them taken; they have employed no assistants to compound the medicines; and hence ten or a dozen patients at a time are as many as can be treated with success. Mrs. Knight has rarely had so many as she could have managed, because the better class of persons have a great aversion to a secret mode of treatment by a woman, and will not go into the inquiries that I did, as to its merits. Mrs. Knight's family never put the secret into writing, for fear of accident, and hence it has always been subject to be lost by the sudden death of the possessor for the time. Hundreds of valuable lives have been lost by the scrofula, and most excessive misery endured, which might have been avoided, if this specific had been made generally known to all practitioners thirty years ago; and probably it might be applied to other uses in medicine."—*Minutes of Evidence before Select Committee of the House of Commons on the law relative to Patents for Inventions. Printed June*, 1829. *Evidence of Mr. John Farey, Civil Engineer.*—p. 135.

Foreign Medicine.

HÔPITAL DES ENFANS MALADES.

A General Review of the Clinical Lectures, delivered by M. BAUDELOCQUE *during the three months of January February, and March, of the present year.*

Ataxo-adynamic Fever cured by Tonics—Small-Pox succeeded by Scarlatina, with gangrenous Inflammation of the Throat—Acute articular Rheumatism rapidly cured without sanguine Evacuations—Pneumonia cured by Diaphoresis—Erythematous Laryngitis resembling Croup—Pneumo-Thorax—Diseased Liver resembling Phthisis Pulmonalis.

Ataxo-adynamic Fever—Exasperation of the Symptoms under the Influence of Antiphlogistics—Cure obtained by the Tonic Treatment.

MILLET, a boy, eight years of age, of weakly constitution, admitted on the 6th of March, was attacked, on the 26th of February, without any apparent cause, with pains in the head and abdomen, attended with general depression, moroseness, and loss of appetite, which symptoms soon assumed a severer character, and were followed by vomiting and delirium; epistaxis supervened, and the sense of hearing became considerably impaired. Leeches were applied over the epigastrium, and behind the ears, also blisters to the lower extremities, without any improvement to the state of the patient, but rather aggravation of the nervous symptoms after each application of leeches.

On the 7th of March, decubitus on the right side, flexion of the limbs, paleness and emaciation of the face, stupor, idiotish smile, vague delirium, screaming, incoherent answers, dryness of the nares, pupils slightly dilated and contractile, dryness of the tongue and lips, excessive thirst, abdomen collapsed and painful on pressure, constipation, involuntary discharge of urine, skin warm and dry, pulse 140, small; respiration 24 in a minute, râle sibilant.

Treatment. — Lemonade, laxatives, and emollient fomentations.

From this to the 12th, great amelioration of all the symptoms. Milk and broth allowed.

On the 18th, a relapse, brought on from imprudence; violent relaxation of the bowels; stools of a light yellow; delirium and intense fever. Sinapisms to the feet.

28th. Great improvement; intelligence restored; tongue moist; return of appetite. Nourishing diet.

From this time the symptoms gradually diminished, and the patient by the end of April had perfectly recovered.

The above case illustrates the impropriety of the strict use of antiphlogistics, especially of sanguineous evacuations in cases of low malignant fever. In this instance the symptoms were greatly aggravated by such treatment, and the patient reduced to the lowest stage of debility and emaciation. No sooner, however, was a strengthening plan adopted, than the patient progressively recovered.

Variola and Scarlatina supervening simultaneously in a Patient afflicted with Purpura Hæmorrhagica — Gangrenous Inflammation of the Throat, unaccompanied with Pain—Death—Necropsy.

Basquyre, a boy of strong constitution, aged 13, was attacked in the middle of January last with purpura hæmorrhagica, which did not prevent him from pursuing his usual occupations, until the 8th of February, when he was seized on getting up in the morning with shiverings, succeeded by heat and fever, general uneasiness, cephalalgia, pains in the limbs, and in the lumbar region. In the course of the day bilious vomiting came on; and the next day dry cough, pain in the right side, and diarrhœa supervened.

On the 10th he came into the hospital with the following symptoms: decubitus on the back; great depression; redness and tumefaction of the face, eruption of papulæ over the body generally; scarlatine redness of the superior extremities; confluent patches of purpura on the neck, upper part of the trunk, and on the thighs; skin warm; pulse 124, regular and small; respiration 32; lips dry and chapped; breath fœtid; thirst excessive; anorexia; no vomiting; three liquid and bloody evacuations by stool; incessant dry cough, without any cause detectible by auscultation or percussion.

(℞. Ipecacu. gr. xxiv., ant. tart. gr. j., to be taken at two doses. Mucilaginous drink,

emollient clysters, fever diet.) This medicine produced copious vomiting, and liquid alvine dejections.

12th. The variolous eruption has partially subsided; papulæ of the face are scarcely visible; some vesicles upon the arms present distinctly the central depression. The scarlatina has assumed a violet hue; purpura unchanged; no pain in the abdomen; no nausea or vomiting; other symptoms much the same. Pulse 120; skin rather warm, and great depression. (Decoction of cinchona, four pints, two drachms of the julep of acetate of ammonia; broth diet.)

In the evening great agitation and violent delirium, lasting for the greater part of the night, then followed by excessive drowsiness.

On the 13th somnolency; cadaverous hue of the head, neck, and fore-arms; neither of the eruptions can be distinguished on any of those parts. Orthopnœa; respiration 60; voice extinct; breath horribly fœtid; pulse small, thready, 184. The limbs still retain their warmth. (Blisters to the lower extremities.)

The patient gradually sinks, and in three hours falls a victim to this disease.

Necropsy.—The amygdalæ, velum palati, pharynx, and internal surface of the larynx, covered with a layer of brownish sloughs, exhaling a gangrenous odour; the parts underneath are of a violet hue; around the glottis, and on the tongue are found some variolous pustules; the trachea and its ramifications contain a greyish fluid, also of a gangrenous smell, and their mucous membrane presents patches of ecchymosis. No remarkable appearance either in the lungs, pleuræ, or heart. Mucous membrane of the stomach covered with a multitude of small ecchymoses, resembling the stains of purpura on the skin; small intestines contain a greenish fluid, several lumbrici, also a few patches of ecchymoses. The glands of Reyer are prominent, greyish, and reticulated; cæcum and transverse arch of the colon contain hard fæcal matter, and two or three ecchymotic patches about the size of a sixpence; liver of a light yellow colour, and bladder distended with a great quantity of urine mixed with blood; contents of the cranium healthy.

This boy was of a strong constitution, and from the account given by his relatives, no clue could be obtained to the attack of purpura, which preceded the invasion of small-pox and scarlatina. The two latter presented nothing remarkable in their premonitory symptoms, but the progress of their eruption was very irregular. Such a combination of two febrile exanthemeta is at all times extremely unfavourable, and proves almost invariably fatal in the Hôpital des Enfans, where it has repeatedly occurred. The gangrenous state of the throat could not be ascertained during life, owing to the impossibility of exploring that region, and the absence of all pain, even during external pressure. It cannot be attributed to the inflammation of the pharynx and larynx, but ought to be referred to the general state of the patient; it was of the same nature as those sloughs on the back of the sacrum, taking place during typhoid fevers, and that gangrene of the mouth which manifests itself in children who have been long confined in hospitals, like the Hôpital des Enfans. In the majority of cases it is not preceded by symptoms of phlegmasia; the typhoid state of this patient was quite independent of any alteration of structure in the brain, or digestive apparatus; the former was found after death to be in a normal state, and the ecchymosis in the latter invariably accompanies purpura hæmorrhagica.

Acute Articular Rheumatism quickly subsiding without Sanguine Evacuations.

A boy, 14 years of age, who had previously enjoyed good health, was admitted on the 11th of March, complaining of a rheumatic affection of the left ankle and both knees, symptoms were heat of skin; pulse 120; tumefaction of the left foot without pain; swelling of both knees, with acute pain increased by pressure, or the slightest motion; tongue natural; thirst excessive; anorexia; pain in the right hypochondrium; bowels open for the first time for the last five days;—infusion of couch grass, (*chien-dent*,) white looch, with two drachms of the white oxide of antimony, frictions of soothing embrocations to the painful parts;—fever diet.

Under this treatment the rheumatic affection continued, alternately attacking the muscles and joints of the limbs, but with less pain in the left hypochondrium, though with some diarrhœa. (The white oxide of antimony ex-

hibited in a mucilaginous vehicle, the looch being discontinued to ascertain which of the two the latter symptom is owing to.) On the 18th, diarrhœa diminished, but rheumatic symptoms the same. (The above treatment suspended, and the employment of warm-baths substituted.) From this date to the 24th, the pains and stiffness of the limbs gradually subsided; skin and pulse natural. Owing to change of weather on the 25th he had a slight relapse, after this the symptoms gradually diminished, and he was discharged from the hospital on the 10th of April quite well.

The antimony in this case afforded no alleviation, the disease was left to nature, and was cured rapidly. Medical men are too fond of the repeated employment of blood-letting in these affections, thereby causing, in many cases, protraction of convalescence, and not unfrequently giving rise to serous infiltrations. Sydenham, who was blamed by his contemporaries for a predilection in favour of blood-letting, recommends four bleedings at most in the acutest stage of rheumatism; yet many practitioners of the present day are not loth to open a vein six or seven times in the course of a few days for these affections. Brady, in a letter to his friend Sydenham, says "In curatione rheumatismi frequentem phlebotomiam et largâ manu celebratam tanquam necessariam proposuisti. Quærerem ego an non rejectâ tam severâ et tam crudeli methodo, alia non humani sanguinis adeo prodiga, nec minùs certè inveniri possit."

GENERAL RULES FOR THE PRESERVATION OF HEALTH.

Air.—Exposure to cold and damp air is to be carefully avoided. Cold is the commonest cause of all diseases, and the greatest source of mortality.

Dress.—The clothing should be suited to the state of the weather, and always sufficient to keep the surface of the body moderately warm. Woollen or cotton dresses should be worn next the skin as a flannel waistcoat, drawers, and warm stockings. The habit of wearing this description of dress when once contracted must not be given up; but in warm weather a lighter description may be substituted.

Captain Parry's crew withstood intense cold by warm clothing. The head should be kept cool, and therefore a heavy wig, or a warm night-cap ought not to be worn. When the head is kept too warm in infancy and advanced age, there is a determination of blood to it; which induces hydrocephalus, vertigo or giddiness, apoplexy, or paralysis.

The warmth of the feet and lower limbs directs the blood to these parts, and diminishes it in the head. Damp rooms, beds, linen, of course, are to be avoided. Constriction or pressure on the neck, chest, or abdomen, causes determination of blood to the head, impedes the breathing, predisposes to chest complaints and apoplexy*. Tight lacing is the cause of spinal distortions in women, and other deformities which endanger their own lives, and those of their infants during parturition.

Sleep.—The old proverb, "early to bed and early to rise," &c., is invaluable. Eight or nine hours' sleep are necessary in this case, notwithstanding the axiom of the once celebrated Salernian school, "septem horas dormire sat est, juvenique senique." This is an error. Seven hours' sleep is too little for young or old.

Warm beds are extremely prejudicial to health on many accounts, and those which are hard or moderately elastic are preferable.

The head and shoulders should be moderately raised, and the best position is the right side, as it facilitates the passage of the contents of the stomach into the bowels, and affords free expansion to the lungs, a good respiration, and a sound sleep.

Either side is preferable to lying on the back. When a person of sedentary habit goes to sleep on the back, the respiration and circulation of the blood through the heart and arteries are impeded; the consequences of which will be disturbed sleep, sense of weight on the chest, called night-mare, unpleasant dreams, falling from precipices, &c., and determination of blood to the head, which always occurs when the breathing is embarrassed or interrupted.

* A German writer, named Fault, condemns breeches and trousers, on account of the pressure of their waistbands; and gravely advises mankind to substitute the Scotch kilt. The world, I think, will not agree to this.

Sleeping by day is contrary to nature and physiology, and hence such repose is disturbed and unrefreshing; it is not sweet, sound, and invigorating.

When an individual sleeps after dinner, he is nervous, debilitated, has taken too much food, or is predisposed to apoplexy.

Sleep is very much disturbed by late suppers, because digestion cannot be completed for two or three hours, the stomach is distended, the lungs cannot expand sufficiently, respiration is impeded, and the consequences described in the third last paragraph, night-mare, disturbed sleep, weariness next morning, lassitude and heaviness during the day, are experienced.

Loitering in bed after waking causes relaxation and debility.

Diet.—A strict observance of temperance establishes health, and prolongs life.

The plainest food, most simply prepared, is the best.

The red meats, as venison, beef, mutton, and hare are the most nutritious and easily digested, when the health is vigorous; but as they excite the pulse, and induce a slight degree of fever, they are improper for convalescents or valetudinarians. The white meats are less exciting, and hence called lighter, but they are not so nutritious as the former.

Fatty and oily aliments, as pork, geese, ducks, eels, fats, oils, cocoa, should be used sparingly, as they disagree with the nervous, bilious, and hypochondriacal.

Farinaceous aliment, as bread, potato, arrow-root, sago, tapioca, &c., are highly nutritious.

Mucilaginous aliments, as carrots, turnips, parsnips, cabbages, asparagus, afford very little nutriment, cause flatulence, and must be taken with pepper.

It is a popular and correct opinion, that aliments, which are relished by a healthy person, are generally wholesome.

The best mode of cooking meat is roasting; it is held that a pound of roast meat contains more nutriment than two pounds of boiled.

Fried or baked meats are objectionable.

Animal food should be masticated well, so as to mix it with the saliva, for if presented to the stomach half-chewed, it cannot be properly acted on by the gastric juice, and the result will be indigestion, flatulence, lowness of spirits, heaviness, tendency to sleep, &c.

When the teeth are bad, the meat should be cut very small, and broths, soups, and jellies substituted for it; as these contain much nutriment, and are presented in a state of semi-digestion, if I may use the term.

Ripe fruits are wholesome. Their excessive use causes numerous diseases in this country, and in the East and West Indies.

Drinks.—It is bad to drink freely at, or during dinner, as the gastric fluid will be too much diluted, and rendered unfit for dissolving the food in the stomach.

Water is the best drink, to which a glass of sherry or Madeira may be added. Toast water is also good.

Malt liquor is generally adulterated with stupefying drugs, and is injurious, unless in a small quantity. Home-brewed ale, the old *vinum Britannicum*, is a wholesome beverage. Table-beer may be used in moderation.

Spirits.—Whiskey, brandy, rum, and gin, &c., are useful in small quantities.

Wines.—Sherry, Madeira, or Port are the best, but others are good when relished. Two or three glasses at or during dinner are beneficial, by stimulating the stomach, and causing it to secrete gastric fluid more copiously. The French take wine at dinner, the English after dinner. The French are right.

Food should be taken to satiety, and masticated well.

It is bad to take exercise for two hours after a repast, as it impedes digestion.

Repletion, or over-feeding, is followed by heaviness, giddiness, lassitude, inclination to sleep, distension of the abdomen and flatulence.

Tea.—Black tea is a safe exhilarating beverage, but should not be taken too strong, or late in the evening. When used too freely, it causes nervousness, giddiness, want of sleep, trembling, agitation, anxiety, hypochondriasis, and melancholy. Tissot called a teapot, Pandora's box. Green tea is the most injurious.

Coffee, "the intellectual beverage," agrees with many much better than tea, and often relieves asthma when medicines fail. It may be used once a-day with advantage. The modern custom of taking tea or coffee shortly after dinner is good, as digestion is promoted by it. Late suppers are to be avoided, as they cause disturbed sleep, night-mare, predisposition to chest and head complaints. "Ut tibi somnus levis, sit tibi cœna brevis,"

is a good maxim,—a light supper ensures a tranquil repose.

Natural evacuations—Nature intends the bowels to act once in twenty-four hours, and that excrementitious matter should be of a deep yellow colour, and of proper consistence. When dark, black, green, white, or any other colour but the above mentioned, there is imperfect digestion, and a necessity for small doses of blue pill at night, and tonics during the day.

The urine should be evacuated whenever there is a desire, and always in the erect posture. The evacuation of the urine on either side or on the back is injurious, and may induce or aggravate diseases of the bladder and kidneys, which are the most distressing and fatal.

The urine may deposit sediments of various colours, red, white, black, green, yellow, &c. Of these the red is the commonest, it is composed of lithic acid, and is speedily corrected by soda water, magnesia, or lime water.

The white or yellowish-white sediment consists of phosphates or alkaline salts; and is corrected by proper doses of diluted sulphuric, nitric, or muriatic acids.

These sediments may be of frequent or rare occurrence, and may alternate very often. They are caused by deficient digestion, and may come on suddenly.

Exercise.—Exercise is as essential to health as air, food, or raiment; it circulates the blood throughout the whole body for the nourishment of all parts. Walking is the best mode of exercise. A sedentary life is the bane of millions, and the prolific source of a variety of diseases. It causes indigestion in all its Protean forms, lowness of spirits, confinement of the bowels, determination of blood to the organs in the head, chest, and abdomen. Exercise for an hour or two daily should be taken in the open air, or when the weather is unfavourable, in a chamber, by walking up and down. Exercise in the country, or that afforded by gardening, is recommended in preference to all other kinds, by physicians and poets, as we find in the works of Homer, Horace, and Virgil.

" Fortunatus est ille deos qui novit agrestes,
Panaque, Sylvanumque senem, nymphasque sorores."

Cicero walked for an hour or two daily; Hippocrates, Celsus, Galen, Pliny, and a host of others, attained considerable longevity by exercise, and especially by walking.

The intellectual faculties, the passions, the mind ought to be regulated so that there may be

" Mens sana in corpore sano."

The extremes of temperature in warm climates must be carefully avoided by Europeans. So also the free use of fruits, acids, &c., which induce bowel complaints, bilious attacks, spasms in the stomach and bowels, cholera, yellow fever, &c.

" In medio tutissimus ibis."

The observance of the foregoing rules will secure health, and leave little to be done by medicine.

" —— Servare modum, finemque tueri,
Naturam sequi."

MEATH HOSPITAL AND COUNTY OF DUBLIN INFIRMARY.

The annual competition for the Clinical Prizes in the medical department of this Institution was held on the 3rd of May, when the following gentlemen were declared the successful candidates by Dr. Graves:—

First Clinical Prize—Mr. King Elison, of Liverpool.

Second Clinical Prize—Mr. James Johnson, of Lancaster.

Third Clinical Prize—Mr. Andrews, Belfast.

The Clinical Certificates were granted to Messrs. Berthon, Sullivan, Parkes, Clarke, &c.

The public examination for the stethoscopic prize, given by Dr. Stokes, was then proceeded with, when the following gentlemen appeared as candidates:—Messrs. Aldridge, Berthon, Clarke, Elison, and Parkes.

On the termination of the examination, three of the candidates were found so nearly equal in answering, that it was determined to hold another examination, in order to award the prize. The three gentlemen, whose answering was so excellent, were Messrs. Elison, Aldridge, and Berthon.

At the adjourned examination, held at Dr. Stokes's house, in which every stethoscopic sign, as well as those afforded by percussion and mensuration, were required, Mr. King Elison, after a most arduous and close contest, obtained the prize.

THE
London Medical & Surgical Journal
Saturday, June 7, 1834.

PATENT MEDICINES AND NOSTRUMS.

THERE will be found in another part of this number a very singular extract from a volume of Parliamentary Papers, which is not within the reach of the general reader. We allude to the extract from the evidence of Mr. Farey before the Select Committee upon Patents in the year 1829. Mr. Farey is a gentleman well known as an eminent practical civil engineer, who is intimately acquainted with the law of patents. There are few unprofessional persons, to whose judgment and discrimination we would pay greater deference, even upon a medical subject. Some of our professional readers may perhaps have opportunities of investigating the nature of Mrs. Knight's treatment of scrofula, and her supposed specific for its cure, to whose beneficial effects Mr. Farey has borne testimony. Mr. Farey is, however, plainly mistaken in his notions of medical law, as it affects Mrs. Knight's practice.

How far it is possible or advisable to check the trade in medical secrets, or nostrums, and in patent medicines, is a question upon which some difference of opinion is entertained. It is a matter which must occupy the attention of the Parliamentary Committee, and we conceive it may be of some service to direct its attention, and that of the profession, to a document in which very material evidence upon patents in general and upon secrets in trade is to be found. We refer to the report already alluded to.

We shall extract from this interesting volume such portions as bear more immediately upon medicine.

It appears that the following parliamentary rewards have been given for medical discoveries since the year 1788:—

To Dr. Jenner, for promulgating his discoveries of the vaccine inoculation in 1802, a reward of 10,000*l.*, and in 1807 a further reward of 20,000*l.*; and to Dr. Smyth, for his discovery of the nitric fumigation to prevent the communication of contagion in 1813, the sum of 5,258*l.*

In the appendix of cases in the law courts, the first that relates to medicine is Newbery against James in 1816. This was the case of the celebrated fever powder of Dr. James, for which a patent was obtained in 1747. Dr. James, the grandfather of the defendant, made agreements with Mr. Newbery, the father of the plaintiff, in 1747 and 1755, that Dr James, his executors, &c. should exclusively prepare the medicine for Mr. Newbery, his executors, &c., who should exclusively have the sale. Those agreements were to continue for an indefinite period, and had been acted upon till very lately. Upon an application to dissolve an injunction Lord Eldon observed:—"The patent for the fever powder is long expired, and it is required to enforce an agreement, by which the parties, independently of that patent, covenanted not to sell the patent article, except through each other's hands. The specification ought to enable all the world now to use the invention." His Lordship dissolved the injunction.

The next case is Williams against Williams, which was an application to dissolve an injunction to restrain the defendants from divulging the secret composition of certain medicines for curing diseases of the eye, and from selling the medicines. In this case, the plaintiff stated that he was sole owner of the recipes of the medicine, and that he communicated the secret to

his son, and put him in possession of his stock, with the intention of taking him into partnership when of age. The son declined the partnership, and threatened to expose the secret. In answer to the allegations of his father, he stated that he had been instructed in it in early life by his mother, who had derived the secret from another, and had communicated it to her husband, the plaintiff. Lord Eldon observed, that so far as the injunction went to restrain the son from communicating the secret upon general principles, he did not think the Court ought to struggle to protect this sort of secret in medicine. The Court is bound to protect patentees, but that is because they have published their secrets. The injunction was dissolved.

The next case referred to is Canham against Jones, which was an application to restrain the defendant from making and selling a medicine called "Velno's Vegetable Syrup," of which the plaintiff claimed to be the sole proprietor: but an injunction was refused.

The only other case we have to cite from the appendix to complete our list is Savory against Price. In 1815 Savory obtained a patent for making artificial Seidlitz Water. The specification gave three distinct recipes for preparing the ingredients, and then directed two scruples of each of the three ingredients to be dissolved in half a pint of water, in order to produce the imitation of Seidlitz Water. It appeared in evidence, that the three recipes were only common processes for preparing Rochelle Salts, carbonate of soda, and tartaric acid; and those three substances being used as directed, constituted the patent Seidlitz Powder. The specification did not give any name to the ingredients. Upon an action for an infringement of the patent, Lord Tenterden (then Lord Chief Justice Abbott) observed, that, by reading this specification, we are led to suppose a laborious process necessary to the production of the ingredients, when, in fact, we might go to any chemist's shop and buy the same things ready made. It was accordingly decided that the patent could not be supported.

Such is a concise account of all the cases we have found in the Appendix relating to medical secrets or patents. We shall resume this subject on another occasion.

STATE OF MEDICAL LAWS.

We have received a petition of Dr. Haycraft to both houses of parliament, which makes out a very strong case of individual hardship arising out of the condition of the existing medical laws. In our last number we alluded to this gentleman's case. He is a dissenter, and, in consequence, disqualified from admission into the English Universities. He has, however, taken his medical degree at the University of Edinburgh; and, under the sanction of that degree, in common with many eminent and useful members of the profession, he practises in England. Conceiving himself libelled in his professional capacity, he endeavours to seek redress by exposing the calumny; but, at last, through the dread of that costly experiment of ascertaining "what *is* law," by the result of a trial, he is obliged to discontinue his action, because serious doubts are ascertained whether a degree from an University possessing one of the best medical schools in the empire is sufficient, in England, to support an action for an injury done to the reputation of its possessor as a physician.

We sympathise with Dr. Haycraft upon the uncertainty, and more than probable

injustice, of the law, without at all entering into the merits of his action. But the evil has been so generally felt and acknowledged, that it would be useless to devote more of our space to one instance of its oppressive operation.

CHAIRS OF CHEMISTRY AND BOTANY AT OXFORD.

Dr. Daubeny, who has been for several years Professor of Chemistry at Oxford, has lately accepted the Botanical Chair at that University, in the place of a person who, in the words of the *Athenæum*, "unfortunately was not a botanist although a botanical professor; and, in whose hands the Chair became a nullity, and the botanic garden a wilderness." Such is the neglect with which this important branch of natural science has been treated at the first university of the kingdom, with its princely revenues and aristocratic students, that there is the utmost difficulty in raising funds for the renovation of the garden. Dr. Daubeny's well-known talents and liberality will undoubtedly do much for the restoration of botany in the University. But what a discredit to the arrogant pretensions of that learned body, to be compelled to disclose such humiliating details!

Of the Chair of Chemistry, and of the encouragement that science receives at the University, Dr. Daubeny will speak for himself.

"That entire devotion of mind to the pursuits of science which has enabled Rose, Mitscherlich, Stromeyer, and Thomson to reach the eminence upon which they stand, can hardly be looked to from the Professor *in this University*, who, unless he should be fortunate enough to possess some independent resources, must consent to regard the pursuit of chemistry as a subordinate object to that of medical practice; seeing that the most assiduous discharge of his duties as professor, the most felicitous mode of expounding the truths of science in his capacity of lecturer, and even the most signal success as an experimentalist, can never, under the existing regulations, enable him to realise from his professorship *a pittance sufficient to meet even the most moderate views in life**."

Review.

The Liverpool Medical Journal. Published monthly, under the Superintendence of an Association of Physicians and Surgeons, chiefly attached to the Medical Charities of Liverpool. No. II. June. Liverpool: W. Grapel. London: Henry Renshaw.

The favourable opinion we expressed of the first number of this periodical was fully warranted by the practical value of its contents, and those of the present fasciculus afford further confirmation of the fact. The contributors to the work are gentlemen extensively engaged in the practice of the healing art; and their communications bear internal evidence of actual observation at the bed-side. The editors display integrity, independence, and high talent; and their journal, in point of practical original communications, is second to none in these countries. It confirms the opinions we have repeatedly avowed in our pages, that "sound chirurgical knowledge" is not confined to the monopolists of modern Babylon. The prosecution of the study of the healing art in different countries has enabled us to observe, that there are zealous and eminent cultivators of medicine in all nations, and in all sections of nations; and this conviction led us to publish provincial, French, Irish, and Scotch lectures, whilst our sagacious contemporaries, long before us in the field, could never even allude to them. They have, at the eleventh hour, however, imitated our

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* An Inaugural Lecture on the study of Botany, &c. By Dr. Daubeny. London: 1834.

example in this respect; but, as yet, they have not condescended to notice the valuable periodical before us. We might expatiate on this theme, but compassion for imbecility restrains us. We allude to our hebdomadal rivals, not to our quarterly contemporaries, who, like ourselves, venerate science wherever it is to be found.

It would be unwise and impolitic on our parts to institute a comparison between the London Medical Journals and those published in such obscure places as Dublin, Edinburgh, and Liverpool; but truth and honesty compel us to remark, that we Babylonians stand in need of that co-operation, experience, and talent, which are pourtrayed in the pages published in distant and benighted parts of this kingdom. Here we have faction and party, jealousy, discord, and dissension, medical school against school, society against society, journal against journal,—opportunities the most extensive neglected in consequence of monopoly and incompetency,—all confusion. But we must pause, and turn to the work before us. We admire and esteem it, and anxiously wish that our hospital and dispensary brethren in this city would imitate the laudable example set to them. We are of opinion that every large city and town in the United Kingdom should contribute something to the advancement of medical science. Though we have expressed a most favourable judgment on our Liverpool contemporary, we must declare that, like every thing human, it is fallible. We shall give some examples.

Mr. Banner, our esteemed correspondent, gives, among many admirable and instructive clinical reports, the following, on which we must offer some remarks. In the first paper in the number before us, he details the following case of uterine hæmorrhage in the early months of gestation.

"Case 2.—Mrs. ——, aged 28, of delicate habit of body, married at the age of 19, had given birth to four living children, and had miscarried twice. She was delivered of her last child ten months previous to my visit; and was affected with a discharge of blood from the vagina, accompanied with slight, dull, aching pain in the back. She occasionally parted with small coagula: the discharge continued eleven days, sometimes more, sometimes less. It was on the 26th of the month that it first commenced; she had then gone eight or nine days beyond the usual period for the catamenial discharge; this discharge had been regular for some months previous to this, but finding on the present occasion, that it was excessive in quantity, and attended with greater pain than usual, she became alarmed. On my first visit (on the second day), the patient was restless; complained of heat of skin, and thirst. The pulse was quick; the discharge florid, small in quantity, but constant. She had parted with several clots and shreds, which had been thrown away. She had been employed in her household affairs, and had not made any alteration in her mode of living. She was desired to remain in the recumbent position; febrifuge medicine was ordered, with acid drinks.

"Symptoms continued with little alteration, and the patient became gradually weaker, until the tenth day, when I was called to her at 4 o'clock in the morning. The hæmorrhage had increased; the pulse had become more irritable; the patient more restless. Forty minims of laudanum were given, and cold affusion applied. The discharge shortly diminished, and the patient became tranquil and slept a little.

"7 A.M.—The discharge continues, though slight; irritability much abated. A cold enema was administered, which remained with the patient some time, and the discharge ceased entirely for an hour, when it again recurred.

"Enemata of cold water were administered every two hours; they had now, however, lost the desired effect; and at the time of voiding them (always attended with considerable tenesmus) several small coagula were parted with, and the patient complained of feeling distress from their use. The pulse, though very weak, was regular. Cold application continued to the abdomen and thighs, and small quantities of soda water given, to allay the vomiting which had now commenced.

"On the morning of the eleventh day, the physician and surgeons who were in attendance, finding the patient weaker, the pulse small, quick, and irritable, the breathing slow, and countenance anxious, administered two grains of solid opium, and repeated it every

two hours: three doses were given; the effect was to increase the pulse in strength, and reduce it in frequency: the discharge continued to flow, however, though in small quantity. The ergot of rye was now given in scruple doses, and repeated every fifteen minutes, until five doses had been given. Injections of ice water were thrown into the vagina at intervals. The effect of the ergot of rye was to produce a very slight increased action in the uterus, and with it an increase of hæmorrhage, with distressing vomiting. At noon the pulse was scarcely perceptible; there was great listlessness, with stupor, (probably from the effects of the opium,) occasional hiccough, and almost constant vomiting. By the frequent administration of injections of ice water, the hæmorrhage again decreased; nevertheless the patient began to sink fast. Brandy in small quantities was given; notwithstanding, the pulse could be felt only at intervals; the breathing was oppressed; the eye half closed, and glassy; the urine was parted with involuntarily, and hiccough became a frequent symptom. In this extremity an examination, *per vaginam*, was determined on. The finger was introduced with great caution; the os uteri was found dilated sufficiently for its admission: from within the neck of the uterus was hanging a fine membrane, which was adherent; this was gently disengaged; the uterus slightly acted. Ice water was again injected, and afterwards a plug was introduced. During the whole of this operation the patient was unconscious; the pulse could not be felt at the wrist, and the breathing was only observed by an occasional gasp. It was considered as the only chance of saving the patient, that the operation of transfusion should be performed, which was accordingly done, and the patient recovered. From the time the membrane was removed, the hæmorrhage ceased.

"In the case just related, there is every reason to suppose, that, had the hand been introduced earlier, the cause of the hæmorrhage would have been removed, and much suffering prevented; and though transfusion was the immediate restorative, yet had the membrane remained as the exciting cause, the operation would have been useless, as hæmorrhage would have, in all probability, again recurred. After the exciting cause has been removed, and the usual means for stopping the hæmorrhage tried, without producing the desired effect, syncope is the result, which must be considered as the last effort of nature to stay the hæmorrhage. It is a symptom, generally speaking, that can be regulated. It occasionally happens, however, that all efforts are ineffectual, and the patient sinks, unless we have recourse to the only remaining chance, namely, the operation of transfusion. So great a chance does the operation of transfusion give, that in all cases of hæmorrhage (the exciting cause having been removed), where the patient dies without its having been had recourse to, I should not hesitate to say, that *every* means within the surgeon's power had not been tried."

Were we consulted in this case we should have acted differently. The discharge of coagula would have convinced us that the case was one of abortion. The menstrual fluid does not coagulate, the fluid in this case did; therefore it was not menstrual. What was it then?—We answer, blood, which, under the circumstances of the case, was caused by abortion. The discharge occurred nine days after the expected menstrual period; but the patient might have conceived three days after the last period; and the hæmorrhage, in our opinion, arose from an abortion of one, two, three, four, five, or six weeks of utero-gestation. Were we consulted, we should have acted thus:—As the evacuation was sanguineous, and not catamenial, and as the patient was so young, we should, in the first instance, have instituted a vaginal examination, ascertained the exact state of the os uteri, given sedatives, and plugged the vagina. This treatment would have been preventive, at all events. If the ovum had not been expelled, hæmorrhage, or abortion, would have been prevented; and if it had, which might have been the case, no evil could have resulted by removing the plug or tampon, at the expiration of twenty-four hours, and then cleansing the vagina and os uteri by an alumnous injection. The plug, if judiciously and properly applied, would have caused coagulum, and arrested the hæmorrhage.

We are informed, that on the morning of the eleventh day the physicians and surgeons exhibited opium very freely as a stimulant. This was good practice under the existing

circumstances, but would have been unnecessary were our plan of treatment adopted. The ergot of rye was given when the vital powers were reduced to the lowest ebb, and consequently could have produced little effect.

When the patient was dying, ice water was injected, and the plug introduced. Both were employed too late, in our humble judgment. Lastly, transfusion was resorted to, and saved the patient's life. We conscientiously believe, however, that this valuable operation need not have been performed, had the practice we have recommended been employed. It is said, that had the *hand* been introduced earlier, "the cause of the hæmorrhage would have been removed." The introduction of the hand, under such circumstances, appears to us unjustifiable. The patient could not have been pregnant more than five or six weeks at most; and the introduction of the hand into the vagina must have been productive of great pain, and, in fact, no more than a finger could have been passed into the os uteri at this stage of utero-gestation. We request our readers to consider the size of the gravid uterus at the fifth or sixth week of pregnancy, and of the vagina under such circumstances.

We have thrown down the glove to more celebrated obstetricians than our Liverpool contemporaries on this point of practice; and they honestly acknowledged its untenability.

Suppose a membrane had been developed in the os uteri, how, we beg to inquire, could it produce such profuse hæmorrhage? Let the scientific reader remember the pathology of adventitious membranes of this extent, and then answer our question.

We have differed, *toto cœlo*, from the narrator of the preceding case, but we leave our profession to pronounce judgment. We are entitled to our opinion as well as Mr. Banner; and we consider ourselves fully as, indeed perhaps more, fallible than he is. Neither can we assent to the following conclusion:—

"Many remedies have been recommended, for the purpose of producing increased action in the uterus. The one at present most in use is the ergot of rye. That this medicine has the power of acting on the uterus, is proved by the assertions of many eminent individuals. Its effects, however, may be considered uncertain. I judge thus from the very contradictory reports we have of its powers. In the few opportunities I have had of witnessing its effects, the operation was most unsatisfactory and uncertain, particularly in that state of uterus which exists in abortion. The fact, that since its introduction, as a means of producing increased action in the uterus, there has been a great increase in the number of still-born children, ought alone to make men pause ere they administer it. This mortality may be accounted for by the violent action of the uterus, brought on by its use, before the passages are sufficiently dilated for the expulsion. So long as there is slight action in the uterus, this remedy seems to increase it; but where all action has ceased, it is more than useless; for the nausea and vomiting which it generally produces have the most distressing effects, and generally tend to weaken the patient. Although the fœtus, placenta, and membranes be thrown off entire, it sometimes happens that even here it is necessary to introduce the hand, and ascertain the cause of hæmorrhage."

We deny that the effects of genuine ergot of rye are uncertain. The fact is, that not one practitioner in a thousand is aware of the proper manner of keeping it. Eternal thanks to the London College of Physicians, who know nothing about it! their incomparable Pharmacopœia, which is super-excellent according to Dr. Paris, in his evidence at the House of Commons, is silent with respect to it! The result is, that the profession in general is unacquainted with its natural and medicinal effects; and hence the discrepant opinions on its value. We are, however, as convinced of its remedial effects as we are of opium or mercury; and we deny that its judicious use has increased the number of children. Neither can we assent to the doctrine, that "so long as there is slight action of the uterus this remedy seems to increase it, but where all action has ceased it is more than useless; for the nausea and vomiting which it generally produces have the most distressing effects, and generally tend to weaken the patient." It is well known that this remedy is now unfortunately used most criminally, and will irritate the unimpregnated as well as the gravid uterus, from the moment of conception.

In thus differing in opinion from Mr. Banner we intend him no disrespect, and we

beg to remind him, that doctors have disagreed from the beginning of the chapter. We leave the practical obstetricians to form their own conclusions. He quotes a case detailed by our able and talented friend, Dr. Malins, in support of his opinion, on which we must offer a comment.

Dr. Malin observes,—"I should be sorry to seem the too ready advocate of any kind of artificial interference in the practice of midwifery; but, as respects the introduction of the hand, multiplied experience has shown it to be generally effective; and, when cautiously and quietly performed, generally safe. The periods of gestation, also, to which it is applicable, should not be limited or absolutely defined, since more must evidently depend on the state of the genital passages, and the qualities of the operator, than on the number of months which the pregnancy has reached. The ill effects, attributed by Dr. Lee to this practice, may be considered to flow, not from its proper use, but from its abuse; either from recklessness and violence in its performance, or from subsequent neglect of means fitted to restore or preserve the tranquillity of the system."

Our friend does not appear to us to be sufficiently precise in his premises. If he means that the hand can be introduced with safety, in the generality of cases, in the early months of pregnancy (before the sixth month for instance), we cannot at all agree with him. Perhaps he means into the vagina, if so, a primoparous woman will suffer severely, or even most of those who have no children. A moment's reflection on the state of the genitals, and the development of the gravid uterus during the early months of utero-gestation, must, we feel assured, convince our valued and learned friend of the validity of our opinion. We can assure him, that one of the most renowned obstetricians in this kingdom, who entertained a similar opinion, on which we offered comments similar to the above, has admitted their validity and justness. We follow nature and observation; but we offer our opinions with diffidence and respect for those who happen to differ from us.

Here we must terminate our notice of our Liverpool contemporary for the present, but shall resume it. Did we not entertain a high opinion of its contents, we should not have expressed our sentiments so early or so freely. For both the gentlemen whose cases we have criticised, we entertain sincere respect; and if we differ from them with respect to the statements placed before us, it is with pain we do so; but, adopting the motto of the work in which they have written, which has long been our own, they will, we know, excuse us:

> "Amicus Socrates, amicus Plato, sed magis amica Veritas."

Both are well known as judicious and experienced practitioners; but, like all members of our and other learned professions, they cannot be surprised if some individuals differ with them in opinion.

Foreign Hospital Reports.

HÔTEL DIEU.

Wound by Laceration of the Palm of the Right Hand — Phlegmonous Erysipelas of the Fore-Arm and Arm—Energetic Treatment—Amelioration.

BY M. DUPUYTREN.

Jean Buteux, a printer, 48 years of age, of lymphatic temperament, had the palm of his hand lacerated by a fragment of a broken bottle. At the end of three days (21st April), having neglected the wound, the skin of the hand became red and erysipelatous. He was attacked with shivering, lassitude, anxiousness, followed by a pricking sensation in the part, and was at this time admitted into the Hôtel Dieu. The skin surrounding the wound was raised by the tumefaction of the subjacent cellular tissue, forming a hard and extensive tumour. The pain was pungent, and there was burning heat; pulse hard and frequent; cephalalgia, and considerable fever. M. Dupuytren proposed to obtain resolution, or, at all events, to diminish the abundance of the suppuration, to prevent the detachment of the skin, the formation of large abscesses, and termination by gangrene. A considerable number of leeches was applied, purgatives were exhibited, and a large blister placed over the erysipelas, which had already extended to the arm. These prompt and energetic measures gradually restored the arm to its natural size in two days; but the disease was too far advanced on the fore-arm; and, notwithstanding the active treatment employed, the phleg-

monous erysipelas terminated by suppuration. The surgeon then hastened to open the abscesses; he ordered the dressings to be frequently renewed, and the pus to be allowed to escape as soon as collected. He recommended methodical compression to be exerted over these parts, which as yet were in a state of engorgement, and some emollient decoction to be injected into the sinuosities of the abscesses. The fore-arm was kept in an elevated position. Besides this external treatment, acidulated drinks and emollient clysters were prescribed, and poultices applied to the affected part. From the beginning of the suppuration the fever was diminished, and the weakness which it had left behind had been combated by the tonic treatment. The same dressings were continued till the wounds were clean and covered with healthy granulations; after which light compresses with cerate were applied, and the wound kept covered as much as possible.

Fracture of the Ribs, with Laceration of the Lung, followed by Pneumonia—Cure.

BY M. SANSON.

Hivelin, coachman, 45 years of age, rather weakly constitution, was admitted on the 2nd of February. A coach had passed over the right side of his chest; at the moment of the accident he had fainted, and had remained in that state two hours on the public road, after which he was conveyed to an inn, and brought to himself by the usual remedies. On his admission into the hospital, the 3rd and 4th ribs of the right side were found fractured about their centre; respiration was short and frequent, producing acute pain about the region of the affected part; this was much increased by cough; countenance flushed and anxious; pulse full and frequent; no hæmoptysis since the accident. Copious blood-letting was had recourse to, resolutive compresses parti dolenti, and a bandage properly tightened around the body. (Mucilaginous drink, fever diet.)

3rd. Much pain on respiration; face flushed; skin hot; much thirst; pulse not so full, 110. The patient could not bear auscultation, but dulness of sound was ascertained on the right side; twelve ounces of blood were extracted.

5th. Respiration short and frequent; skin very hot; pulse small, hard, and quick; crepitous rattle at the seat of the fracture. Eight ounces of blood were taken immediately, and four to be repeated in the evening.

6th. Considerable hæmoptysis came on, mixed with sputa; tongue dry, much thirst; pulse small, from 120 to 130. Six ounces of blood were again taken from the arm.

15th. Several bleedings were necessary between the intervening days. Hæmoptysis gradually diminished; much sputa, indicating the second stage of pulmonary inflammation; pulse extremely small, but very rapid; life of the patient is almost despaired of. Blood-letting has been pushed as far as the system could bear it, and only one means remained to arrest the pneumonia, viz. tartarised antimony in large doses. Its efficacy, however, had only been ascertained in cases of spontaneous inflammation of the lung; its exhibition was thought to be of too doubtful result, and was therefore not resorted to.

M. Sanson confined himself to ordering a small quantity of chicken-broth. On the 19th the hæmoptysis had completely ceased; some diarrhœa supervened. 24th. Some amendment was perceived, and from this time to the 2nd of March, the symptoms gradually improved; the pain in the right side only occurred on coughing; the purulent sputa were very abundant; the appetite returned; and in the course of a fortnight the patient gained strength, and went out on the 24th quite cured but still rather weak.

Fracture of the Acromial End of the Clavicle.

A labourer, 33 years of age, of good constitution, came into this hospital on the 11th of April, for fracture of the clavicle, caused by falling and striking his right shoulder against a block of wood. Upon his admission, the signs of a transverse fracture were not to be easily detected, either by inspection or examination; but when the patient was told to carry his hand to his head, he could only accomplish it by bending the elbow, and leaning the head to the affected side. The integuments over the fracture were hardly raised by the point of the internal fragment, consequently there could be but little displacement. In the treatment of these fractures, says M. Dupuytren, Desault was the first to show, that it was not sufficient to draw

the external fragment backwards, but that it must also be raised, to be brought on a level with the internal one; he therefore constructed a bandage, which answers both these indications, and which is too well known to need any explanation; with its use five and twenty or thirty days are in most cases sufficient to produce consolidation. In this case it has already been applied eighteen days, but M. Dupuytren, having found that less consolidation than usual had taken place, has removed it, and applied it with greater care a second time.

EGYPTIAN SURGERY.

From a Report by CLOT BEY *of Cairo.*

Elephantiasis of the Scrotum.

THIS the author calls *œdemo-sarca*, from Severin. He operated for this disease on five individuals: in one, the tumour weighed 80 pounds; the testicles being diseased were removed at the same time. In another, the tumour weighed 60 pounds, and was complicated with two hydroceles; the testicles, however, were preserved. The third was also complicated with two hydroceles, besides inguinal hernia of the left side: these cases, together with the fourth, were successful; but the fifth was in a state of marasmus, and had several urinary fistulæ. The operation terminated fatally.

ROYAL COLLEGE OF SURGEONS.

NAMES of Candidates who received Diplomas during the month of May 1834.

Alfred Hudson	W. Bromwich.
Henry Johnston	Adare, Limerick
Thomas Chris. Hunter	E. I.
H. Chapman Green	Pentonville.
John Gayleard	———
William Smith	Worcester.
George Fred. Payne	———
Robert Edward Gage	Shefford, Beds.
Charles Barsham Wiles	Norwich.
Charles Henry Cornish	Taunton.
John Julius Dare	———
Henry Hayman	Axminster.
Alfred Temple	New Malton, York.
Trafford Holmes	Pocklington, York.
Fred. Josiah Burgess	Potter's Fields, Horsleydown.
Thomas Scatchard	East Keswick, York.
W. Lyndon Francis	Jersey.
Arthur Anderson	Army.
Isaac Harrison	Bardsey, York:
John Dawson	Stafford.
Thomas Fentern	Eyam, Derby.
Thomas Cowper	Indian.
John Arnold	Donaghadee.
Charles Morse	Great Portland-street
Frederick Caudle	Strand.
Richard Burdsall	York.
John Thumam	Lynn, Norfolk
Robert H. Williams	Manchester.
Robert Dent	Aylshaw, Norfolk.
Henry Victor Martin	Birmingham.
John Gormer Robinson	Colchester.
Frederick Bell	Terrington, St. John's.
George West Barnes	Gort, Galway.
Henry Gordon Gray	Newry.
Robert Henry Coulter	Cavan.
Thomas Harwood	Boston.
Isaac Guillemard	Hackney.
James Compigne Chase	Northampton.
Joseph Linton Mason	St. Ann's, Jamaica.
Francis R. S. Upjohn	Field Dalling, Norfolk.
E. Bamfield Gardner	Cariscross.
William Harris	Swansea.
John Bird	Exeter.
James Bates	Halifax, York.
Frederick Davies	Wells, Somerset.
Solomon Smith	Halifax.
Joseph Collingwood	Corby, Lincolnshire.
James Taylor	London.
Richard P. Tucker	Exeter.
Nathaniel Collyer	Gislingham, Suffolk.
John Duncan	Aberdeen.
Samuel Sproule	Stabane.
Edward Pope	Chippenham.
Alfred Lochee	Craigs Court.
William Clapham	Thorney.
Frederick R. Hitch	Melborne, Cambridge.
Henry Trant	Leeds.
Frederick Yate	Madeley, Salop
William Kennard	Chatham.
Thomas D. Maybury	Killanny.
James O'Brien Barry	Newcastle, Limerick.
James James Barry	Newcastle, Emblin.
W. Aston Murray	Ballybay, Monaghan.
Stewart Clark	Castletown, Bremar.
Christopher Peter Bodkin	Galway.
Philip Stoneham	Ilfracombe.
Robert Gardiner Hill	Lincoln.
Francis Freeling Hart	Harwich.
John Brookes Williams	Tetbury.
W. Alex. Tuach	Bermondsey.

John Caldwell	R. N.
Patrick J. Kelly	Baltimore.
Paul Jackson	Newark.
Howard Hooper	Nova Scotia.
George Seymour Dixon	Walsingham, Durham.
John Smyth Glover	Dublin.
Henry Clapton Barnard	Hereford.
Samuel Atherton	St. Helen's Lancashire.
Robert H. Crisp	Peterborough.
Robert Kirby	Knaresboro.
John Scott	Barnstaple.
William Clark	Limerick.
Henry Bowen	St. Albans.
William Samuel	Llandilo.
Edward Mulberry Hodden	Canada.
Nathaniel Taylor	Caledon, Tyrone.
Henry Chambers	London.
Robert John Cropper	Louth.
Webster Adams	Needham Market.
Thomas Dixon Jackson	Settle, York.
Fred. Fowke	Radnorshire.
Arthur Wellington Thurmal	Cambridge.
Fred. Yeomant	Llangadock.
Robert Whitmore Clarke	Woolwich.
Henry Brand	——

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification on Thursday, May 29th.

William Bennett	Barton upon Humber.
Thomas Samuel Cotterell	Hinckley.
Charles Dodd	Northampton.
Luke Evans	Manchester
Robert Stone	Oxford.
James Keys Parkinson	Hoxton-square

BOOKS.

A Series of Anatomical Plates in Lithography, with References and Physiological Comments, illustrating the Structures of the Different Parts of the Human Body. Edited by JONES QUAIN, M.D., Professor of Anatomy in the University of London. Fasciculus XIII. Taylor.

The Principles and Practice of Obstetric Medicine, in a Series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children. Illustrated by numerous Plates. By DAVID D. DAVIS, M.D., Professor of Midwifery in the University of London. Part XXXII. Taylor.

The Surgical Anatomy of the Arteries of the Leg and Foot, being the continuation of Mr. Dermott's large plates, highly coloured, and the size of nature.

The plates are remarkably well executed, and the cheapest we have seen.

Ossa Humana; or the Bones of the Human Body, drawn from Nature. By R. B. CUMMING, Pupil of St. George's Hospital. Royal 4to. Two Plates. London, 1834. Sustenance.

The representations are accurate, and the lithographs well executed.

Physiognomy founded on Physiology, as applied to the various Countries, Professions, and Individuals: with an Appendix on the Bones at Hythe—the skulls of the ancient inhabitants of Britain, and its invaders. By ALEXANDER WALKER, formerly Lecturer on Anatomy and Physiology at Edinburgh. Illustrated by Engravings. 8vo. pp. 286. London, 1834. Smith, Elder, and Co.

A very curious and instructive work, which abounds with matter interesting to the reading part of the public.

METEOROLOGICAL JOURNAL.

MONTH. May, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
29		55	65	55	29·85	29·81	58	59	N.	S.S.W.	Fine	Fine	Cloudy
30	☾	60	64	49	29·84	29.93	59	60	N.N.E.	E.	——	——	——
31		58	72	55	29·97	29·97	60	59	E.S.E.	S.S.E.	——	——	Fine
June 1		63	72	57	30·04	29·98	59	57	S.S.E.	S.E.	——	——	——
2		68	75	63	29·92	29·85	55	53	S.	S.S.W.	——	——	——
3		71	73	57	29·78	29·75	53	58	W.	S.S.W.	——	Cloudy	——
4		67	68	55	29·72	29·54	58	61	S.W.	W.S.W.	——	Fine	Rain

The quantity of Rain fallen in May was $\frac{92}{100}$ of an inch.

50, *High Holborn*. WILLIAM HARRIS and Co.

ALL Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 124. SATURDAY, JUNE 14, 1834. Vol. V.

LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE XCIII., DELIVERED APRIL 23, 1833.

Gentlemen,—*Wounds of the chest.*—When you consider the important organs contained in the chest, you would hardly suppose it possible for a bullet or a sword to pass across it without inflicting a mortal wound. Yet recoveries from injuries of this kind are frequent, and this notwithstanding the cases were complicated with a wound of the lungs. Nay, facts are recorded, which leave no doubt, that even wounds of the heart itself are not always fatal, balls having been found encysted in the substance of the heart after death from other causes, long after the receipt of the wound.

When in respiration the air passes alternately into and out of a wound in the parietes of the chest, you know, of course, that the weapon must have penetrated beyond the pleura costalis. In the expansion of the thorax by the muscles of inspiration, the air enters the wound; in its contraction by the muscles of expiration, the air is pressed out in a more or less forcible current. When the communication between the cavity of the pleura and the atmospheric air is free and ample, the lung generally collapses, unless prevented by adhesions; and the knowledge of this circumstance led to the belief, that if direct openings were made simultaneously into both cavities of the pleura, the patient would inevitably die of asphyxia produced by the collapse of both lungs. Experience proves, however, that this is not the fact, and that recoveries may follow wounds penetrating the two sides of the chest, even where the admission of air to the cavities of the pleura is free and direct. Now, gentlemen, there are three chief sources of danger in all examples of penetrating wounds of the chest.

1. You have the risk of profuse internal hæmorrhage, by which the patient is sometimes destroyed at once; or by which he is more slowly cut off, generally in consequence of the extravasation in the pleura producing too much pressure on the lungs, or becoming combined with inflammation of those organs.

2. Then, gentlemen, other patients fall victims to inflammation within the chest, without any effusion of blood, though sometimes the inflammation is followed by abscess, or, as it is here called, *empyema.*

3. Another cause of danger, gentlemen, where the lungs are wounded, is *emphysema*, or the inflation of the cellular tissue, sometimes of the greater part of it throughout the body, occasioned by the influence of the alternate expansion and contraction of the chest in respiration. The expansion, or act of inspiration, draws the air first from the breach in the lung into the cavity of the pleura, and thence it is propelled into the cellular membrane adjoining the wound in the side, by the diminution in the capacity of the chest in each expiration. In other words, each inspiration draws it out of the rent in the lung into the cavity of the pleura, and each expiration pumps or compresses it out of that cavity into the cellular tissue, for it cannot return into the air cells, on account of their being already full of air themselves.

The symptoms of *a wound of the lungs* are, bloody expectoration *immediately* after the receipt of the injury, great difficulty of breathing, a feeling of suffocation, and a sudden alteration of the countenance, in which you will remark paleness and anxiety. Here the immediate danger is either from the quantity of blood, withdrawn from the circulation by internal hæmorrhage, or from the passage of that fluid into the bronchiæ and air-cells of the lungs, or into the cavity of the pleura, so as to cause suffocation. Hence wounds of the root or upper part of the lungs are always the most dangerous.

With regard to the *treatment of wounds of the chest*, I may observe, that it is a general rule to close all such wounds without delay. You ought, however, to extract any splinters of a broken rib, a ball, a portion of the clothes,

or any other extraneous substances which lie near the surface, and can be easily reached without too much irritation of the parts. With respect to *a wounded intercostal artery*, all the best modern practitioners disapprove of the introduction of various instruments and contrivances into the wound or chest for the suppression of the bleeding. Dr. Hennen had heard of examples, in which the intercostal artery was taken up with a tenaculum. But supposing this were not practicable, I believe that less danger would arise from closing the wound and applying a compress over it, than from the introduction of extraneous substances round or within the rib. I have lately been attending a young gentleman, one of whose intercostal arteries was wounded by a small knife. The result was a prodigious effusion of blood under the muscles of the back, followed by large collections of matter, and very urgent danger; but in the end the boy recovered. No attempt was made to secure the vessel. About eight ounces of blood flowed out of the orifice of the wound directly after the accident; the outward hæmorrhage then ceased, but the blood accumulated in the cellular tissue; great swelling ensued, and in about eight days such a quantity of matter and putrid blood was suddenly discharged from the external wound, that the patient lay in a kind of pond, extending from his feet to his neck. Incisions were occasionally practised to facilitate the exit of the matter. It was some months before the discharge ceased, and the wound closed. Leeches and venesection were also freely employed in the early and inflammatory stage.

In all penetrating wounds of the chest, and especially those extending into the lungs, the free use of the lancet is the only thing which can be depended upon in the beginning of the treatment. It is by this means that internal hæmorrhage is to be checked; and the inflammation of the lungs is to be prevented or subdued. Here, as in certain injuries of the head, moderate bleeding will not suffice. You may perhaps be required to bleed the patient more than once a-day for six or eight days in succession. The first bleeding should be copious; and, if the patient faint, you should not give him cordials, but allow him to revive gradually without them.

When the oppression of breathing returns, and the pulse rises, accompanied by pain in the chest, and spitting of blood, venesection should be performed again; and thus the lancet is to be used as often as the state of the circulation, the pain and oppression of breathing, or other circumstances call for it. If you neglect this rule, you are certain of losing the patient.

When the paroxysms of pain, the sense of suffocation, and the internal hæmorrhage are lessened, but the cough is severe, you may prescribe digitalis, or hyoscyamus, with small doses of the acetate of morphia, and saline medicines.

When much cough and pain in the chest continue, after bleeding has been carried as far as practicable, a blister may often be applied to the chest with great benefit; and, perhaps, leeches, or cupping, might yet be ventured upon, though venesection itself were not any longer proper.

When matter forms in the cavity of the pleura, after a wound of the chest, constituting empyema, or when the extravasation of blood in the chest causes urgent danger by its pressure, the indication is to make an outlet for the discharge of such fluids; but, if the wound should not be closed, you ought to avail yourselves of the opening already existing for this purpose; and, with this view, direct the patient to lie in a posture that will render the wound depending.

In former days, gentlemen, when blood was extravasated in the chest, surgeons used to make themselves particularly officious about its evacuation, sometimes using tubes and syringes for the purpose. But, at present, we never hear of such schemes in actual practice, to which they are little suited. This part of surgery, gentlemen, may sometimes be attended with a great deal of perplexity; for you have two dangers to contend against,—one is that of letting the patient die of suffocation from the pressure of the blood on the lungs and diaphragm, if no opening be made for its discharge; the other is that of seeing him fall a victim to continued hæmorrhage if such opening be made. I believe, however, that the experience of all the best army surgeons, who are the most experienced judges of this subject, will justify me in saying, that you will generally act with most prudence when you do not hastily adopt schemes and contrivances for discharging blood from the chest, but rely upon rigorous antiphlogistic treatment. The diagnosis also is rarely so clear, with regard to an extravasation of blood, as to justify the performance of an operation for its evacuation. At all events, you should not be in too great a hurry to make an opening in the chest, but give nature an opportunity of doing her best, under the assistance of the treatment which I have advised.

Sometimes wounds of the chest are complicated with protrusion of a portion of the lungs: one such case was brought to me at Brussels after the battle of Waterloo. The protruded piece of lung was of a long, narrow, tongue-like form, and severely contused. The wound had been made with a lance. I thought at first of cutting the protrusion off, but the bleeding made a ligature more safe. The patient, I believe, did not ultimately recover.

Emphysema, or the inflation of the general cellular tissue, is more frequent after a fractured rib with wounded lung, than after a common penetrating wound of the chest, because the air has no outlet, the skin being entire.

The symptoms of emphysema are great oppression of the breathing, inability to lie

down, or a preference to an upright or sitting posture; a colourless, elastic, crackling tumour, beginning near the wound or fractured rib, and often extending with great rapidity over the body, so as to cause sometimes an enormous distension of the cellular tissue of every part and region. The chief cause of danger, however, is not this diffusion of air in the common cellular membrane, but its insinuation into the interlobular cellular tissue of the lungs, and its accumulation in the cavity of the pleura, two circumstances causing a perilous obstruction of the function of respiration. Emphysema is also frequently combined with the danger depending upon inflammation, effusion of blood, or lodgment of foreign bodies in the chest.

The treatment varies according to the degree of emphysema, and the urgency of the symptoms arising from it. In slight cases, it may be sufficient to make a few punctures, in the swelling, near the wound, or over the broken part of the rib. These will prevent the air from extending itself widely; but, as I have said, this is not the chief danger. The risk proceeds from the accumulation of air in the cavity of the pleura, a state indicated by a metallic tinkling sound, compared to the dropping of shot into a porcelain basin; and, therefore, when small scarifications do not give relief, and there is reason to believe that air is confined in the chest, you should make a deeper and freer incision over the broken part of the rib, or enlarge the original wound, and puncture the pleura costalis.

Slight scarifications and a bandage round the chest will tend to prevent the increase of emphysema in the common cellular membrane: and may indeed be of important utility in hindering its extension into this texture so far as to reach the interlobular cellular substance of the lungs. Yet, in more aggravated cases, I believe with Baron Dupuytren, they are inefficient means, and that the pressure of the bandage really makes the state of the breathing worse. In urgent or rapidly increasing cases, therefore, I believe, the most prudent plan is to make an incision, and then cautiously puncture the pleura costalis.

In cases of emphysema, the place for the incision and puncture is determined by the fracture, or original wound, where the air first escapes from the chest; but, when the intention is to let out blood, water, or purulent matter, you divide the integuments over the space between the sixth and seventh ribs, where the indigitations of the serratus major anticus meet those of the obliquus externus, and cautiously puncture the pleura.

No surgeons of common sense ever think of plunging a trocar into the chest, or performing paracentesis; a proceeding so much spoken of in old works on surgery. When you make an incision, be sure to let it be away from the lower edge of the rib, where the chief branch of the intercostal artery runs.

Diseases of the Breast.—Gentlemen, I believe, we have no better classification of the diseases of the breast, than that adopted by Sir Astley Cooper; namely,

First, into diseases, which are *the result of common inflammation*, whether it be *acute*, or *chronic*.

Secondly, into complaints which arise *from peculiar* or *specific action*, but which are *not malignant*, and *do not contaminate other structures*.

Thirdly, into those, which not only *consist in local, malignant, and specific actions*, but which *are connected with a peculiar and unhealthy state of the constitution*, and affect with similar disease, besides the part originally attacked, others in the neighbourhood, and even sometimes remote parts.

The first class of diseases comprehends:

1. *Acute inflammation* of the breast, and the *milk abscess*.

2. *Chronic inflammation*, terminating at length in *suppuration*.

3. The *lacteal tumour*, so called by Sir Astley Cooper, on account of its arising from obstruction of one of the lactiferous tubes, as an effect of chronic inflammation. I will first speak, gentlemen,

Of Acute Inflammation and Milk Abscess.—You know perfectly well that women, during the period of suckling, are particularly liable to inflammation and suppuration of the breast, whence the term *milk abscess*. The inflammation is of the phlegmonous kind, exhibiting all its usual characters; but, on account of the sensitive nature of the part, and the envelopment of it in a dense cellular or fascial membrane that does not readily yield to inflammatory swelling, the suffering is uncommonly severe. A solid swelling is produced, succeeded by a blush of inflammation on its surface, and at length a prominence and smoothness in one particular situation, where you will be able to feel the fluctuation of matter.

The most frequent cause of the *milk abscess* is the great determination of blood to the breast each time the child is about to suck, by nurses called the *draught*, combined with the mechanical irritation, to which the part is continually subjected. The origin of such abscesses is sometimes promoted by the child not being put to the breast soon enough after birth; consequently the breast becomes too full; and this state, influenced by the stimulating diet often pressed upon mothers by nurses, soon ends in acute inflammation.

If you meet with acute inflammation of the breast in its early stage, you may sometimes bring about resolution by employing cold evaporating lotions, leeches, and purgative medicines. Amongst the causes of this complaint, I have mentioned the mechanical irritation and disturbance of the breast in suckling. Hence, I always advise the mother not to allow the child to suck the inflamed breast; and, if it be necessary to draw the milk from it, re-

commend the use of a glass tube made for the purpose.

When an abscess cannot be prevented from forming, cold applications are to be discontinued, and emollient poultices and poppyhead fomentations substituted for them.

With respect to the question of opening the abscess, I may observe, that if the collection of matter be superficial, not attended with extreme pain, and quick in its progress to the surface, you may let it burst of itself; but when the abscess is deep, its progress tedious, and the pain severe, accompanied by much fever, the matter should be let out. However, even under these circumstances, it is rarely judged advisable to cut through a great thickness of parts, or to attempt to make an opening unless the fluctuation of the matter can be plainly felt.

Gentlemen, you will meet with some cases which are exceedingly obstinate, in consequence of several abscesses following one another in succession. Here the administration of opium and the sulphate of quinine will be found beneficial; and when a deep-seated abscess leads to the formation of sinuses in various directions, which continue to discharge matter for a long time, if they cannot be healed by pressure, you may follow Sir Astley Cooper's plan, which is, to inject them with a lotion of rose water, with every ounce of which two or three drops of concentrated sulphuric acid are blended, and apply the same lotion to the surface. Mr. Hey, of Leeds, was an advocate for laying open all sinuses of this kind; a painful practice, scarcely ever requisite, as far as my experience enables me to judge.

Chronic Abscesses of the Breast, I believe, occur chiefly in scrofulous constitutions, and are much less frequent than acute milk abscesses. The matter ought to be let out, and an attempt made to improve the general health by some of the plans mentioned in the consideration of scrofula. The state of the uterine functions should always be inquired into. They will often be found to be disordered, and then aloetic and steel medicines are indicated.

The *Lacteal Swelling*, as it is named by Sir Astley Cooper, is confined to the nipple, and consists of a large collection of milk in one of the lactiferous tubes, the aperture of which has been stopped up by chronic inflammation. It is a disease analogous to ranula. The swelling presents a distinct fluctuation; the cutaneous veins are large; but the colour of the skin is not changed. If a slight puncture be made it soon heals, and another accumulation takes place; or, if a small ulcerated opening form, a little way from the nipple, it continues during the period of suckling, and the milk, instead of passing into the child's mouth, is lost.

With regard to the treatment, gentlemen, a puncture of moderate size will suffice, if the child be weaned; if not, a larger opening must be made, so as to let the milk escape while the child is sucking, until the secretion of milk ceases, or the child is weaned. This is the advice given by Sir Astley Cooper.

I come now to complaints of the breast, arising from peculiar or specific action, but not malignant. Of this nature are the

Hydatid Tumours, as they are named by Sir Astley Cooper, and of which he gives an account of several varieties. Some surgeons prefer the name of *cystic sarcoma*, because the expression *hydatid* would lead us to suppose that the disease really contained, not adherent cysts, but detached globular ones, endued with separate vitality, independent of the texture in which they are formed.

This cystic sarcoma I have already noticed with other sarcomatous tumours. It is characterised by a tendency to increase to a considerable size; but it is not prone to malignant change, nor does it occasion any inconvenience, except what proceeds from its bulk. At first, it feels entirely solid, but after a time a fluctuation can be distinguished at certain points. The tumour is very moveable and pendulous. Sometimes the cysts ulcerate, discharge a serous fluid, and then heal, or even become obliterated. No local applications are of any service. If there be only one large cyst, and it be punctured, sometimes it will not fill again. The only reason for removing this kind of disease, when it becomes large, is to relieve the patient from the annoyance produced by its bulk. All the swollen and indurated parts must be taken away, for if you leave any small cysts behind, the disease will recur. The glands in the axilla are either free from disease, or only enlarged by irritation.

Then, gentlemen, you will also meet with *swellings of the breast consisting of globular hydatids*. They should have an incision made in them, and the bag extracted, after which the part will heal. The disease is characterised by a central fluctuation, a solid circumference, and freedom from tenderness on pressure. The disease is quite of an innocent nature.

The *Chronic Mammary Tumour*, as it is named by Sir Astley Cooper, is another case meriting your earnest attention. The substance of the female breast is liable to a slow kind of induration,—a swelling that grows from its surface rather than from its interior, and therefore seems to be superficial, except when it grows from the posterior surface of the breast. It is exceedingly moveable; not buried in the mammary gland, but only connected to its surface; not generally painful or tender when touched; its growth is slow; and its weight seldom more than from one to four ounces. It is not malignant, and often remains stationary for years, and then disperses. The disease seldom occurs in persons after the age of thirty.

The tumour, when taken out and examined, is lobulated, and at first view something like the mammary gland itself: this tumour has a cyst. The cause of the chronic mammary

tumour is generally sympathy of the breast with the uterus, producing great determination of blood to the part, but blows and the pressure of stays may sometimes excite it.

Alterative medicines may be useful. When the digestive functions are deranged give the compound calomel pill at night, with the infusion of calumba and rhubarb and carbonate of soda twice a-day. When the uterine functions are disordered, you may prescribe small doses of the blue pill, with extract of colocynth and steel medicines.

The tumour may also be dispersed by the internal and external use of iodine. The emplastrum ammoniaci cum hydrargyro is a common application.

The tumour does not require to be extirpated, nor, as Sir Astley Cooper observes, is it any impediment to matrimony, for, in fact, pregnancy and suckling rarely fail to make it disappear.

A scrofulous swelling of the breast is occasionally seen in young women, who have enlarged lymphatic glands under the jaw. In general, there is only one tumour, and it is exceedingly indolent. There is no disposition to malignancy, and of course it would be improper to have recourse to extirpation. The treatment is like that of scrofulous diseases in general.

I next request your attention to the *irritable tumour of the breast.* The breast is sometimes the seat of severe pain without any distinct or perceptible swelling. Such an affection might be called *neuralgia* of the breast, but occasionally you will find that, besides excessive pain in the part, there is also a tumour, composed of a structure unlike that of the gland itself, and which therefore appears to be a specific growth. When the glandular structure is the seat of it, one or more of its lobes become exquisitely tender, and, if handled, the pain will sometimes continue for several hours, extending to the shoulder, axilla, down the arm, and even to the side of the body.

When the pain is most severe, which is often the case prior to menstruation, the stomach frequently sympathises, and the patient is troubled with vomiting.

The *irritable* tumour is most common between the ages of 16 and 30.

Sometimes you will notice a distinct circumscribed tumour, highly sensitive to the touch, acutely painful at intervals, more especially just before menstruation, very moveable, often not larger than a pea, and rarely exceeding the size of a marble.

Although the disease may continue for years, it varies but little in size, hardly ever suppurates, but occasionally disappears of itself. In the account of sarcomatous tumours I have already noticed this disease under the name of *painful tubercle*, as affecting other parts.

The tumour, when taken out and examined, is found to be composed of a solid semi-transparent substance, with fibres interwoven with it; but, according to Sir A. Cooper, no large filaments of a nerve can be traced into it.

Equal parts of soap cerate and extract of belladonna may be applied, or a bread poultice made with a solution of the same extract. Or the part may be protected with a piece of oil skin, or hare skin. You may likewise apply leeches during the violence of the pain.

As internal remedies, you may try calomel with opium, and hemlock with purgatives. If the menstrual secretion should be interrupted, you may prescribe the mistura ferri comp. combined with aloes.

What has been termed the *ecchymosis, discolouration of the breast*, and is a morbid change, sometimes occurring in young women at the time of menstruation, preceded by severe pain in the breast and arm. The extravasation of blood makes its appearance as a large spot, with smaller and less conspicuous ones in other places. In general, after menstruation, it gradually disappears.

According to Sir Astley Cooper's views, the indications are

1. To render the menstrual discharge more regular than it often is in these cases, by means of steel medicines, and to support the strength with sulphate of quinine given with infus. rosæ comp.

The best local application is the liq. ammon. acet. with spirit of wine, five ounces of the former to one of the latter.

With respect to the *third class of diseases* of the breast, or the *malignant*, it comprises cancer and fungus hæmatodes, the nature of which I have already explained in former lectures.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

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LECTURE XXIII.

Diseases of the Nervous System—Causes of Variation of Symptoms — Organic and Functional Diseases—Neuroses—Question of Molecular Change in the Nervous Centres —Application of the Doctrine of Isomerism—Difficulties in distinguishing Arachnitis from Encephalitis — Partial Cerebritis—Lesions of the Muscular and Sensorial Functions—Comparison with those of Apoplexy—Preservation of Intellect in Cerebral Disease—Production of General Symptoms by Local Lesion.

GENTLEMEN,—To-day we commence the consideration of the diseases of the nervous system, and here let me remark, that even on the very threshold we have to encounter several difficulties, some depending upon the great obscurity of the symptoms, some upon the want

of correspondence between the symptoms and known organic changes, and some upon the necessarily imperfect nature of our classification of nervous affections. Many persons are in the habit of taking a limited view of the nervous system. They suppose, that, when we speak of its diseases, we merely allude to affections of the brain and spinal cord, but the truth is that the nervous system, so far as regards organisation, is universal; and there is evidence to show that, even in parts and tissues which present no appearance of nerves, or nervous communication, there resides a nervous power, either inherent in their organisation, or derived from external sources, and by the latter mode, of *nervous irradiation from surrounding tissues*, has the sensibility of serous membranes been supposed capable of explanation. But there can be little doubt, that even these tissues present nervous expansions, though of an infinite delicacy. They are, we know, supplied with white vessels, and doubtless have nerves corresponding to their vessels in size and function, — nerves, insensible to us in health, but, when inflammation elevates the organ in the scale, capable of transmitting the most exquisite pain to the centre of perception. It seems, also, to be highly probable, that nervous disease may commence not only in an affection of the brain or spinal marrow, but also in a similar condition of any part of the system. Again, if we admit the nervous system to be the governing and directing portion of the whole body, it is likely that some modification of that government *precedes* the alterations which take place in the circulatory and nutritive functions of other parts. Thus, in all diseases it may be laid down as a general rule, that there is an affection of the nervous system, either local or general; or, in other words, that there is no disease which we could name, which does not present signs of an affection of the nervous system, either *quoad* the suffering organ itself, or of an affection more general and diffused. If we take, for instance, a case of gastritis, or hepatitis, we find a lesion of function in the nerves of the respective organs, which, in certain cases, seems local, but if the inflammation be intense and the fever high we have superadded to this a sympathetic affection of the brain, or spinal cord. The same thing applies to all forms of local disease, for in all there is an affection of the nerves, either confined to the suffering organ, or extending to the whole system.

In reviewing the phenomena of nervous diseases we find them presenting several varieties depending upon certain circumstances. In the first place, they vary according to the seat of the disease. We find that the signs and symptoms of affections of the cerebro-spinal system differ very considerably from those which characterise diseases of the sympathetic nerves. Again, if we take any part of the nervous system and examine its diseases, we find that here also there is a source of variation connected with the peculiar part affected. Thus, if we take the cerebro-spinal system we find that disease of one part of it differs most essentially in symptoms from disease of another; we may have enormous and fatal disease of the spine without the slightest injury of the intellectual powers, but we seldom have disease of the brain, particularly of the surface, without a more or less appreciable lesion of the phenomena of the mind. To follow up this point, suppose we take the diseases of the brain itself as compared with each other; we find that their symptoms vary according to the locality, so that whether we look to physiology or pathology we must consider the brain as consisting of several distinct parts, and not as an inseparable whole. It is admitted by many writers of high authority, that there is a difference between the symptoms of disease affecting the periphery, and disease affecting the central parts of the brain; and there is reason to believe, that we may be able in many cases to diagnosticate affections not only of the centre and periphery of the cerebrum, but even of other parts of the organ.

The same variety occurs with respect to the effects of diseases of the nervous centres. In some instances we have, as the result of disease of the brain, a loss of muscular power or of sensation, in different parts of the body, sometimes affecting the face, sometimes one side, or even both; and these paralyses may be single or variously combined. It appears, then, that the component parts of the nervous system, by being to a certain extent separate and distinct, furnish a very extensive source of variety in the phenomena of nervous affections.

Lastly, we have the varieties which depend upon the nature of the lesion. We generally observe an obvious difference between cases of nervous disease, accompanied by some *known change* in the injured part, and cases in which no such change can be demonstrated. Thus, for instance, we know the symptoms of apoplexy, and that, in the majority of cases, it is a disease connected with some perceptible change in the circulation of the brain, as excessive distension of its vessels, or an effusion of blood on its surface, or into its substance. We also have some idea of the nature of inflammation of the brain, we know that its substance becomes at first red, then begins to soften, and finally is converted into a pulpy mass. Now, there are a number of symptoms, which are so often and so constantly connected with peculiar organic changes, that the symptoms being known we can make a tolerably correct guess at the nature of the alteration, or vice versâ.

On the other hand, however, we have a large and important catalogue of nervous affections, in which the symptoms give but very unsatisfactory information as to the real

nature of the disease, and to the elucidation of which the painful and long-continued investigations of the pathological anatomist have hitherto been directed in vain. Of the actual nature of a numerous, complex, and interesting class of diseases — the *neuroses*, we know nothing. All we can say of them is, that they are examples of lesions of function in various parts of the nervous system, presenting no trace of structural alteration *appreciable by our senses*. It is a startling fact, and one which must be a source of gloomy reflection to the pathologist, that many of the diseases of the nervous system, which present the most violent symptoms, are those in which there is the least perceptible organic alteration. Every man who has seen a case of hydrophobia, or tetanus, or mania, or epilepsy, has witnessed a train of extraordinary and horrible symptoms, infinitely worse than those which are seen to accompany even great organic alterations of the brain.

Here then is a singular fact,—that there is a part of the system presenting a series of diseases under this extraordinary law, that the most violent and frequently fatal symptoms are accompanied by the least perceptible organic alteration. Now what is the nature of these neuroses? To give you a familiar illustration, let us take a case of tetanus or hydrophobia as an example. Here we have a train of symptoms exhibiting the most frightful irritation of the nervous system; and yet, when we come after death to examine with eager curiosity the cause of all these appalling phenomena, what do we find?—Nothing. There is no unequivocal, no constant, no prominent alteration of any part of the nervous system, to throw light upon the obscurity of our opinions, and enable us to fix the nature or locality of the disease. We lay aside the knife in despair, and bitter indeed is the consciousness of our ignorance.

Two opinions have been entertained by pathologists with respect to those singular affections:—one, that they are examples of some peculiar modification of the nervous influence, *independent of any organic change*. In other words, the pathologists who entertain this opinion hold, that the principle of life may be altered in its phenomena, and admit of modifications, independent of any molecular change. The supporters of this doctrine reason thus:—In the phenomena of neuroses we have a train of extraordinary and violent symptoms unconnected with organic change. Now, it is quite unphilosophical to say that there is organic change when we cannot see or demonstrate it; and, on the other hand, it is not absurd to suppose that we may have lesions or peculiar modifications of the nervous principle without any organic alteration. The other opinion is, that in the neuroses there is some organic change, the nature of which cannot be ascertained, in consequence of our limited powers of detecting elementary changes. In whatever light we view this question, it appears to be surrounded with difficulties. No one can deny that neuroses are very different from organic diseases of parts. If we compare them with that class which is most familiar to us,—the inflammatory affections, we find a remarkable difference. In the first place, the neuroses may be brought on by causes not reckoned among those commonly capable of exciting inflammation. In the next place, their invasion is sudden, and their progress rapid; they arrive at their acme in a very short period of time, and subside rapidly. These are characters which do not belong to the ordinary forms of organic disease. Again, we often observe the utmost intensity of nervous pain without the co-existence of swelling, redness, or heat of the part affected. We find, too, that they are not to be subdued by the antiphlogistic plan: on the contrary, several of them are either relieved or cured by an exactly opposite line of practice; and many cases which would appear to demand the lancet are known by long experience to be most benefited by stimulants. Lastly, the most accurate and well-conducted investigations of pathological anatomy have failed in demonstrating the slightest organic change in these cases,—at least, where changes are found, these are *neither constant, competent, nor commensurate with symptoms;* so that whether we compare the information we derive from symptoms, or the result of pathological anatomy, we find a great difference between neuroses and organic diseases. It may be said, that though they are not inflammatory affections, they have some resemblance to them. This, however, is only a gratuitous supposition; for even in the very worst cases they present nothing analogous to the results of inflammation, and the brain and spinal cord are as free from perceptible organic change in the majority of cases of fatal tetanus and hydrophobia, as they would be in nervous affections of a slight and transient character.

You must have been already convinced, gentlemen, that it is difficult to form any clear or definite notion of the nature of neuroses;—indeed the only thing we can say of them, is what they are not. When we reflect on nervous phenomena, and consider how occult, how mysterious the properties of those organs which give rise to them are, we are struck with astonishment at the discrepancy between cause and effect. No medical man has ever witnessed a case of confirmed tetanus or hydrophobia, without being oppressed with a conviction of the imperfect and limited state of our knowledge of nervous disease.

It may be very possible, that in these neuroses the change, though so slight as to escape our means of detection, does absolutely occur, and yet such is the nature of nervous phenomena, that we must admit that great and extraordinary effects are produced by very sligh causes. Do we see anything like this in

nature? any remarkable alterations in properties depending upon apparently slight causes? We do; we see extraordinary changes taking place in the characters of various inorganic substances (to which I need not particularly allude), and there is no reason why the same thing should not occur in organic structures. On considering the doctrine of Isomerism, I should be inclined to think that it throws some light on this obscure subject. In chemistry, it is a well-known though singular law, that the properties of two bodies may be essentially different at the same time that their respective component elements are, as far as our knowledge goes, identically the same; and the change, whatever it may be, appears to result, not from the abstraction or removal of any of the component atoms, but from their peculiar juxta-position. Now, it being admitted, in chemistry, that many bodies having the same constitution possess totally different properties; and this difference being explained by the different position of their elements, it does not seem strange if the same thing should take place in the phenomena of organised beings; and if this be the case, we have a key towards elucidating the nature of these neuroses, and can conceive how an analogous change, a difference in the arrangement of the molecules of the component parts of the nerves, or their centres, may produce new modifications of their properties, without making any distinct change in their nature, or adding or abstracting a single organic molecule. I am much inclined to adopt the opinion of those who think, that in the neuroses a peculiar organic change actually takes place, though we cannot demonstrate its existence, because, to reason on the phenomena of animal life independently of organisation is to plunge blindly into hypothesis, and retrace the errors of an antiquated and exploded school.

In treating of the diseases of the nervous system, I regret that time will not permit me to enter into the subject as fully as I could wish; all that I hope to be able to accomplish is, to give a sketch of some of the more prominent affections. The arrangement I purpose to adopt is the following:—1st, I shall treat of local inflammations of the brain; 2nd, of general inflammations of that organ; 3rd, of mere sanguineous congestion or hyperæmia of the brain; 4th, of apoplexy; and 5th, of the various forms of paralysis.

In taking up the subject of cerebral inflammation, I beg leave to observe, *in limine*, that the brain may be attacked by general or local inflammation; and further, that it may, as stated in books, be inflamed in its membranes or in its substance, or in both together. A great deal has been written to show that we can distinguish during life between inflammation of the substance and of the membranes of the brain. On this point, I believe, we may come to this conclusion,—that inflammation of the membranes of the brain, or arachnitis, may be distinguished from some cases of local inflammation of the cerebral substance, but that it cannot, in the present state of our knowledge, be distinguished from *general* inflammation of the brain. We can, in most instances, make a distinction between local disease of the brain and arachnitis; but when the whole substance of that organ is affected, our means of diagnosis fail. This, however, is not so much to be regretted, as the distinction is of very little consequence so far as treatment is concerned. Here we arrive at the knowledge of a principle highly consolatory in the practice of medicine, namely, that in many acute cases where the diagnosis between two diseases of neighbouring parts is difficult or impossible, it is also, so far as regards immediate treatment, unnecessary.

If we inquire what are the symptoms of membranous inflammation of the brain, as laid down in books, we shall find them to be the following:—pain, delirium, convulsions, alteration of sensibility, and coma. These are the symptoms which are generally given as characteristic of arachnitis; and it is quite true that they are observed in many cases of the kind. But the person must be dull indeed who thinks that such symptoms imply nothing more than an inflammatory affection of the membranes of the brain. Take for instance one of the most prominent symptoms — delirium; what does this imply? that the portion of the brain which discharges the functions of intelligence or mind has been injured, and is rendered incapable of performing its office. No one will venture to assert that the membranes of the brain are the organs of thought, and that the delirium proceeds from *their* morbid condition; such a notion as this could not be entertained for a moment. What then are we to suppose? One of these two things—either that there must be inflammation of the substance as well as of the membranes, or that the substance of the brain must be affected in a neurotic manner without any actual inflammation. As far as delirium is concerned, it appears to me to be quite impossible to distinguish between inflammation of the brain generally, and of its membranes. The same rule applies to the other symptoms, convulsions, alteration of sensibility, and coma. I repeat, that all we can say on this subject is, that in such cases there is either inflammation of the substance as well as the membranes of the brain, or that, with the membranous inflammation, there is a neurotic condition of the substance of the brain. Yet who, in such cases, can affirm with certainty that the symptoms of derangement of the substance of the brain are merely neurotic, when inflammation is admitted to exist within the cranium, and when we know that the two inflammations commonly co-exist?

The fact of delirium occurring so frequently in inflammation of the membranes of the brain, is of considerable importance, as showing, not that membranes of the brain have anything to do with intelligence, but as supporting the

opinions of those who believe the periphery of the brain to be the seat of the intellectual faculties, and here is a fact which, as far as it goes, is in favour of the doctrines of phrenology. If we compare those cases of cerebral disease in which there is delirium, with those in which it does not occur, we shall find that it is most common in cases where disease attacks the periphery of the brain, as in arachnitis. The cases in which we observe great lesions of the brain without delirium, are generally cases of deep-seated inflammation of a local nature, or inflammation of those portions of the brain which the phrenologists consider not to be subservient to the production of mental phenomena. This fact, also, would seem to confirm the truth of the opinion of the difference in function between the medullary and cortical parts of the brain. It is supposed that the cortical part of the brain is the organ of intelligence, while the medullary portion performs a different function. It is, however, a curious fact that in delirium the inflammation is generally confined to the surface of the brain, and that in cases of deep seated inflammation, the most important symptoms are those which are derived from the sympathetic affections of the muscular system.

Partial encephalitis may be either primary or secondary. An example of the latter is that inflammation of the substance of the brain which supervenes on apoplectic effusion, tumours, or cancer. What we generally observe in a case of this kind, is more an alteration in the functions of the muscular system, and less of the intellect. This alteration consists at first in an apparent increase of innervation in certain muscles of the body, and we generally find that one of the earliest symptoms of local encephalitis is the occurrence of pain in some of the muscles of the extremities. This is a curious fact, but one which is well established. In partial encephalitis there is often but little, or even no pain in the head, and the only warning we have of the approach of cerebral disease is the occurrence of pain in the extremities, followed by rigidity. Here are the two most prominent symptoms of the disease, pain in the muscles of the extremities, and then rigidity. Further, we have alternate spasms and relaxations of the muscles, in which, however, the power of the flexor muscles ultimately prevails, so that, if the disease be in the fore-arm, it may become permanently flexed on the arm, and the contraction of the fingers is sometimes so great as to drive the nails into the flesh. If it affects the leg, the heel may be pressed against the buttock sometimes so forcibly as to form a sore. As the case proceeds, the limb becomes more fixed in its new position, and every attempt to extend it causes pain. During the prevalence of these symptoms, it frequently happens that the patient does not feel pain in the head, or any diminution of intellectual power. The absence of pain in the part affected may be accounted for by recollecting that it is a general law that all inflammatory affections of deep-seated parts are, to a certain extent, of a comparatively painless character, and we may account for the non-existence of any lesion of the mind, by remembering that the disease is partial, and confined to a portion of the brain which appears to have little or no connection with the intellectual functions. In cases of this kind, when the muscles of the face are affected, the phenomena are interesting, from their being (*in the first stage*) the reverse of those of apoplexy. The face is drawn *from* the affected side, and the tongue pushed, by the opposite half of the genio-hyo-glossus muscle, *to* the affected side. This is the spastic stage, when complete disorganisation has not yet occurred. But when this happens, then the phenomena of the face are like those of apoplexy, because the opposite muscles, which were in a spasmodic, are now in a paralysed state, so that the face is drawn *to* the affected side, and the tongue pushed *from* it, by the healthy action of muscles which are deprived of their antagonists.

I mentioned before, that delirium may not occur during the course of a partial encephalitis; and I gave as a reason for this the circumstance of the disease being of small extent, and confined to parts of the brain which do not discharge any of the functions of mind. Another explanation has been given, drawn from the consideration of the double nature of the brain. It is thought that where disease exists in one part of the brain, sanity may be still preserved in consequence of the healthy condition of the corresponding part, but where disease attacks both hemispheres together, as in a case of arachnitis, then there is a distinct lesion of the mental faculties.

The next stage of partial encephalitis is that in which the diseased portion of the brain breaks down, softens, and is converted into purulent matter. This stage is marked by a new train of symptoms. The first stage is characterised by pain occurring in the muscles of the face, or of the extremities of either side, and followed by great rigidity. The second stage is of a different character; the rigidity and spasm of the muscles diminish, and are succeeded by a paralytic and flaccid state of these organs. Voluntary motion on the affected side now becomes impossible, the organ on which it depends being destroyed. Now, let us, for sake of arrangement, call the first, or spastic condition, the convulsive paralysis, and the second, the paralysis with resolution. In the first, or convulsive stage, the brain is affected in the first degree; it is labouring under irritation or actual inflammation, and the disease still holds out a tolerably fair prospect of relief or cure. But in the second stage a cure is impossible, and hence it is a matter of the greatest importance to commence our operations at an early period, and, by having recourse to prompt and active

treatment, give the patient every chance for a cure.

In the partial inflammation of the substance of the brain, sensation is variously altered. In some cases motion is lost, while sensation remains intact; in others, sensation is partially or wholly abolished. In many instances the intellectual powers remain in all their integrity, or but little impaired, even after the occurrence of symptoms which mark the softening down of the substance of the brain, and its conversion into purulent matter. In a few there is, during the first stage of the disease, a slight alteration in the state of the intellect, marked by a certain degree of excitement or exaltation of the mental faculties, and this, on the supervention of the second stage, is exchanged for a state of depression. In fact, the morbid phenomena of the mind and of the muscular system, where they co-exist, appear to be regulated by the same laws. Where the disease is extensive, you can easily observe the injury of the mental faculties which accompanies the second stage; the patient answers slowly when questioned; his memory is weak, and his countenance has a stupid expression. But cases, even of extensive local suppuration, have been described by various authors, in which there was no lesion of the intellectual functions observed. These, however, generally admit of an explanation. Thus, in the cases recorded by Lallemand, the abscesses were situated in the cerebellum, pons Varolii, and other parts which are not supposed to have any connexion with the phenomena of mind. There are several well authenticated cases of extensive disease, not only of these parts, but even of the substance of the hemispheres, occurring without any appreciable lesion of the intellect. Thus, Mr. O'Halloran gives the case of a man, who, after an injury which destroyed a large portion of the frontal bone, had extensive suppuration of the brain, and lost an enormous quantity of the substance of one of the hemispheres, and yet preserved his intellect entire up to the moment of his dissolution. There is some difficulty in explaining this. It is an opinion entertained by some physiologists, that, when one hemisphere is diseased, its functions are discharged by the other, and that the brain being a double organ, disease of one side does not impair the functions of the other. But in answer to this, it may be urged, that there are many cases on record, in which disease of *a single hemisphere* has produced great alterations of intellect. The supporters of the former opinion attempt to explain such cases in this way. They state, that in the majority of such cases there was, besides the local encephalitis, inflammation of the arachnoid membrane, and that the lesion of intellect was not so much the effect of local disease of the brain as the result of its complication with an arachnitis engaging the whole periphery of the organ. In the next place, they explain the fact of a *general* affection of the brain arising from *local* disease, as depending in most cases on the pressure which the tumefied state of the diseased portion necessarily makes on the sound hemisphere; and they state that this pressure must be very considerable, as the brain, being confined within a bony cavity, has no power of expanding itself. Now, it is a most interesting fact, in support of this view, that in a great number of the cases of loss of brain with preservation of intellect *all through the case*, an extensive opening existed in the bones of the skull, so as to permit of expansion in the diseased hemisphere, and prevent the pressure being exercised on the opposite one. This point appears to be borne out by the result of Mr. O'Halloran's cases, and by many other examples. Lastly, in every acute case of local inflammation of the brain, two causes having a tendency to produce symptoms exist. One of these is the local disease which gives rise to those phenomena of motion and sensation which we observe on the opposite side of the body; the other is the determination of blood to *the whole brain*, the result of the irritation of that disease.—"*Ubi stimulus ibi humorum affluxus.*"

CLINICAL LECTURES ON SURGERY,

DELIVERED AT

THE HOTEL DIEU, PARIS,

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

Corrected by himself.

Cystotomy—Different Regions in which it is performed—Symptoms of Stone in the Bladder—Difficulty of Detection—Different Methods of using the Catheter—Scrofulous Tubercles in the Bladder cause of all Symptoms of Stone—Uncertainty of Catheterism—Importance of a minute anatomical knowledge of the Parts concerned in the Operation for Cystotomy—Anatomical Demonstration of the Parts connected with the Hypogastric Operation—A minute description of the Perinæal Region—Attachment of the Fascia—Importance of the Diameters of the different Triangles: their exact extent—Proportion of Deaths to Cures—Table of Cases—Preparations for the Operation.

GENTLEMEN,—The operation for stone has, without doubt, occupied the attention of surgeons more than any other. Important discoveries, various manœuvres, and numerous modifications have been made, and such, in a few words, is the history of this important operation. It is not my intention to enter into a full history of all that is known on this subject; dictionaries, and the works *ex professo*, will furnish you with the different pro-

ceedings that have been employed. I will draw your attention only to the most successful means we have arrived at in cystotomy, and mention to you the most striking cases that have occurred, and present themselves daily in this hospital. The operation is performed, at the present day, in four different regions, namely, above the pubes or hypogastric; below the pubes, or the sub-pubic or perinæal; the recto-vesical; and by the destruction of the stone in the bladder without incision. All these have been tried, and their advantages and disadvantages are known to us; but, before pointing them out to you, it will be necessary to tell you the symptoms by which we recognise the existence of stone in the bladder, the anatomical disposition of the parts, and the different precautions necessary before undertaking this operation.

The principal symptoms which reveal to us the existence of a calculus are, a constant sensation of weight; obtuse, vague, and even extreme pains about the region of the bladder, and in the fundament; difficulty, and even impossibility, to ride on horseback, or in a jolting carriage, without which the pains are not much increased; the frequent discharge of bloody urine, or even pure blood caused by the irritated state of the bladder; the flow of urine irregularly interrupted; pain at the glans penis, or at the navicular cavity, and which obliges the patient to make incessant pressure on these parts, and to lengthen, as it were, the urethra and prepuce; finally, all the local and sympathetic phenomena of chronic cystitis. None of the above named symptoms, however, arising separately, or even if they all exist, can for a certainty indicate the existence of a stone in this organ. Chronic inflammations, especially those which attack the inferior part or neck of the bladder, and which are complicated with the presence of fungous growths, or owing to a varicose development of the vesical veins, are able to produce such symptoms, as even to deceive the most experienced surgeon.

An examination of the bladder is, then, indispensable; and the ideas furnished by the catheter, in these cases, are as valuable as various. The instrument does not always reach the situation of the foreign body: it frequently fails from the smallness of the stone, and sometimes in consequence of the stone being retained in a part of the bladder not accessible to the instrument. In the greater number of cases it is necessary to pass the point of the instrument to the most sloping part of the bladder, and if there, the stone cannot be found, to carry it to the pubic region, to the summit, and to the sides of this organ. These manœuvres must be repeated both when the bladder is distended with urine, and when in a state of vacuity.

In general, the external opening of the instrument is closed, so as to prevent the discharge of urine, and thus keep the bladder in a state of distension; but, towards the latter part of the examination, it is frequently useful to permit, on the contrary, this organ to evacuate itself, the instrument being kept still, and the flow of urine will sometimes cause the calculus to strike against the extremity of the instrument.

In obscure cases, it is the duty of every practitioner to make his examinations repeatedly, and at different times, with solid and hollow instruments of different dimensions and curvatures, and never to perform the operation unless the calculus can be detected.

Case 1st.—An infant, eighteen months old, was brought into this hospital about the first week in January, 1827. His mother assured me that at intervals he suffered from acute pains in the region of the bladder, accompanied with great difficulty to void his urine. I passed the sound, but was unable to detect the existence of a calculus. Some time afterwards he was brought again, and many times at different intervals I made an examination; sometimes I believed there existed a stone, at others I was unable to detect it. He was brought to me a third time, his mother begging of me to deliver her child from such incessant torment; the pains, she said, were so acute, that in the middle of the paroxysm the child was taken with severe convulsions. I admitted him with his mother into the hospital, and a few days afterwards had him brought into the operating theatre. On this last admission I thought I could feel the calculus, and I said at the time, should this be actually the case, it is the first that I have met with of stone in the bladder in a child so young; and for more than six months the symptoms had made their appearance. The stone appeared to exist at the inferior fundus of the bladder, and towards the right side. Many of you, doubtless, recollect the case of a child who was admitted about a year since into one of these wards: this infant, who was only two years of age, experienced for some time acute pains similar to the one I am speaking of; he was sounded, and a calculus was thought to have been detected. I examined him also, and was of the same opinion. I repeated my examinations at different periods; sometimes I was able to detect the existence of a stone, at others I could not. Having determined to perform the operation, the child was brought into the operating theatre; I there sounded him again, and was fully convinced of the existence of a calculus. The operation was immediately performed, and, in spite of the most attentive efforts, I was unable to find the stone. The wound was kept open; I continued my researches; sometimes the sound appeared to grate against a foreign body, and at others not to meet with it. The child still suffered at intervals from the excruciating pains, and I believed that the stone, which I so frequently encountered, was lodged in the right ureter, and disappeared at the suffering moments, believing the contractions of the ureter to be the cause

of this deception. The child emaciated, and I had no hopes of his recovery, when suddenly the pains ceased, and did not reappear, and the child soon regained its health and spirits. Sometime after this the child again became ill, was taken to the Hôpital des Enfans, and died. On examining the body, at the lower part of the fundus of the bladder, to the right side, and near the orifice of the ureter, were discovered some scrofulous tubercles in a state of suppuration, the lungs also were affected with this disease. Is it not probable that the tubercles in the bladder gave the shock to the instrument, which led me to believe the existence of a calculus?

The case under consideration presents symptoms very similar to the one I have just quoted. It appears also that the stone is lodged in the right side of the bladder, and sometimes it is not distinguishable. I examined the child with the greatest care, and employed in the operation the buttoned stylet. The catheter, owing to its great curvature, will prevent you, in many instances, from examining with facility the different regions of the bladder, and a hollow sound has the inconvenience of receiving urine in its cavity, and air is introduced at the same time; the shock of these liquids, their density being so different, resembles frequently that communicated to the instrument by the calculus. The stylet, from its easy curvature at pleasure, and from its not being excavated, prevents all these inconveniences.

In examining the child, first with a stylet, then with a catheter, and afterwards with a hollow sound, without detecting the existence of a foreign body, I deferred the operation.

Five days afterwards I made a second examination, moved the instrument in every direction without striking against a foreign body, but at length carrying it to the lower fundus of the bladder, and giving it a direction from above downwards, it grated against a hard substance, which appeared, as it were, to retain it. This kind of movement was repeated several times, both by myself and my colleague, M. Sanson, and the same sensation was at every attempt reproduced. I suspected that the sound conveyed to us, by thus directing the instrument, resulted from its meeting a fleshy column in the bladder, for upon moving it from before backwards, and from right to left in this situation, no grating was produced; I then made the point of the instrument, by moving it in the same direction as at first, strike against this fleshy body, and the same impression was again conveyed to me. My opinion coinciding with that of my colleagues as to the nature of the disease, the operation was condemned, and the child sent back to his mother.

This case was not only interesting, as regards the age, but also points out the uncertainty of catheterism in all cases; and the confused ideas, conveyed to it by different vesicle diseases, also shows the importance of using every manœuvre for the detection of a stone. The examination per rectum, the patient lying on his back, and the surgeon with his right hand pressing on the hypogastric region, furnishes in certain cases useful indications relative to the volume, weight, and situation of the calculus, as well as the healthy or morbid condition of the prostate, and, to a certain extent, the suppleness or hardness of the walls of the bladder.

After detecting the existence of a foreign body in the bladder, it must be extracted either through the medium of the natural passage, by seizing it with a pair of forceps, by reducing it to fragments, or by making a passage through the soft parts into the cavity of the bladder, and thus extract it through the opening.

The attempts of breaking the stone, I imagine to have been ineffectual; and it is not at present adopted for the reasons I will explain to you hereafter. Cystotomy is the most certain, and the operation most frequently employed: but two difficulties here present themselves; either the division in the walls of the bladder is not sufficiently extensive, or else is too long. In the first, the parts are torn, bruised, and inflammation is the consequence; in the second, from the length of the incision there is danger of urinary infiltration.

The hæmorrhage that frequently results is not less important, and must be prevented; as to the concomitant affections, it is difficult to foresee them. It must be recollected, that the traumatic fever increases all morbid dispositions, causes symptoms to appear, which might otherwise be concealed in the viscera. Every attention must be paid to the action of the different functions, and a perfect health of the different organs is requisite, before the operation is undertaken.

It will be needless for me to impress upon you the necessity of a thorough knowledge of the structure, dimensions, and relative position of the parts on which the surgeon is required to operate, it must be evident to all of you. It is not my intention to give you a minute anatomical description of the parts, but shall limit myself to those points which are most practical. There are three regions in which the operation is performed, as I have before named to you; one above the pubes, called the hypogastric, the other below, called the perinæal, and the third, called the recto-vesical; the latter in women is called the vagino-vesical. I will first call your attention to the hypogastric, or the one performed above the pubes.

This region is limited above by an horizontal line drawn from one anterior superior spinous process of the ilium to the other, and below, by a semicircular line, the circumference of which is opposite to the attachment of the fallopian ligaments to the pubes. This region

is covered by skin, beneath which is cellular tissue, of greater or less density, a few ramifications of the tegumentary and external genital vessels terminate about the median line.

Beneath this cellular tissue, we come to a dense fascia, which covers the external oblique muscle, and underneath which is the aponeurosis belonging to this muscle, these tendinous fibres intermixing with the fibres of the opposite side become more dense, unite, and form the linea alba; this ligamentous line, which assists in supporting the anterior abdominal parieties, is fixed to the sternum above, and to the symphysis pubis below. Behind the aponeurotic expansion of the external oblique, and to the sides of this ligamentous line are found the recti muscles, the internal fibres of which are separated from one another by this line, and run parallel with it, and inferiorly are situated between it and the pyramidales muscles, which are not found in all subjects. The external borders of the recti muscles are directed obliquely from above downwards, and from without inwards, and are attached to the spine of the pubis. Externally to these muscles we observe the internal oblique, and transversalis, their aponeurotic expansions pass before this muscle inferiorly, and unite with the linea alba.

After having raised the abdominal muscles, we arrive at a dense cellular expansion, to which the name of *internal fascia* has been given (fascia transversalis). Next we come to the peritoneum, which appears descending from the umbilical region. Arriving near the pubis, it is reflected on the superior region of the bladder, and from thence to the vagina, uterus, and rectum.

The bladder, when in a state of vacuity, is situated behind, and nearly concealed by, the symphysis pubis, but when distended lies in the hypogastric region, extends to, and sometimes even above the umbilicus, applied against the recti muscles, and fascia internalis. From its globular shape, it is placed more in contact with the pubis, and in the inferior abdominal region against the median line, than on the sides. When the bladder is empty, by passing a catheter, you may easily distinguish its summit above the symphysis pubis. After dividing the inferior part of the white line, it is necessary to push upwards the fold of peritoneum, and you immediately expose the anterior part of the body of the bladder.

Perinæal, or sub-pubic region.—This region is triangular, the apex corresponding to the junction of the symphysis pubis anteriorly, bounded laterally by the rami of the ischium and pubes, and the base posteriorly by the rectum.

The skin of the perinæum is thin, elastic, and furnished with hairs; beneath this is a layer of cellular tissue, covering a fibro-cellular expansion, enveloping the perinæal muscles, the bulb, and spongy portion of the urethra. This is the superficial fascia of the perinæum, arising from the sciatic tuberosities, from the inferior surface of the middle aponeurosis in front of the rectum (triangular ligament), laterally it has a strong attachment to the rami of the ischium and pubis, and anteriorly is connected with the dartos. This aponeurosis separates the rectum from the genital and urinary organs.

On removing this, we observe posteriorly, and in the median line, the external sphincter muscle, the anterior extremity of which divides into two fasciculi, a superficial and deep, the former being connected with the sub-cutaneous aponeurosis, and the other with the bulbo-cavernous and transverse muscles of the perinæum.

Along the median line, and anterior to the sphincter ani muscle, eight or ten lines from the anus, we find the bulbous portion of the urethra, covered by the bulbo-cavernous muscles, forming for it a moveable and very contractable investment. After having covered the bulbous portion of the urethra, these muscles diverge from one another anteriorly, and unite with the corresponding corpus cavernosum penis, their action being for to raise, and compress the bulb.

The transverse muscles of the perinæum are situated a little deeper, at the union of the bulbo-cavernous with the sphincter ani. These constitute two fleshy fasciculi, passing obliquely from without inwards, and from behind forwards, extending from the tuberosities of the ischium to the raphe of the perinæum, intermingle with each other, and with the preceding muscles.

On the sides of the perinæal region, and applied on the ascending branches of the ischium and pubis, are the roots of the corpora cavernosa, enveloped at their origin by the expansion of the erector-penis muscles, in a similar way that the bulb is covered by the bulbo-cavernous.

From the internal edges of the ascending branches of the ischium, and descending branches of the pubis, an aponeurotic lamina is detached, arising from without backwards from the external face of the superior aponeurosis, at the junction of the superior border with the levator ani muscle; in front this aponeurotic lamina has received the names of middle perinæal fascia, fascia of the levator ani muscle, and the perinæal ligament of *Carcassonne*. It is continuous with the inferior pubic ligament, and directs itself from thence to the sides of the bulb of the urethra, which it fixes in the median line; towards the circumference of the margin of the anus, it extends upwards, between the digestive, urinary, and genital organs, so as to form a second fibrous lamina, perforated only, as that of the superior aponeurosis, for the passage of the middle organs. Below the symphysis pubis, we always find a hole, somewhat inverted, for the passage of the dorsal arteries and veins of

the corpora cavernosa. The middle aponeurosis is very strong anteriorly, and thin posteriorly; its superior face corresponds to the levator ani muscle; the inferior and external gives origin from without to a fibrous lamina, which descends perpendicularly on the sides of the pelvis, and terminates on the internal border of the great, or posterior sacro-sciatic ligament, and retains in its duplicature the trunk of the pudic artery on the inner surface, and inferior part of the side of the ischium.

On the sides of the perinæum between the urethra, which is covered by its muscles, and the corpus cavernosum, exists a triangular space containing much cellular tissue, which extends from the integuments to the prostate gland, and bladder. This kind of canal is prolonged posteriorly on the sides of the rectum, limited in this direction only by the levator ani muscle, and the superior perinæal aponeurosis; anteriorly we find it limited by the junction of the corpus cavernosum. About eight or ten lines in front of the rectum we find the transverse muscles of the perinæum, accompanied with an artery of the same name, thus interrupting its regularity. On the external side we observe the superficial perinæal artery; posteriorly we come in contact with the inferior and middle hæmorrhoidal arteries, also a considerable venous plexus.

Above the parts I have just described we find the prostate gland placed on the anterior part of the rectum. Around these two organs are obliquely descending the converging fibres of the levator ani muscles, which embrace, fix, and sustain them in their position, thus forming in this region a contractile plane, which strongly opposes the combined actions of the diaphragm and abdominal parietes. This fleshy bed is still further strengthened superiorly by a prolongation of the pelvic fascia, which, from all the internal parts of the pelvis, descends on the levator ani, and is applied to the circumference of the prostate, envelops the rectum, and assists in closing the inferior pelvic cavity. This is called the superior aponeurosis of the perinæum, fascia pelvica, also the recto-vesical fascia; it represents a concave plate, and may be said to be perforated for the passage of the rectum, and the genital and urinary organs.

The disposition of the parts that I have described merit the whole of your attention, and it shows you the difference of gravity in urinal infiltrations. Thus, as the crevices of the spongy region, and of the bulb of the urethra, which perforate the superficial aponeurosis, cause only subcutaneous effusion, because the spongy portion of the urethra, its bulb, the sphincter ani, the ischio-cavernous muscles, and the corpora cavernosa penis are placed between the middle and superior aponeurosis. The perforations of the membranous region, those of the superior portion of the rectum and external sphincter, frequently in fact give origin to deeper abscesses, which extend from the sides of the perinæum to the margin of the anus, without communicating with the cavity of the pelvis; whilst ruptures of the bladder, above the edges of the prostate, and incisions, which pass the limits of this glandiform structure, permit urinous, or stercoraceous, effusions to glide under the peritoneum, and to extend in the cellular tissue of the pelvis, which accident frequently proves fatal. These two different results are owing to the different partitions of the fascia; in the first, the membranous part of the urethra, the prostate, and the corresponding region of the rectum, and levator ani muscles are situated between the middle and deep fascia; and in the second, above the superior fascia exists only cellular tissue, lying beneath the peritoneum, and the folds of this latter membrane around the bladder and rectum.

In continuing the examination of these parts we find in the median line, between the most inferior part of the rectum and the bulb of the urethra, a triangular space, to which I wish particularly to direct your attention; its apex corresponds to the point of the prostate, exactly at the spot where this body touches the rectum, and consequently about nine lines above the integuments, its base rests on the integuments, superficial fascia, and external sphincter muscle, and is from eight to ten lines in extent from before backwards; its anterior border is convex, and corresponds to the membranous portion of the urethra, which directs itself obliquely from above downwards, and from behind forwards; its posterior border is equally convex and prominent forwards, and corresponds to the last part of the rectum. In this transverse sense, the triangle extends from one tuberosity of the ischium to the other, and is about two inches and a few lines in length. The decussation of the muscular fibres with the fascia, of which I have before spoken, occupies its middle part, and its sides are traversed by the tranversalis perinæic muscles. It is through this space that we must cut in the lateral operation of lithotomy.

The utility of a perfect knowledge in an operation of this description must be evident to you all, and not only is the disposition of the parts necessary, but the exact size of each of the parts I have described is of the highest importance. The anterior, or spongy, part of the urethra is from six to eight inches in length, and the membranous portion from seven to nine lines, covered under the symphysis, and strengthened internally by fleshy and aponeurotic fibres, and this part frequently forms a serious obstruction to the passage of a catheter. The prostate, which partially surrounds it, presents on either side, in the perinæum, a convex surface, flattened behind, and is perforated above in its central point for the passage of the urethra. Its dimensions, about the middle of life, are generally thirteen lines from before backwards, and nineteen transversely.

Formerly the neck of the bladder was considered to be placed immediately against the arch of the pubis, but it is well known at the present time, that the prostate is separated from it about nine lines. This situation of the neck of the bladder causes the right portion of the urethra to be as it were stretched, and thus renders the sub-pubic curvature less prominent, and facilitates the strengthening of this portion of the canal.

In the corresponding point, at the anterior part of the prostate, the arch of the pubis is from 20 to 22 lines in length at the junction of the middle part with this body. The rami of the ischium are separated by an interval of about two inches; and, lastly, the posterior, or rectal, corresponds to the division of the tuberosities, which are distant from one another about two inches and three lines.

I have measured the thickness of the perinæum by the assistance of a pelvimètre, by placing one of its branches on the neck of the bladder, and the other upon the integuments, and I have generally found it about two inches and a quarter in depth. I must add, however, that it is liable to great variations.

The posterior, or rectal, region is the last division of the parts I am describing. It is directed obliquely from above downwards, and a little from left to right, the rectum descends from the termination of the colon to the bladder, where it becomes very nearly in the median line. In this course it presents a great curvature, and is applied on the concavity of the sacrum, and embraces the lower fundus of the bladder to the point of the prostate. In this situation the rectum takes a new curve, changes its direction, passes downwards and backwards, between the fibres of the sphincter ani to the anus. That portion of rectum, extending from the meso-colon to the external sphincter, remains uncovered by peritoneum, and corresponds posteriorly and inferiorly to the anterior face of the sacrum, to the coccyx, and to the ischio-coccygean muscles, anteriorly to the inferior part of the fundus of the bladder, from which it is separated externally by the ureters, vasa deferentia, and vesiculæ seminales, and still more inferiorly by the prostate gland, which is united to it through the medium of cellular tissue. In old people this portion of the rectum is frequently found dilated, and lodges as it were the prostate, forming on its sides two lateral projections, which are easily incised in the lateral operation of lithotomy, and requires great attention. The lowest part of the rectum, extending from the point of the prostate to the anus, is enveloped by the sphincters, and directed downwards and backwards. It forms the posterior boundary of the middle triangle of the perinæum, of which I have previously spoken.

The posterior and inferior part of the bladder, which corresponds to the rectum, is traversed obliquely from behind forwards, and from without inwards, by the ureters and vasa deferentia, and may be divided into three distinct regions. Two of these may be called lateral; they are convex, larger before than behind, and placed on the outer side of the ureters, vasa deferentia, and vesiculæ seminales. The third, or middle, region is also triangular, and is situated between these ducts. The base is inclined upwards and backwards, and the apex corresponds to the prostate, and is in immediate contact with the rectum.

The sides of this triangle are formed by the converging of the vasa deferentia, which approaches the prostrate with the vesiculæ seminales, traverses the thickness of this gland, where the ducts of the vesiculæ seminales join those of the vasa deferentia and the common ducts, then terminate on the sides of the verumontanum.

The following are the dimensions of the parts situated between the recto-vesical fold of the peritoneum and the external surface of the perinæum:—The triangle comprised between the membranous portion of the urethra and anus, on the highest part, is from eight to ten lines in extent. The most superior and posterior part of the prostrate, from its point to the middle and posterior part of its circumference between the ureters, the canals of the vasa deferentia, and vesiculæ seminales, from seven to ten lines. Lastly, between the most raised portion of the prostrate and the recto-vesical fold of peritoneum, fifteen to eighteen lines. It is along this space that the incision is made in the recto-vesical operation; and its total length varies from two inches and a half to three inches and two lines.

The different conditions of the bladder and rectum alter but slightly the relative position of these parts. The only case in which the recto-vesical serous fold descends, so as to approach nearly the circumference of the prostrate, is when the bladder and rectum are at the same time much contracted, and each reduced to a very small volume; and, in such case, it is difficult to avoid it in passing the limits of the glandiform body.

I have now pointed out the general disposition of the parts which are divided in operating for stone. Hereafter, I will speak more particularly of those parts which are generally chosen for the operation, and the different methods and proceedings adopted to effect it.

I have endeavoured to ascertain a correct proportion of deaths to the number of cures resulting from this operation; but the general statistical results so widely differ one from the other, that it is impossible to place an equal reliance on them all. Therefore I confine myself to the cases that have been operated on at the different hospitals, and the suburbs of this town, within the last ten years, of which I have collected 356, and the following are the results:—

SEX.	AGE.	Number of Operations.	Cures.	Deaths.	REPORT OF CASES.	
					Died.	Cured.
	Years.					
Masculine	3 to 15	97	88	9	1 out of 11	9 out of 100
	15 to 30	59	51	8	1 out of 7	13½ —
	30 to 50	45	35	10	1 between 4 and 5	23 —
	50 to 70	74	56	18	0 out of 4	24 —
	70 to 90	7	26	11	1 between 3 and 4	29⅓ —
Feminine	3 to 15	7	7	0	—	0 out of 100
	15 to 50	11	10	1	1 out of 3 ⅔	10 —
	50 to 70	17	15	2	1 between 8 and 9	12 —
	70 to 90	9	7	2	1 between 3 and 4	22 —
Total . .	3 to 90	356	295	61	1 out of 6	17 out of 100
Men . .	Ditto.	312	256	56	1 between 5 and 6	18 out of 100
Women .	Ditto.	44	39	5	1 out of 9	11½ out of 100

From the proportions indicated in this table, if we take the middle period of life, we shall see what the chances of death are to the chances of cure—

:: 1 : 5 or :: 1 : 6.

This proportion appears at first sight considerable; but when we consider the importance of the parts necessarily affected, the concomitance of local and other lesions, it is not surprising.

This table also shows, that before and after puberty, and then the middle age, are the most favourable periods for the operation, and after this the chances rapidly diminish.

In the first part of the lecture I told you, that there were four principal methods for extracting calculi from the bladder. Before entering upon this subject, I will say a few words on the preparations that are necessary before submitting the patient to this operation. The season in general exercises but little influence; however, it is best to avoid, if possible, those seasons of the year in which visceral inflammations and epidemics are most prevalent. If the patient suffers from nephritic pains, they must be combated by bleedings, emollient drinks, and baths. Bleeding is also useful when the patient has a full pulse; he then should be purged once or twice, and be allowed but a light nourishing diet. The evening before the operation a clyster should be administered, so as to empty the large intestines; the hair should be shaved from the perinæum and its surrounding parts.

The difference of your prognosis of course must depend upon the individual. In women and children the cures are more numerous than in adults and the aged. If the operation is performed quick, and without causing much pain, the chances of success are favourable. In nervous habits the operation is less successful than in those of an opposite condition. Again, those individuals whose constitution has become affected from long-continued sufferance, and who have, either in the bladder or in any other organ, extensive lesion, little hopes are to be expected from the operation, and it had better be deferred.

In my next lecture I shall continue with the operation above the pubis, or hypogastric.

OBSERVATIONS MADE IN THE CLINICAL OPHTHALMIC WARDS IN VIENNA, DURING THE WINTER AND SPRING OF 1832–33.

BY WILLIAM BROWN, M.D.,

One of the District Surgeons of Glasgow.

THE great eminence of Professor Beer gave a celebrity to the Ophthalmic School of Vienna, which was not speedily to decline. The combined eminence of Dr. Rosas, successor to Beer, and of Dr. Jaeger, Professor of Ophthalmology in the Josephine Military Academy of Vienna, could not fail to maintain the dynasty of professional talent in the Ophthalmic School of the Austrian capital; and, accordingly, it still continues the great focus of ophthalmological literature in Germany. Besides conducting the Clinics for the Diseases of the Eye, Professor Rosas and Jaeger give courses on the anatomy, physiology pathology, and operative surgery of that organ. The clinic of Professor Rosas is conducted in the Latin language, but his course on the eye is in the German. Professor Jaeger's clinic and instructions are entirely in the German language. Besides their public courses, both Professors

give privatissima on the Operations of the Eye, which, if it be preferred by the individuals who attend them, will be delivered in the French or the Italian language. Professor Jaeger gives advice in his own house at a stated hour of the day, affording an admirable opportunity of observing a great variety of interesting eye diseases. He is in the habit of inviting the attendance of the foreign graduates in medicine who frequent his clinic.

An assistant, who resides in the hospital, is attached to each clinic, whose duty it is to officiate in the absence of the Professor, and to attend to the general economy of the department. The drawing out reports of the cases which are to be treated in the clinic is no part of his duty: this is the business of the students, who, as Professor Rosas used to remark, constituted essential instruments in managing the clinic. When a patient is received, he is committed to the charge of one of the attending pupils, who all receive cases in succession. Under the superintendence of the Professor, and in the presence of his fellow-students, he examines the case, and prescribes the requisite means of cure, assigning at the same time the rationalia of the adopted measures. Every disordered appearance of the eye is detailed according to an established arrangement of parts. The diseased appearances, when such exist, of the eyelids, of the secreting and excreting lachrymal organs, of the different tunics, of the cornea, the iris, the aqueous humour, and of the other transparent media of the eye, are carefully distinguished. Previous to this, no questions are put to the patient. The subjective symptoms, with the history of the causes, progress, and duration of the disease are diligently sought after; strict inquiry is made into the present and previous state of his general health, and the diseases which he has had during his life. The diagnosis, prognosis, and treatment of the case are determined in a short conversation between the professor and student. A history of the case is prepared and read at the clinic of the following day. Each student presents his patient to the Collegium every morning, details the changes which have taken place in his symptoms within the last twenty-four hours, and proposes, if he deem it necessary, variations in the treatment. The histories of all the cases, with the daily reports which are written by the students, are lodged with the Professor, when the patient leaves the clinic. They constitute a part of the probationary trials of candidates for medical degrees.

The same plan of clinical tuition is pursued by the teachers of Clinical Medicine, Surgery, and Obstetrics, in Vienna, and in the majority of the German Universities. It is a system which demands time and patience on the part of the teachers, but is fraught with great advantage to their students. On the completion of their academical course they have obtained in some measure a practical knowledge of their profession, have learned to observe the characters of diseases, and to reason with some accuracy on the modifications required in their treatment. The practical experience and peculiar views of the teachers are, on this plan, readily learned, conversation being an easy method of communicating and acquiring knowledge. It is not the easy matter which students are apt to suppose it to be, to delineate accurately the characters of even a simple ulcer; they first become acquainted with the difficulty when they make attempts to do it, which, when left to their own will, are too often procrastinated. It may be said that a person may be self-taught in his department of knowledge; it may be so; but accurate observation is an attainment so difficult, that lessons will at least be useful in facilitating its acquirement.

M. Louis has commenced teaching clinical medicine on this plan, in the Hospital of La Pitié in Paris. The positions and state of the uterus have long been studied on a nearly similar plan in Paris. The Professor examines the female, per vaginam, and details the results of his examination to the students, who, in performing the toucher themselves, endeavour to trace what he has described. These toucher courses are highly instructive, but the attending pupils are generally numerous, and the time too limited for careful examination. Dr. Naegele, Professor of Midwifery in the University of Heidelberg, divides his public class into small parties, which attend the obstetrical clinic by turns. Dr. Naegele having ascertained the position and state of the vagina and uterus, the students examine in succession, and each of them apart communicates the result of his examination to

the Professor, who pronounces upon the accuracy or inaccuracy of his diagnosis.

In ophthalmia tarsi, attended with thickening and induration of the edges of the eyelids, Professor Rosas thinks favourably of the deobstruent efficacy of cicuta. After the crusts, which so often form on the margins of the eyelids in this disease, have been removed by poultices, cicuta is prescribed in the form of lotion, or mixed with weak red precipitate ointment. A solution of muriate of mercury in water, with the addition of some extract of cicuta, is frequently prescribed as an eye lotion.

In granular conjunctiva, which Professor Rosas thinks is of the nature of polypus, the use of acetic acid seems beneficial. Professor Rosas exposes the granulated surface by everting the eyelid, and applies the acid with a camel-hair pencil. The moment that the acid is applied, the granulated surface becomes pale, and this appearance continues for a considerable time. Before allowing the eyelid to invert itself, oil is streaked upon the surface to which the acid was applied, to prevent injury to the eyeball. I have seen the good effects of acetic acid, in a case of sarcomatous eversion of the lower eyelid. Dr. Jaeger's assistant was trying oil of thyme in granular conjunctiva, when I left Vienna.

A number of deep and superficial cancerous looking ulcerations of the eyelids were treated in Professor Rosas's clinic during the winter. In the case of an old man, the disease had destroyed the nasal half of the eyelids of the right eye, exposing the inner half of the eyeball; the conjunctiva bulbi was destroyed, but the sclerotic coat was untouched by the ulceration, this being a membrane, in the opinion of Professor Rosas, seldom found involved in cancer or fungus medullaris of the eye. This patient had been successfully treated in the clinic, on a former occasion, for the same disease, existing to the same extent, and in the same situation, in the left eye. The following are the remedies which Professor Rosas finds most successful in these cases. ℞. Oxydi arsenici albi, ℈ij; sanguin. draconis, gr. xij; cinnabar. 3ij. ℳ. This constitutes the pulvis cosmicus. Eight grains of the powder, made into a paste with water or oil, are applied to the ulcer by means of a bit of wood. The indurated surface of the sore being destroyed, healthy granulation is attempted by the application of laudanum, or Helmont's ointment, which is made with equal parts of Peruvian balsam, extract of cicuta, tincture of opium, and acetate of lead, to eight parts of simple cerate. Extract of cicuta is given internally in the form of pill.

The following case of erysipelas palpebrarum proved fatal from supervening meningitis. The patient, a man about 35 years of age, was received into the clinic of Professor Rosas on the 19th December, 1833. Both eyelids of left side presented a livid swelling, attended with the usual appearances of erysipelatous inflammation. He complained little of pain. The disease had attacked him two days previous to his admission, and he ascribed its origin to the sudden cessation of rheumatism; there was considerable quickness of pulse and fever, with general derangement of the functions; warm dry linen cloths were applied to the eye; his bowels were to be opened by sulphate of magnesia, dissolved in a decoction of mallows; and tepid barley-water was allowed him for ordinary drink. On the 10th he was restless, complained of headach, and talked incoherently; he was bled from the arm; mustard poultices were applied to the feet; and the medicines prescribed on the previous day were continued. On the 11th he was comatose: the bleeding was repeated, and infusion of arnica was prescribed. He died at 3 o'clock in the afternoon. On the 13th the body presented the following post mortem appearances:— Blood flowed plentifully when the skull cap was torn from the dura mater; the arachnoid membrane was highly vascular, thickened, and dim; the substance of the brain was firm, and its vessels turgid; the sinuses, particularly those in the base of the skull, were distended with fluid blood; the ophthalmic artery, on the affected side, was tumefied; the orbital cellular substance was very vascular, and softened in texture; the eyelids were of deep livid colour, thickened, and their surface partially covered with crusts. In the thorax and abdomen no pathological appearances, worthy of notice, were discovered.

Professor Jaeger made trial of acupuncture in the following case of paralysis of some of the muscles in the orbit. The patient was a stout man about 30 years age, and he ascribed the affection of his eye to exposure to cold.

The upper eyelid hung down, covering more than half of right cornea. He was incapable of moving the eyeball upwards, inwards, or outwards. The abductor retained its power, so that he could direct his eye towards the temple; the pupil was greatly dilated, and vision very indistinct. Leeching, blistering, rubefacients, and stimulating plasters, with the internal exhibition of calomel, were tried for several weeks without any amelioration. Professor Jaeger introduced a very slender needle to the depth of nearly an inch, in the direction of the levator palpebræ superioris. The needle was allowed to remain till the patient began to experience smart pain in the orbit, which generally took place in a minute or two after the introduction of the needle. This process was repeated every second or third day for two weeks, when the patient left Vienna without having experienced any benefit. I met him accidentally in the street in a town in Hungary, about six weeks after the first trial of acupuncture, and the symptoms continued the same as when I saw him in Vienna. In some cases of this description, the amaurotic symptoms are probably owing to a rheumatic affection of the neurilema of the optic nerve. A degree of amaurosis, in the rheumatic ophthalmia, is occasionally met with, apparently from the same cause. In syphilitic diseases of the eye, amblyiopic symptoms appear occasionally to be the effect of pressure from diseased periorbita.

Professors Rosas and Jaeger are of opinion, that the conjunctiva bulbi, in its physiological condition at least, partakes more of the characters of serous than of mucous membranes. Dr. Rosas states, in his work on the Eye, that the conjunctiva loses its mucous character and assumes the serous, proportionably to its distance from the margin of the eyelids; that where it covers the cornea it has assumed entirely the serous character; that the conjunctiva, as it approaches the margin of the cornea, becomes smoother, more glancing, and firmer in its texture, and that the conjunctiva bulbi resembles serous membranes in the disposition of its vessels. In accordance with these views of the anatomy of the conjunctiva, rheumatic inflammation of this membrane is of frequent occurrence in Vienna. The students used to name this disease "pleuritis oculi." The idiopathic form of the disease is subject to variations from scrofula and other ailments; hence conjunctivitis rheumatica, scrofulosa, and other varieties are described. The idiopathic form of the disease appears to be the catarrho-rheumatic ophthalmia of English authors. The conjunctiva may be subject to rheumatic inflammation, but in most of the cases which were pointed out to me as rheumatic conjunctivitis the sclerotica was involved.

In rheumatic ophthalmia, warmed linen cloths are applied to the eye, which are said to be indicated by the patient keeping the orbital region covered with his hand; fluid applications to the eye in this description of ophthalmia are thought improper. If there be much supraorbital, or circumorbital pain, extract of hyoscyamus, or powdered opium, mixed with a little lard, is rubbed on the eyelids or brow. Professor Rosas prefers hyoscyamus to opium in active congestions of the eye or its adjacent parts; hence, in the cases of young people, hyoscyamus is more frequently employed than opium; in old people it is the reverse. Leeches are applied in this disease to the neighbourhood of the eye, but it is seldom found necessary to take blood from the arm. Diaphoretics, as the acetate of ammonia, or the tartrate of antimony dissolved in a decoction of mallows, are found useful. The remedia resolventia, as taraxacum, the triticum repens, the nitras potassæ, and other saline preparations, are often prescribed by Professor Rosas, as he supposes that congestion of the liver and vena portarum system produces or favours the continuance of eye diseases. In the milder forms of rheumatic inflammation of the eye, Professor Rosas deems mercury unnecessary; he prescribes it when there is danger of serous exudations. If it be necessary to exhibit anodynes internally, he generally prefers hyoscyamus to opium. When the disease has become chronic, counter irritation, by blisters and tartar emetic ointment, applied behind the ears is had recourse to. A solution of the lapis divinus, with the occasional addition of some tincture of opium, is used as an eye lotion. I never saw solutions of lunar caustic used in any disease of the eye at Vienna, the beneficial effects of which, in conjunctival inflammation, are so universally acknowledged by the surgeons of this country, who are acquainted with eye diseases. A so-

lution of corrosive sublimate is occasionally employed as a lotion.

Acute catarrhal ophthalmiæ are treated with purgatives, diaphoretics, and local and general bleeding when necessary; tepid water alone, or with the addition of some mucilage of quince seeds and tincture of opium, is used as an eye lotion. In the second period of the inflammation no mucilaginous fluid is thought necessary; astringent solutions remove the disease.

I saw two cases of ophthalmia erysipelatosa at Vienna, a disease which I never saw in this country. This variety of ophthalmia was characterised by the conjunctiva being elevated into blebs containing yellow transparent fluid, some of them projecting beyond the margins of the eyelids. In one of the cases, the temple of affected side was tumid from erysipelatous inflammation. The pain felt was trivial. Professor Jaeger, in whose house I saw these cases, prescribed the internal use of small doses of tartrate of antimony.

In Professor Rosas's opinion, scrofulous ophthalmia bears all the use of cold local applications; he finds tepid mucilaginous lotions, and warmed linen cloths, more suited to the disease. He finds it occasionally necessary to take away blood by leeches, and he prefers having them applied behind the ears. Counter irritation to the same situation is often deemed useful; if, however, there are glandular swellings in the neck, the irritants are directed to be applied to the shoulders or arms, in case of producing increased excitement of the already irritated parts. Extract of hyoscyamus is found to diminish the intolerance of light and spasm of the eyelids, which are so frequent attendants upon this disease; if not admissible in the form of lotion, the softened extract is applied to the brow. In the more chronic forms of the disease, solutions of some of the preparations of copper are the ordinary remedies; a solution of corrosive sublimate, with the addition of a little laudanum, is thought preferable when there are pustules of the cornea.

Much attention is paid to the constitutional treatment of scrofulous ophthalmia at Vienna. The patient is enjoined to take free exercise in the open air, when the weather is dry; to have his bed and body linens frequently changed, and his lodgings regularly ventilated. His diet is to consist of fresh animal food; fat, smoked, salted, and pickled meats are to be carefully avoided. Acids, and the sour wines which are so generally in use among the poorer classes of the people in Austria, and potatoes, bread, and coffee, are strictly forbidden. Animal soups, roasted apples and pears, and some of the dried fruits are thought convenient articles of diet.

It is thought that the object in the medical treatment of scrofula is to give energy to the lymphatic system. With this view, a moderate use of drastic purgatives, jalap and senna, for example, of diaphoretics, as the preparations of antimony and ipecacuanha, and of deobstruents, as taraxacum and mercurials, is tried. Narcotics are indicated when there is a high degree of irritation of the lymphatic or nervous system. Among the tonics carbonate of iron is sometimes used. I never knew sulphate of quinine prescribed as a remedy in scrofulous ophthalmia at Vienna.

Professor Rosas has observed that arthritic ophthalmia generally commences in the left eye, and that the disease in many cases does not appear in the other eye till the first attacked has suffered materially. Dr. Rosas has described arthritic inflammation of the conjunctiva as characterised by a peculiar yellowish erysipelatous redness of the margins of the eyelids, by frequently repeated cramps of the orbicular muscle, by severe pain, by exacerbations in cold wet weather, by remissions when the atmosphere is dry and warm, by secretion of acrid tears from the lachrymal gland, and by a peculiar white frothy discharge which appears on the eyelids. In this ophthalmia, the conjunctiva is often in a softened condition, but seldom shows any disposition to secrete pus. Arthritic ophthalmia seems, however, to delight in fixing its seat in the venous system of the eye, and accordingly its most frequent forms are inflammation of the choroid and iris. Congestion of the liver and vena portarum system seems often to exist along with arthritic inflammation of the eye; the disease often appears after suppressed hæmorrhoidal discharge. Arthritic ophthalmia is treated by general and local bleedings, the extent of the inflammation, and the age and constitution of the patient modifying the degree to which they are practised. When the disease has succeeded to suppressed hæmorrhoidal or other habitual discharge, restoration

is to be attempted. Counter-irritation applied to the extremities, and the abstraction of blood, by leeches or cupping, from behind the ear, neck, or shoulders, are often serviceable. To mitigate the supra-orbital pain, Professor Rosas directs powdered opium, mixed with a little saliva, or the acetas of morphia, dissolved in a drop or two of almond oil, to be applied to the supra-orbital region. In all cases the patient is directed to avoid damp air and wetness. The arthritic cachexy is to be combated by improving the state of the digestive organs.

Foreign Medicine.

ACADEMIE DES SCIENCES.

Sitting of the 5th May, 1834.

Analogy between the Egg of a Bird, and the Ovum of Mammalia.

M. Dutrochet brought up a report in his name, and in the names of M.M. Serres and J. Geffroy, on a memoir by M. Coste, entitled, Researches on the Generation of Mammiferous Tribes. The report ended with the following conclusions: " the monography of the ovology of the rabbit," which is the subject of M. Coste's treatises, has been writſen with a truly philosophical spirit, and the author has made judicious use of the improvements that the science has made within the last few years. His labours doubtless leave something to be wished for; the facts demonstrated by him do not all bear the stamp of novelty, but amongst them are several discoveries of great importance that we have verified with the author. He has described, with more precision and detail than had before been employed, the different phenomena which take place successively in the ovum, from the period of its impregnation to that of its complete development. By his observations a complete analogy is established between the egg of the bird and the ovum of mammalia, with regard to their principal phenomena. M. Coste thereby deserves the approbation of the Academy, we would propose that he should be encouraged to continue his researches in a science which every day demands more and more the solution of a question of so much interest.

HÔPITAL DES ENFANS MALADES.

A General Review of the Clinical Lectures, delivered by M. Baudelocque *during the three months of January February, and March, of the present year.*

Pleuro-pneumony of the Left Lung—No Active Treatment—Cure following an Abundant Diaphoresis on the 13*th and* 14*th Days.*

Etienne Saunar, aged 4 years, of good constitution, had suffered some time from cough, and on the 20th of March was attacked without any apparent cause with fever, accompanied with dyspnœa and pain on the left side of the chest. These symptoms increased with loss of appetite, and on alternate days he suffered with relaxation and constipation. The child was confined to bed, and mere simple diluents were prescribed. On the 27th of March he was admitted into the hospital, and was then suffering from the following symptoms:—orthopnœa; countenance flushed; skin hot and dry; intense dyspnœa; thirst, *souffle tubaire*; and bronchophony; complete absence of respiratory murmur on the right side, that on the left heard louder than natural, and in some situations combined with the râle ronflant; no expectoration; pulse very quick, 144 in a minute; lips dry; tongue wider than natural, and covered with a whitish mucus; no nausea or vomiting; has had no stool for three days. (Four ounces of blood taken from the arm; decoction of milk wort prescribed; two blisters applied to the lower extremities, and an emollient injection.) The patient is very much irritated, continually screaming, no rest during the night.

29th. Decubitus on the left side; dyspnœa continues; voice extremely feeble; cough very troublesome; pulse 140 in a minute; respiration 48; other symptoms the same. (The decoction of milk wort to be discontinued, in lieu of which the decoction of marsh-mallow was ordered, and a dram of the white oxide of antimony prescribed.)

From this to the 1st of April the symptoms continued; decubitus changing sometimes from the right to the left side; the white oxide of antimony was discontinued, and sinapisms were applied to the left side of the chest.

On the 3rd, fourteen days from the com-

mencement of the disease, profuse sweating; cough moist.

From the 3rd to the 8th, the symptoms gradually subsided; respiratory murmur could now be heard equally on both sides of the chest; *souffle tubaire* can still be heard on the summit of the chest; cough loose; skin moist; all the symptoms improved.

Thus he continued,—every symptom by degrees diminished, and on the 20th of April he left the hospital quite well.

In this case, as in the case of rheumatism, as soon as the medicines were discontinued, and the disease left to nature, the patient recovered, without much debility remaining.

Acute Laryngitis resembling Croup—Repeated Applications of Leeches on the anterior part of the Neck without any relief—Death—Morbid Appearances.

—Cabourg, a child five years of age, was admitted into the hospital on the 9th March. It appeared that the mother had died of phthisis at the age of 27, and the father within the last few days at the Hôtel Dieu, from a disease not yet ascertained. The person who came with the child said, for the last three months he had been troubled with cough, which, for the last two days, had greatly increased, with hoarseness and intense dyspnœa, for which the child had not, as yet, had any advice.

On examination at the time of admission, a violet hue was observed on his countenance, orthopnœa with whistling, neck swollen, pain about the region of the throat, and the child complained of a suffocating sensation; continual cough, no expectoration; pulse wiry, 150; respiration 60 in a minute; tonsils enlarged. From percussion or auscultation no morbid sound was apparent, with the exception of the above named whistling; tongue natural; no appetite; slight thirst; intellectual powers perfect. Eight leeches were applied to the sides of the larynx, a laxative clyster was given, and sinapisms applied to the inferior extremities. An emetic, composed of ipecacuanha, was administered. The latter produced vomiting, and two or three liquid evacuations, and there was a free discharge of blood from the leech bites. The symptoms became ameliorated, and the child passed a tranquil night, but the next morning the symptoms returned with great severity.

10th. The same hue is apparent on the countenance; orthopnœa continues; the sonorousness of respiration can be heard from one extremity of the ward to the other; extreme anxiety; pulse 136, tolerably powerful; respiration 56 in a minute; cough followed by opaque mucous expectoration without containing the least traces of false membrane; amygdalæ healthy. (Decoction of marsh-mallow sweetened. Hydr. subm. gr. xv. to be made in three powders.)

During the day a small quantity of milk was allowed, which was no sooner taken than vomited. In the evening the child became restless and agitated; these symptoms were followed by delirium and extreme difficulty of breathing. (Four drops of croton oil were rubbed on the fore part of the neck, and a blister applied on the nape.)

11th. Excessive prostration; violet hue of the countenance continues, lips swollen and livid; whistling respiration; cough feeble, harsh, resembling croup; voice faint; pulse small, 164; respiration 52 in a minute. On asking the patient where he experiences pain, he points to the laryngeal region. On percussion, a clear sound is emitted on either side of the thorax; and from auscultation no positive indication of disease can be discovered. (Six leeches to the neck, two blisters to the thighs; syrup of ipecacuanha two ounces—a spoonful to be taken in coffee every quarter of an hour.)

From the different remedies employed, no amelioration was procured, orthopnœa continued, with delirium, and violent restlessness, the patient lying first on the right, then on the left side, carrying frequently his hand to the larynx, in the hope of removing some foreign obstacle, which appeared to him to obstruct the air passage.

On the 12th, the next morning, imminent asphyxia; great alteration of features; countenance livid; pulse small, thready; and, in an hour and a half from the visit, the patient died.

Examination of the Body twenty-three hours after Death.—External Appearance.—The body, since death, has lain on its belly; rigidity of the limbs very prominent; livid hue of the countenance; anterior part of the thorax and abdomen blackish; ecchymosis surrounding the leech-bites.

Neck and Chest.—The glottis and epiglottis are considerably swollen and remarkably red, the rima glottidis of course much restricted. Its mucous membrane presents neither infiltration, ulcerations, nor false membranes. The redness continues in the larynx, especially about its superior part, and is only very slight about the trachea and bronchi, on which there is slight purulent exudation; old adhesions of the lungs to the pleura, principally to the left lung, and in its apex are found two small tubercular masses. The tissue of the lungs contains serum, mixed with blood; the remainder of the thoracic viscera healthy. Head not examined.

At the same period last year, a patient of the same age, with precisely the same symptoms, was under the care of M. Baudelocque. The child was attacked in the hospital. Leeches, blisters, &c., were applied, as in this case, but without success; and, on a post mortem examination, every part of the pharynx and larynx was found in a similar state of disease.

These two facts point out to us the inefficacy of local sanguineous evacuations, when practised on the affected organ. In these two cases, the palliation was only temporary, and the symptoms continued to increase. We neglect, at the present day, too much small revulsive bleedings. Ghisi, who was the first to describe the epidemic of croup at Cremona in 1717, stated that general blood-letting was more beneficial than the application of leeches or scarifications on the affected part; and, indeed, it was the only successful method. In very young children, plebotomy can be omitted, and leeches substituted; but they must be applied as far as possible from the affected organ. M. Chauffard, in his Traité de Médecine Pratique, quotes a number of cases, which are in favour of this last method, and which confirm the danger of local blood-letting near an affected organ when in its acute stage. We have lately witnessed a case of acute ophthalmia, which became aggravated after the application of leeches to the temples; but, as soon as sanguineous evacuations were had recourse to on the inferior extremities, the disease subsided.

Extraordinary Power of Increasing or Diminishing the Height at will.

M. Velpeau presented to the Académie de Médecine a man of forty, over whom a vehicle had passed during his childhood. He has the power of increasing or diminishing his height by two inches at will. This lengthening takes place in the pelvis alone, the trochanters are not displaced, the pubis very little; the sacrum alone ascends and descends like a wedge between the ossa ilii.

EXPOSURE OF THE ADULTERATIONS OF DRUGS.

No one could imagine the fraud and villany which are practised in the drug trade, as proved last week before the Medical Committee of the House of Commons. We take credit to ourselves for having, single-handed, repeatedly attacked this nefarious system, which will, and must, be abated. It must be obvious to the meanest capacity, that the most ample acquaintance with science, and the greatest judgment in practice are of no avail, if adulterated or inefficient remedies are substituted for those ordered in prescriptions. It is really deplorable to reflect that, in a case of danger, the medical attendant feels in his breast that he cannot depend on the genuineness of the medicines he prescribes. This is the melancholy fact, however. If a physician recommend some house, where pure medicines may be obtained, he is assailed in the pages of a contemporary, and accused of having made a contract with the proprietor for a per centage system. His reputation and the welfare of his patient are unworthy of the slightest consideration, and he is grossly slandered for daring to protect his own reputation, and save his patient's life.

Reports of Societies.

MEDICO-BOTANICAL SOCIETY OF LONDON.

Tuesday, June 10th, 1834.

Mr. Judd, Professor of Toxicology, in the Chair.

A paper was read on the Convolvulus Jalapa, which was furnished to the Society by M. Pelletan, which evinced great research, and a full account of all that has been written by botanists on the important medicine above named.

After the paper was concluded, Dr. Sigmond, Dr. Ryan, Dr. Chowne, and Mr. Iliffe addressed the meeting on the medicinal effects of jalap and its adulteration.

This conversation gave rise to remarks on the adulterations of medicines generally, and to the exposures which took place before the Parliamentary Committee during the week. It was universally agreed by all the speakers, that it was extremely difficult, indeed almost impossible, to obtain pure and efficacious medicines, and that the legislature should devise a more efficient mode of examining apothecaries and druggists' shops than the defective state of the law admits at present.

The meeting then adjourned to the 24th, when Professor Burnett will deliver a lecture, after which the session will close.

THE

London Medical & Surgical Journal

Saturday, June 14, 1834.

MEDICAL RELIEF TO THE POOR.

THE Report of the Poor Law Commissioners contains the following passage, which embodies the result of their enquiries into the medical treatment of parish paupers:—

"The out-door relief of the sick is usually effected by a contract with a surgeon, which however, in general, includes only those who are parishioners;—when non-parishioners become chargeable from illness, an order for their removal is obtained, which is suspended until they can perform the journey; in the meantime they are attended by the local surgeon, but at the expense of the parish to which they belong. This has been complained of as a source of great peculation; the surgeon charging a far larger sum than he would have received for attending an independent labourer, or a pauper, in the place of his settlement. On the whole, however, medical attendance seems in general to be adequately supplied, and economically if we consider only the price and amount of attendance."

"The country is much indebted to Mr. Smith, of Southam, for his exertions to promote the establishment of dispensaries, for the purpose of enabling the labouring classes to defray, from their own resources, the expense of medical treatment. Some valuable remarks on this subject by the Rev. P. Blakiston and Dr. Calvert will be found in Appendix (C). It appears to us, that great good has already been effected by these dispensaries, and that much more may be effected by them; but we are not prepared to suggest any legislative measures for their encouragement*."

It is pretty evident, from the guarded language used by the Commissioners in the first portion of this extract, that they were sensible they had but very imperfectly examined this branch of their extensive enquiries, which it must be confessed was of very little importance in comparison to the graver matters they had to animadvert upon. The published extracts from the information they acquired, give us but seven examples of the pay of parish surgeons, and five of these in Sussex; so that we have no means of judging what were the facts which were elicited during their researches. We have the less cause to regret this defect, as Mr. Warburton has very properly directed some very searching questions to the parish authorities upon this subject.

The contracts with parish surgeons has long been a scandal to country practitioners. If there be any truth in the allegations that are commonly made, there is no doubt that the unusual economy in medical matters, in parish management, is the result of an utter disregard to the

* Page 43.

quality of the thing purchased, and too often to the respectability of the sellers. In the unworthy degradation of the profession the interests of the poor have been equally compromised.

With respect to the second portion of the foregoing extract we have, for some time, reserved a few observations on the dispensary system, in the hopes of seeing the remarks which the Commissioners received. They are not yet printed, at least we have been unable to procure them. But as our attention has been lately called to certain attempts at establishing self-supporting dispensaries we shall anticipate the subject, and, in the meantime, introduce a few remarks upon the collateral topic of gratuitous medical relief to the poor, to which we have been led by some comments in the last number of the Quarterly Review.

Not interfering in general politics it would be unwise in us, as medical journalists, to do more than to admire the singular ingenuity with which every subject is tortured into some bearing upon Tory politics in our celebrated cotemporary.

An acute and just observation of Mr. Sharp, in his admirable *Letters and Essays*, is the text upon which the Quarterly undertakes to preach.

"When a child is taken from an opulent mother, she comforts herself by saying, 'I thank God that all that could be done has been done to save it;' but the grief of a poor woman is heightened into agony by the belief that a physician and proper attendance might have preserved her little one. Such thoughts are the harder to bear, because the social affections of the needy are necessarily cherished by the habit of doing those humble services to each other which are rendered to the rich by their menials; and perhaps this necessity alone may counteract the inevitable, and therefore pardonable, selfishness arising from scanty subsistence."

Upon this touching passage, the truth of which the medical practitioner, whose lot it is to be conversant with the severest physical and moral distresses of our nature, whose habits lead him to reflect where others feel, can best attest, our cotemporary "takes leave to observe, that in London, and in all our great towns, thanks to the high and generous tone of feeling *hitherto* characteristic of the medical profession in this kingdom, the poorest have easy access to the best medical advice, as well as surgical assistance—*gratis*."

To this passage there is but one exception,—all the Toryism implied in that adverb *hitherto*. How far this consolation applies to the ranks a little above the lowest, we stay not to inquire. But the insinuation the reviewer means to imply in disfavour of medical reform, as destructive of the generosity and sympathy of medical practitioners, deserves more especial notice. This hint, the reviewer ingenuously confesses he has received from a pamphlet on *The Medical Profession in England*, which he recommends to the candid attention of Lord Durham and Mr. Warburton. This pamphlet our readers are already acquainted with through the pages of this Journal. Under the impression that nothing is ever gained by slighting or perverting the argument of an adversary, we endeavour to do full justice to our opponents. The argument we are about to notice did not, we admit, strike us as of so much importance as to merit particular attention, till we found it was so highly valued in such an influential quarter. "Suppose," says the author of the pamphlet, "the practice of physic be reduced to a mere trade for lucre—and it is not difficult to conceive

this—nay, it is the inevitable consequence of bringing all the present denomination of practitioners under one head, and giving them all equal rank. . . Conceive, then, the condition of *gentlemen* in the profession to be at an end, and the business of physic to have become a mere trade, in which there is a competition of tradesmen to supply the article of advice at the cheapest rate. . . . . A person of reputation for the cure of diseases under this free trade system, would not only have no scruples, but would think he did not do himself justice if he forbore to take advantage of such opportunities, *as he who dealt in* TIMBER *or in* COALS *would avail himself of the rise in the market to sell his goods.* This is but a short hint at the evils of such a change;—add to them another. *The charitable assistance which is afforded by all branches of the profession to the poor, or to persons in indifferent circumstances, would at once be stopped. For that high character for benevolence which has been cultivated in the profession of physic from the commencement of the institution of the* COLLEGE, and has, *by the example afforded,* been *diffused to all branches of medical practitioners, and raised the whole of the profession to a higher state and condition in England than in any other country in Europe* will be lost. Each individual will consider that his advice and medicine is his stock in trade against such competition, as will not allow him to dispose of any of it in charity, lest he lose his daily bread."

We are not at present aware of the date of the first dispensaries. We do believe that when the College was perverting its charter to the establishment of a downright monopoly in the *trade* of medicine, and when its insolent bearing, now many years ago, engaged the public interest in behalf of the apothecaries, insomuch that the House of Lords virtually repealed its charter—we do believe that, at the time we allude to, the handful of practitioners constituting the College established a dispensary for the poor as a subterfuge from the unanswerable argument of their opponents against their then oppressive and grinding monopoly. We reproach not the Fellows of the present day with the misdeeds of a past age; but when it is boldly asserted that THE COLLEGE set the example of liberality, we cannot but examine into its pretensions; and when, in the nineteenth century, an advocate of the *rank* abuses of the profession, whom, from his nail, we cannot but recognise *, seriously, or under the mask of seriousness, cautions the public to apprehend the decay of the professional charities, together with the total loss of *gentlemen* practitioners, in the downfal of insolent and useless distinctions, and in the encouragement and improvement of medical education, it is difficult to restrain our honest indignation within moderate bounds. We shall pursue the subject of Dispensaries in our next.

MEDICAL LAW.

DURING the course of the week the Court of King's Bench has given judgment in the case of Collins *v.* Colnaghi, to the effect, that a Scotch physician cannot lawfully practise physic in England.

A question of great importance to the public press has been postponed for a second argument next term. The question is how far a *boná-fide* report of what takes place in a court of justice is an authorised publication. We have often abstained from commenting upon reports of coroners' inquests in consequence of the uncertainty of the law. Common sense seems to us to make short work of the argument.

* "Ex ungue leonem."

EXPEDIENCY OF PRINTING THE MEDICAL EVIDENCE GIVEN BEFORE THE HOUSE OF COMMONS.

We hope that Mr. Warburton will report to the House of Commons the progress of the Committee, before the prorogation of Parliament, so that the minutes of the Committee may be made public. We can see no reason why it should not be done in a matter like this, which is purely professional, and it would be very satisfactory to gentlemen in the country, who have considerable anxiety on the subject. It would relieve us from the difficulty under which we labour in being unable to reply to our correspondents without a breach of privilege of Parliament.

Among many communications we received on the progress of Reform, there are two which demand an answer, and these relate to

MR. GUTHRIE'S EVIDENCE.

Gentlemen have written to ask us how we reconcile the statements we have made, that the President of the College of Surgeons was the best advocate and the best witness the College could have had, with the liberal sentiments he has expressed on various occasions. Our reply is, he became the best witness and advocate simply through the liberality of his sentiments, by mentioning every point with perfect openness and candour, by admitting every error into which the College had fallen, and by showing where they were, in his opinion, right, and where they were wrong, without reserve, or without endeavouring to conceal anything. He also showed what had been done, and what they would do if power were granted to them. He not only pointed out every abuse, but the means by which they were in future to be prevented. For instance, after mentioning the various ways in which he had heard it had been proposed to elect the Council, he pointed out the inconveniences that would result from all; and whilst he preferred the present mode, on account of its greater fairness to all classes of persons, he said it was so disagreeable to himself and to most of the Council, that they would be glad if the Committee could find another and a better way of doing it; but that if they could not, they would ensure strict justice being done, by not allowing the person elected to take his seat at the Council until after the election had been confirmed by the Secretary of State for the Home Department, thus giving time to every man who thought himself aggrieved or passed by to make his appeal. In addition to this, he recommended that all the meetings of the Council, except those for the election of a new Councillor, should be open to the members generally, so that anything under discussion might be publicly known, and thus every member of the Council would stand fairly before the public on his own merits, and abuses could neither be created nor exist. Other points of Reform which Mr. Guthrie recommended we cannot enter into; they extended to every thing connected with the affairs of the College, and, though we differ from him on many points, we are satisfied that the whole of his evidence will be read with great interest when the time comes for its publication.

HOSPITAL AND PRIVATE MEDICAL SCHOOLS.

In another page will be found a Representation from the Bristol Medical School to the indefatigable Chairman of the Parliamentary Committee on Medical Education, to which we request the attention of our readers. Such a proceeding was called for, in consequence of the evidence given by certain lecturers of the London Hospital Schools, which went to show that medical science could only be taught efficiently in their *own* schools, and that "low fees were dishonest." We are not aware of any private lecturer who has been examined, or allowed to answer this allegation; and so far as the recorded evidence goes, it is interested and one-sided. There is a good maxim in our laws—*Audi alteram partem*—and we entertain no doubt but the liberal and upright Chairman will bear this in recollection. In the meantime we cannot help commenting upon and refuting the above evidence. Few will admit that the Examiners and Council of the College of Surgeons, most of whom are teachers, are the only individuals in Great Britain and Ireland who can communicate the best medical instruction! For our own part, we have long entertained the opposite opinion;

and have long since expressed our conviction, that there are as scientific and dexterous operative surgeons, and as good teachers and writers, in different parts of the United Kingdom as in this metropolis. Were it not invidious, we could name physicians and surgeons attached to private schools who have far outstripped many of their metropolitan contemporaries, and have done much more for science. Moreover, we could prove that, so far as the private schools are concerned, they are frequented by those who have entered at the larger schools, and who find it their interest to re-enter the proscribed places of instruction. In attestation of this fact, we may mention, without the slightest vanity, that pupils have entered to our lectures, after having attended the same subjects in larger schools; and we have had them from every large medical school in London. The same fact could be attested by our colleagues, and it is easily explained. The private lecturers are in their own defence indefatigable, are more accessible to students, and are ever ready to give explanations and information. Nearly all the lecturers in the large schools immediately disappear after each lecture, and leave students to have their doubts cleared up as they may. But the real offending of the private schools is the lowness of their fees—*hinc illæ lachrymæ*. It is, no doubt, very dishonest that one school demands eighteen or twenty guineas for anatomy, when another offers it for one-half or one-third of that sum; and so also with respect to the other branches of medical science. This is the real source of dissatisfaction. There are, however, some individuals so antiquated in their notions, and so aristocratic in their dispositions, that they still imagine there ought to be the high fees exacted which were demanded some thirty years since, when there was no competition or rivalry in medical teaching. They forget that a race of younger and more efficient instructors than themselves are in the field; and that these, in accordance with the spirit of the times, are contented with a fair though more moderate remuneration for their labours. The world, too, is so stupid as to patronise the new plan, and hence we have low fees in London, Dublin, and Edinburgh. We remember the good old times when we were "dishonestly" mulct in double the fees now fixed in the Dublin and Edinburgh schools; that is to say, we paid four guineas for each six months' course of lectures, which may now be had for half the amount. Nevertheless, this sum is only one-half of the lowest fee demanded in London, *ergo*, the private schools with us are absolutely dishonest in taking such low fees. We are satisfied that we have said enough to convince Mr. Warburton and the Medical Committee that there are two ways of telling a story, and that the legal maxim, *audi alteram partem*, is accordant with common sense and justice.

REPRESENTATION OF THE MEDICAL SCHOOL OF BRISTOL TO THE MEDICAL COMMITTEE OF THE HOUSE OF COMMONS.

To the Chairman of the Committee on Medical Education.

Sir,—Having reason to believe that the Committee over which you preside are anxious to collect all the information that can be obtained on the present state of medical education, and to give attention to statements of grievances and disadvantages experienced in any department of the profession, we, the undersigned Lecturers of the Bristol Medical School, take the liberty of addressing your Committee on a subject which we consider of vital importance to the success of our Institution, and, consequently, to the interests of medical students in this city.

We do not think it necessary to trouble you with any remarks tending to demonstrate the possibility of completing a medical education beyond the walls of the metropolis, nor shall we urge the advantages which are peculiarly afforded by Bristol for the prosecution of medical study. For information on the latter point we beg to refer to the enclosed prospectus.

The object that we have in view in the present memorial is, to solicit respectfully, but earnestly, that you will take into consideration that regulation of the Council of the Royal College of Surgeons, which prescribes an attendance of six months at one of the hospitals in London, as a necessary condition for obtaining the diploma of the College.

The intention of this regulation was undoubtedly a good one: it was designed to enforce the acquisition of a certain quantum of

practical information, which, according to the ideas of the framers of this regulation, would be accomplished with greater certainty, and with more collateral benefit, in London than elsewhere. Whether this idea was a correct one at the time the regulation was enacted, it is not our business to inquire; but we conceive that the mere fact of the existence of such hospitals as are now common in the provinces, and a knowledge of the mode in which their professional departments are conducted, must be amply sufficient to show that, however superior were the advantages once afforded by metropolitan institutions, that superiority no longer exists. Nay, we might go a step further, and say, that a student will spend a given time at a hospital in the country more profitably than at one in London, for the simple reason, that his examinations of cases in the latter instance must, to a certain extent, be contracted and disturbed by the throng of persons who are no less desirous than himself of extracting the same amount of information from such cases, but this inconvenience rarely or never occurs in provincial institutions.

But were the regulation in question *superfluous* only, we should feel some hesitation in troubling your Committee with our sentiments on the subject. We regret, however, to say, that its operation is actually injurious, by interfering in those branches of provincial education which have no immediate connexion with hospital attendance. When a student knows that however diligently he may toil in the prosecution of his studies under provincial teachers, his course cannot be completed without a certain residence in London, he is induced to underrate the opportunities in his present possession, and to delay the pursuit of various branches of knowledge, until he shall have repaired to a situation where he imagines he shall imbibe instruction of a more profitable character than can be obtained in his present circumstances. In the meantime he neglects the acquisition of those fundamental principles of medical science which are absolutely essential to the utility of a residence in London, and fall into habits of idleness and listlessness, or at best of superficial observation, which would render him incapable of making the acquisition that he needs during the prescribed residence, even if the time were sufficient for the purpose, but which is very far from being the case. In order, however, to obtain a certificate of his capability of practising he adopts a pernicious method but too common among students in London, that of resorting to a private tutor who, although he may, by dint of what is technically termed *grinding* or *cramming*, enable his pupil to answer a number of interrogatories before a Board of Examiners, cannot be expected to qualify him for the important and difficult duties of a medical practitioner.

When to the foregoing considerations we add the well known fact, that vast numbers of promising young men have had their characters, their usefulness, and their peace of mind irreparably ruined by even a brief sojourn in the capital, where practices of immorality and licentiousness may be pursued with such facility, and with so little immediate disgrace; when we urge that a heavy expenditure is incurred by students, in addition to that which medical education must entail under any circumstances; and, finally, when we submit, that the regulation implies an invidious distinction between the hospital teachers in the metropolis and those in the provinces, we entertain great hopes that your Committee will think it right to recommend to the legislature, that the obnoxious regulation be annulled.

We have the honour to remain, Sir,
Your obedient servants,

Henry Riley, M.D.
J. A. Symonds, M.D.
William Hetling, M.R.C.S., Surgeon to the Bristol Infirmary.
Henry Clark, M.R.C.S., &c.
J. C. Swayne, M.R.C.S., &c.
G. D. Fripp, M.R.C.S., Surgeon to the Bristol General Hospital
William Herapath.
Samuel Rootsey, F.L.S.

To Henry Warburton, Esq. M.P., &c., *Chairman of the Committee on Medical Education, House of Commons, London.*

ARGUMENTS MADE ON THE DIFFERENT THESES WHICH WERE WRITTEN FOR THE CLINICAL CHAIR OF MIDWIFERY, BY COLOMBE, DUBOIS, VELPEAU, AND BAGIGNAN.

Extracted from the Lancette Française.

The first thesis by M. L. Colombe—on Delivery.

M. Colombe called delivery the completion of labour.

M. Dubois disputed this definition, because, after the expulsion of the placenta, there still remained some clots of blood to be discharged,

M. Dubois blamed M. Colombe for making a scholastic distinction of the three periods in the separation of the placenta. You have even, says he, allowed of it, by saying that you would distinguish these periods by the character of the pains.

M. Colombe—I have not pretended to distinguish thus the times of separation, but only if there is or not adherence of the placenta. We might as well make ten periods as two, three, four, or five. Thus in prolapsus, we can divide into as many lines (laughter).

M. Velpeau.—You say that adhesions of the placenta are less at the commencement and termination of pregnancy. On what do you found this opinion? Is it on the experiments of Alph. Leroy?

M. Colombe.—I regard but little experiments; it is from practical observation.

M. Velpeau.—If at the commencement of pregnancy the fœtus is expelled, it depends on the state of the neck of the uterus, but, on the contrary, if at the termination, it is from distension of this organ. When we examine the fœtus in utero, we find the adhesions the same at all periods; the placenta, however, is not, as you have described, of smaller size proportionally in the middle than in the last months of utero-gestation.

M. Colombe.--You are speaking of the embryology, which is not a part of delivery.

M. Velpeau.—You say in page 6 of your thesis, that the vessels of the placenta, in the termination of pregnancy, become obliterated; this is not the case, they are in the same state; they are changed only in number and volume. What is your opinion on the chatonnement of the placenta? [hour-glass contraction.]

M. Colombe.—Before giving an opinion, it would be necessary to see many of them; I can at present give you only the opinions of authors.

M. Velpeau.—On spasmodic obstruction of the neck of the uterus—do you speak of the external or internal orifice?

M. Colombe.—Of the external.

M. Velpeau.—I deny that this orifice has the power of contraction so as to prevent delivery. The neck in this case is dragged towards the vulva; the hand is introduced into its cavity, sometimes even to the extent of four or five inches, without entering the cavity of the uterus; the contraction is at the internal orifice; you have mistaken one for the other.

M. Colombe.—Hervé relates a case in which the external orifice was so much contracted after delivery, that he was unable to introduce a stylet.

M. Velpeau.—That is impossible in the first twenty-four hours; the two orifices have always been confounded.

M. Colombe.—Then the error has been common to Desormeaux and many others.

M. Velpeau.—My opinion on the chatonnement of the placenta is the following: It happens not unfrequently, I have often seen it; it is distinct from contraction of the internal orifice. In utero-tubal pregnancies, the chatonnement is in the angle of the womb; it exists then in three cavities—1st, that of the neck; 2nd, that of the uterus; 3rd, that of the chatonnement.

M. Colombe.—I have seen but one kind of chatonnement, and I have never witnessed particular pouches.

M. Velpeau.—In floodings that take place before delivery the precept is immediate delivery. Why do you say in page 24, that it is necessary to wait, and introduce the hand only if the woman is not too feeble.

M. Colombe.—I have seen attempts at delivery prove fatal.

M. Velpeau.—Doubtless it does not always prevent death.

M. Colombe.—But it hastens death! I spoke, in fact, of the means to facilitate the contraction of the uterus, in cases of inactive contraction.

M. Velpeau.—The best plan is to deliver.

M. Colombe.—That is if there is danger of death.

M. Velpeau.—We must deliver before it takes place.

M. Colombe.—If the patient is very weak you kill her.

M. Velpeau.—What do you do then?

M. Colombe.—I wait.

M. Velpeau.—The patient dies.

The second thesis, read by M. Dubois.—What are the best means to be adopted in cases of narrowness of the pelvis? (Arguments between M. Velpeau and M. Dubois.)

M. Velpeau.—Page 83 and 84, you say,—If a calculus complicates the labour, it is necessary to thrust it back above the head of the child, by driving back the head at the same time, or as well to perform the operation of lithotomy, as *under any other circumstance.*

M. Dubois.—It is not I who has recommended this mode of proceeding: and if you continue the paragraph, you will find that I have explained it in another way.

M. Velpeau.—You have stated it positively as a fact in those cases in which the forceps are insufficient. What method should you prefer, then?

M. Dubois.—The high apparatus recommended is only possible when the head is not engaged in the pelvis, and then not necessary. When engaged in the pelvic cavity, it is impossible to have recourse to it with any beneficial result.

M. Velpeau.—You might have said that with advantage in your thesis.

You have spoken, page 76, of tumours not inherent to the conformation of the pelvis: in cases of obturation by a tumour in premature labour, does it appear to you applicable?

M. Dubois.—You confound two things together. I have said, first, that if contraction was owing to a permanent cause, we must

proceed as in cases of deformation of the pelvis; secondly, if the tumour changed in volume from one day to another, or in the course of nine months, then artificial means must be had recourse to for effecting premature labour.

M. Velpeau.—Osseous tumours are very various; you have spoken of only two. In the case of an osseous prolongment in the form of the styloid apophyse behind the pubis, would it be essential to produce artificial labour?

M. Dubois.—It is difficult for me not to reply, but I shall not enter into all the by-roads of this question. What I have said of permanent contraction generally takes place, though not always: it is impossible to enter into the details.

M. Velpeau.—You might have mentioned them to a certain extent.

M. Dubois.—My thesis already contains 85 pages.

M. Velpeau.—Page 70, you say,—when the pelvis is less than two inches, and the infant is dead, the Cæsarean operation is indicated; but if the child is dead, the operation that you speak of is unnecessarily dangerous.

M. Dubois.—In these cases it is impossible to extract the fœtus by the natural passage, without equally endangering the life of the patient.

M. Velpeau.—Well, you say if the head only remains, and the pelvis be less than two inches, it must be abandoned.

M. Dubois.—There is in such cases a great difference. When the fœtus remains entire in the cavity, it putrefies, and causes much greater danger than if the head alone remained.

M. Velpeau.—Then, when the fœtus is entire, is it not best to extract it by pieces?

M. Dubois.—There is no comparison; the danger of the version and of the extraction of the parts adds to the danger of the head remaining in the cavity, and is much greater than the Cæsarean operation.

M. Velpeau.—I believe your opinion to be too absolute. In the case of the pelvis being three inches and a half, and the fœtus dead, you say, page 25, that it is necessary to wait; but the death of the infant is the very reason you should not wait, for the pains become less severe, and there is not sufficient power for its expulsion.

M. Dubois.—You do not finish my phrase; I add, " or you must be guided by the same rules as if the pelvis was naturally formed." I bear all the responsibility of my phrase.

M. Velpeau.—Have you said that it is necessary to wait?

M. Dubois.—As in ordinary labour.

M. Velpeau.—It is necessary to proceed in its extraction.

M. Dubois.—I do not suppose to have finished. I persist in what I have stated.

M. Velpeau.—We differ in opinion.

M. Dubois.—It is an error to imagine the work is over, because the child is dead; nevertheless, I beg you will permit me to keep my opinion.

M. Velpeau.—And I shall keep mine. (*Laughter.*)

M. Velpeau.—You perforate and empty the contents of the cranium when the diameter of the pelvis is three inches and a half. I am astonished to hear you speak so frequently of perforation. What do you think, then, of cephalotribe?—it is sufficient when the pelvis has three inches and a quarter to three inches and a half.

M. Dubois.—The application of the cephalotribe is very difficult; impossible even in the case of three inches. Have you applied it?

M. Velpeau.—Yes, once. It offers less danger than perforating the skull.

M. Dubois.—I may say its application is impossible, when I know the difficulty we find in the employment of the forceps, in those cases in which we are compelled to place the branches of the forceps otherwise than natural. There is no comparison between it and the easy operation of perforating the skull.

M. Velpeau.—When you have perforated the cranium, why do you not use in preference the cephalotribe to the forceps? Besides, I do not agree that its use is more dangerous than the forceps. One of our colleagues has employed it many times, in which the pelvis has not been three inches.

M. Dubois.—It is very difficult; perforation is less painful.

M. Velpeau.—So you perforate, and I crush. (*Laughter.*)

M. Velpeau.—You require for the state of premature labour 1st, that the woman is in good health; 2nd, that she is primiparous; 3rd, that the two preceding labours have been impossible. But you acknowledge yourself that it is essential for the first labour to relax the parts; but I have seen several women in whom premature labour has not been, after repeated efforts, produced, and in whom parturition took place at the usual term. Is this your opinion?

M. Dubois.—Yes, in general; I have, in fact, only to quote Jœrghe. This last objection is not serious; but if it were always true that after one or two mutilated infants, the woman could be naturally delivered, it would be necessary to condemn altogether premature labour. I have cited Smellie as an authority for the provocation of delivery.

M. Velpeau.—Your reasons do not point out the necessity for premature accouchement. A large head presents to the side of the largest or narrowest pelvis; as to the exact dimensions, it is difficult to ascertain by a few lines; you cannot know then whether delivery will take place, and not any of your arguments are convincing; besides in particular epochs of utero-gestation there is an uncertainty as to the diameter of the head.

The third thesis by M. Velpeau—Convul-

sions in women during pregnancy, at the time of labour, and after delivery.

M. Dubois.—Your thesis contains many inexactitudes.

M. Velpeau.—Without doubt there are many that I should not have wished it to contain; however I have corrected many of them.

M. Dubois.—I attach, in fact, *little*, very *little* importance to this objection.

M. Dubois.—Page 11 you mention a case of pretended convulsion of the uterus, taken from the thesis of M. Baudelocque; there is some contradiction between you in the manner of explaining it, for it is evident that the symptoms resulted from muscular contraction.

M. Velpeau —I do not see the point of this contradiction; I have given the opinion of M. Baudelocque, who does not admit of the convulsions of the uterus. I added that there might be not only convulsions of muscles, but of the intestines and uterus.

M. Dubois.—I believe that uterine convulsions would not have this effect.

M. Velpeau.—Also I have stated that he exaggerated the case; I add that the fact of Pacond, who has seen after death the uterus to be the seat of real movements and violent agitation, is much more extraordinary.

The fourth thesis by M. Bagignan—In cases of faulty presentation of the fœtus, what is best to be done?

The arguments on this essay were strongly contested by Dubois, Bagignan, and Velpeau; the want of space prevents us from continuing their argumentation.

LITERARY INTELLIGENCE.

In July will be published a new edition of Mr. Wardrop's Morbid Anatomy of the Human Eye. 2 vols. royal 8vo.

The price will be considerably less than the former edition; but the same regard will be paid to the fidelity and beauty of the colouring of the plates, the whole being executed under the superintendence of the Author.

CORRESPONDENTS.

We shall be happy to comply with the wish of our Glasgow correspondent.

Dr. Stokes's Lecture.—Numerous inquirers, Medicus, A. C. T., a General Practitioner, Zeno, &c. will find the best reply we can give in the present number.

Medicus.—The adulterations of drugs are noticed in another page.

A Reformer.—The provincial lecturers and hospital attendants will be examined, but not this session, as Parliament will be prorogued on the 2nd of July. The Irish and Scotch corporations also stand over. The medical officers of hospitals and dispensaries would be examined were they not required to furnish written evidence.

A Parish Surgeon.—The remuneration of parish surgeons ought to be increased, and fixed in proportion to the amount of the poor.

Galen.—It is not easy to pass a law against empirics, as the upper and middle classes employ them as well as the community. It is very true they commit great slaughter and do incalculable mischief.

A Chemist.—It is very probable that chemists and druggists will be obliged to study materia medica and pharmacy, and be confined to preparing prescriptions.

Mr. Hetling's communication has been received.

Errata.—In page 604, col. 2, line 40. *for* increased *read* decreased; in page 605, col. 1, line 35, *for* primoparous *read* primiparous.

METEOROLOGICAL JOURNAL.

MONTH. June, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
5		64	66	53	29·48	29·67	60	60	W. N.W.	W.N.W.	Fine	Fine	Fine
6		63	65	45	29·73	29.89	60	60	N.N.E.	E.	—	—	—
7	☽	60	68	51	29·81	29·75	60	60	N.N.E.	E.	—	—	—
8		62	68	58	29·65	29·54	60	58	N.E.	S.E.	—	—	—
9		65	72	59	29·48	29·55	58	58	S.S.W.	S.S.W.	—	—	—
10		66	74	58	29·50	29·42	59	60	S.	S.S.W.	—	—	—
11		64	64	51	29·42	29·48	59	61	S.E.	S.W.	—	Showy.	Cloudy

50, *High Holborn.* William Harris and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 125. SATURDAY, JUNE 21, 1834. Vol. V.

LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE XCIV., DELIVERED APRIL 24, 1833.

Gentlemen,—This evening I will make a few observations on *wounds of the abdomen;* and it may first be remarked, that those which do not extend through the peritoneum are not attended with any peculiarity, and consequently are to be treated on the principles applicable to wounds in general. In other examples of deeper injury, in which the peritoneum is pierced, and the cavity of the abdomen penetrated, even if the wound heal favourably, it may leave a cicatrix that will sometimes become the seat of a hernial protrusion, if not supported with a bandage.

Severe contusions of the skin and muscles of the belly without any wound, are also sometimes followed by a gradual yielding of the parts to the pressure of the viscera, and, in this manner, considerable swellings, termed by the French *eventrations*, may be produced.

A cannon ball, when nearly spent, if it strikes the abdomen obliquely, may rupture the muscles and their aponeuroses, and a protrusion of the viscera be the result, though the skin, on account of its greater elasticity, may continue unbroken. Accidents of this kind, however, are for the most part immediately fatal.

Gentlemen,—you should also be aware that punctured wounds, or violent blows on the belly, may give rise to the formation of matter in the sheath of the rectus muscle, a case in which an early and a depending opening is always required.

A contusion of the hypogastric region, when the bladder is full of urine, will burst that viscus, and occasion a most dangerous extravasation of urine; such as is very apt to give rise to a fatal attack of peritonitis, notwithstanding the prompt use of the catheter, and every aid which it is in the power of the surgeon to afford.

Penetrating wounds of the abdomen, attended with injury of parts of importance, are frequently followed by a small, feeble, contracted pulse, pallid countenance, cold extremities, great and sudden prostration of strength, vomiting, spasmodic affections, and other alarming symptoms. These may indeed arise in timid, nervous subjects, without any injury of important organs; but, unless they soon subside, you will have reason to suspect something more than the wound of ordinary parts.

Generally speaking, unless the wound be large, attended with protrusion of the viscera, or discharge of bile or intestinal matter from the external opening, you cannot at first give any positive opinion about the depth and nature of the injury.

But, gentlemen, you will sometimes gain information from certain symptoms, denoting the injury of particular viscera; as vomiting of blood when the stomach is pierced, discharge of blood per *anum* when the bowels are wounded, or the evacuation of bloody urine when the bladder or kidney has suffered.

From what has been already explained, gentlemen, it must be manifest to you, that, although superficial wounds of the belly are not attended with any great peculiarity, this is not the case with such as penetrate that cavity. Here various sources of peril occur, depending partly upon the chance of internal hæmorrhage, or extravasation of the contents of the viscera, but, in a still greater degree, upon the tendency of the peritoneum, when subjected to irritation, to become extensively inflamed. With the exception of such patients as die instantaneously, or in a few hours, from internal bleeding, nine-tenths of those, who die from penetrating wounds of the abdomen, are cut off by peritonitis. In fact, those who die after a moderate effusion of blood, or from the escape of the contents of the bowels into the cavity of the peritoneum, really die of peritoneal inflammation. Hence, the lancet is one of the principal means on which you are to rely in the treatment, which must indeed be rigorously antiphlogistic.

Wounds of the Belly are *sometimes attended with protrusion of the viscera.* If these be uninjured, the sooner they are reduced the better. The protruded parts are usually portions of bowel, or omentum. In the reduction of them, the abdominal muscles are to be relaxed, and the mesentery is to be returned before the bowel, and the intestine before the omentum. Rather than injure the viscera by too much pressure, I recommend you, if necessary, to enlarge the wound, due regard being paid, in making the incision, to the situation of the epigastric artery.

Formerly, gentlemen, a regular account was given in books and lectures of the manner of sewing up wounds of the belly, under the title of *gastroraphe*, which was generally a kind of quill suture, much more ingenious than useful, or even warrantable. But modern surgeons, when they are obliged to have recourse to sutures for wounds of the abdomen, prefer to the piece of ingenuity which I have mentioned, the common interrupted suture, and make as few stitches as possible. Without absolutely rejecting sutures altogether, they employ them only in cases of necessity, and trust very much to the united operation of position, bandages, and adhesive plaster, assisted by antiphlogistic measures.

Then, gentlemen, you may meet with other wounds of the belly, in which the *viscera not only protrude, but are cut or torn.* When a portion of intestine was wounded, it was formerly the custom to sew it up with great precision, and with as much coolness as if it were only a piece of leather. This practice has now, I believe, few or no advocates. It is obvious, gentlemen, that when the opening in the bowel is so small as to be entirely closed up by the protrusion of the villous coat, the suture must be useless. In operations for hernia, the bowel is sometimes accidentally wounded, and the feces pass through the aperture: such an accident has happened in the practice of several surgeons of eminence, who immediately surrounded the opening with a piece of silk, and no harm ensued. Of course the ends of the silk should be cut off, experience proving that the small noose which is left always finds it way into the intestinal canal, and is voided with the feces.

Were a bowel more extensively cut, certainly not more than one stitch should be employed for keeping the ends of the bowel near each other; indeed the mesentery itself answers this purpose; and therefore some doubts may be entertained about the propriety of a suture at all, especially when you recollect that the very nature of the process, by which the reparation of a wounded bowel is accomplished, seems hardly capable of being at all promoted by sutures. In fact, such an injury is accompanied with an inversion and protrusion of the mucous coat, which is scarcely susceptible of the adhesive inflammation. The edges of the wound, I may also observe, can never be brought together with accuracy; and the repair is effected through the medium of the surrounding parts, that is to say, by the adhesions, which the peritoneal coat of the bowel contracts to the great sac of the peritoneum, or to the productions of this membrane, constituting the outer covering of the other viscera.

The right plan, I believe, therefore, is that of avoiding as much as possible the employment of sutures; at all events, I should never apply more than a single stitch of fine thread or silk. Then the bowel should be reduced, and the external opening dressed superficially and lightly, but not very strictly closed. The intestine in a few hours will become adherent to the peritoneum near the external wound, and, through this, any intestinal matter effused will find an outlet. Then, in proportion as the feces resume their natural course, the external wound may be allowed to heal up. The bowel ought always to be reduced as speedily as possible, whether you use a suture or not; and, for this purpose, if necessary, the external wound is to be dilated. The rest of the treatment consists in antiphlogistic means, especially bleeding, leeches, quietude, and abstinence. As for the dressings, I think they cannot be too light, simple, and superficial.

The chance of effusion in the abdomen, gentlemen, is much diminished by the compact manner in which all the viscera and their various surfaces lie in close contact.

Injury of the Viscera without protrusion.—I have already specified a few symptoms denoting the injury of particular viscera. Frequently, however, we remain uncertain about the precise nature of the wounded parts, especially in the beginning of the case. However, this is of no practical consequence, because it is our duty to employ rigorous antiphlogistic treatment, whether the viscera be wounded or not.

Wounds of the small intestines are well known to be more dangerous than those of the large, and the nearer the injury is to the pylorus the greater is the risk. Such cases are also more frequently followed by extravasation. Deep wounds of the liver are alleged to be as fatal as those of the heart itself. Many recoveries from wounds of the stomach are upon record.

Gentlemen, I have mentioned various considerations, rendering it questionable whether you should ever stitch a protruded and wounded bowel; but, when there is no protrusion, no man in his senses would think of ripping open the patient, to perform any experiment of this kind. Indeed, you can rarely know at first whether the intestine is wounded or not, and afterwards when such a wound is denoted by particular symptoms, the bowel has generally had time to become completely fixed by adhesions. Here you should trust to other means,—the resources of nature, assisted by the lancet, abstinence, perfect quietude, and other antiphlogistics remedies.

With respect to the dressings, they should

always be light and simple. If intestinal matter show a tendency to pass by the wound, you should pay great attention to cleanliness, and to maintaining a ready outlet for such matter, until it resumes its natural course, which it will mostly do after a short time, if the patient live through the first perils.

Extravasation of bile, or urine, amongst the bowels, will give rise to fatal peritonitis, and the same consequence is frequently produced by effusion of intestinal matter, unless it happen to be bounded by the adhesive inflammation. If, immediately after a wound of the belly, and its contents, it is the compact state of the contained and containing parts, which at first prevents extravasation, it is that salutary process, the adhesive inflammation, which afterwards renders the occurrence either quite impossible, or bounds and circumscribes the effusion, if it should take place.

It is only under the following circumstances, that the contents of the intestines are likely to be effused. First, when the gut is full, the wound extensive, and air or blood lies near the opening. An extravasation, also, more frequently follows the rupture of the bowels by blows, than the injury of them by wounds.

When an extravasation is perceived in the first instance, a part of the wound should be left unclosed, and the patient placed in a position that will favour the flow of the matter out. Here antiphlogistic treatment is the main hope.

The *Psoas Abscess*, or *lumbar abscess*, is a collection of matter formed in the cellular substance of the loins, behind the peritoneum, and descending in the course of the psoas muscle, until it produces a swelling below or above Poupart's ligament, or glides under the fascia of the thigh. The disease furnishes the best illustration of the nature of large chronic abscesses, and especially of those which are usually regarded as scrofulous. It begins with slight uneasiness in the loins, and a weakness in walking, but no acute pain may have been experienced, though the matter be already copious enough to produce an external swelling. By degrees, however, the quantity of matter becomes very considerable, producing a sense of tension and weight about the loins, pain shooting down the lower extremity, and some degree of hectic disturbance of the system. As I have said, the abscess may form a swelling below Poupart's ligament, or above it; or make its way down the thigh under the femoral fascia. In a few cases it descends into the pelvis, whence it passes through the sacro-ischiatic foramen, and forms a swelling near the anus.

Lumbar abscess may or may not be combined with caries of the vertebræ; and the disease of the bone may be either the cause or the accidental accompaniment of the collection of matter. When joined with caries of the bodies of the vertebræ, you may have paralysis of the lower extremities; and then, I believe, the affection of the bones is the primary complaint, and one of a scrofulous nature. Generally speaking, however, even when a lumbar abscess is joined with disease of the vertebræ, there is no paralysis, and then you may conclude that, in all probability, the affection of the bones is secondary. At the same time, I ought to mention, that my friend, Mr. Brodie, is led by his experience to believe, that lumbar abscess is rarely the primary disease, but originates from caries of the vertebræ.

Gentlemen, from explanations already delivered in previous lectures, you are aware that it is the disposition of lumbar and other chronic abscesses to begin very slowly and insidiously, and to increase in the same way, until, from containing a few ounces of matter, they include at last several quarts. The matter of a lumbar abscess commonly presents flakes of a curdy substance, like those seen in other scrofulous abscesses; and the whole cavity in which it collects is lined by a membrane called *the cyst of the abscess*, which has somewhat the appearance of a mucous membrane, and is the organ by which, after the disease is established, the matter continues to be incessantly undergoing secretion and absorption. The extent of the surface of such a cyst may well be conceived, when you recollect that the lumbar abscess sometimes contains a gallon of matter. Here, gentlemen, you see a specimen of a cyst of a considerable psoas abscess: it looks like a membranous bag of ample size. Until the quantity of matter is enough to produce an external swelling and fluctuation, you rarely have any positive knowledge of the existence of the disease, which is often mistaken for rheumatism.

I have seen several lumbar abscesses, the swelling of which in the bend of the groin more or less resembled that of a hernia, and was attended with impulse when the patient coughed. One case was lately brought to my house: there was a small soft prominent tumour, with impulse, near the groin, but rather more towards the ilium than the place of a hernia, and accompanied by a larger swelling,—evidently an abscess behind the os innominatum. I recommended the tumour behind to be opened, when, if it had a communication with that in the thigh, the latter would subside, and indicate, at all events, the nature of the case. Another surgeon of great experience advised the introduction of a needle into the femoral tumour, in order to learn the quality of its contents.

Attempts have been made to disperse lumbar abscesses by exciting the action of the absorbents, by emetics, blistering the surface of the swelling, and the employment of purgatives. The plan has been attended with little success. Now, as it is the nature of lumbar and all chronic abscesses to become larger and larger, and sometimes to attain vast magnitude before they burst, it is, I think, a good general rule to open them as soon as a fluctuation can be plainly distinguished. It is found, however, that opening a considerable lumbar abscess is frequently followed by a violent and even fatal

attack of *irritative fever;* and hence some caution is requisite if the tumour be large. In fact, when you puncture the abscess, discharge its contents, and leave the opening unclosed, the cyst sometimes inflames over its whole extent, and the patient now suffers that violent derangement of the system, excited by any fresh irritation operating upon a hectical constitution, which is well known by the name of *irritative fever.*

The knowledge of this fact, gentlemen, made surgeons fearful of following this practice when the cyst was of considerable size. Hence arose the method of introducing a seton across the tumour, and letting the matter escape gradually; and Mr. Abernethy's more successful way of letting out the matter by a puncture, and then closing it with adhesive plaister, and healing it by the first intention. The skin is to be drawn to one side, the lancet introduced, and the matter having been discharged, the skin is allowed to resume its natural place again. Thus the opening in the skin and the fascia and cyst do not afterwards correspond, and the admission of air is more likely to be excluded. The cyst remains some time undistended—it has an opportunity of contracting—and, as soon as a certain quantity of matter accumulates again, the same proceedings are repeated.

With such treatment you will have to combine the administration of tonic and alterative medicines, and especially such as are found to be the best for scrofulous constitutions in a state of hectic. After the abscess has become very small, blistering the skin, or rubbing the skin freely with the hydriodate of potash ointment, will sometimes promote the dispersion of the remains of it. If the vertebræ should be diseased, counter-irritation will be advisable; especially an issue or blister kept open.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XXIV.

Recapitulation — Preservation of Function with Organic Disease — Application of the Laws of Development — Vicarious Action of Parts — Importance of Pathology to Phrenology — Diagnosis of Local Disease of the Brain — Opinions of Bouillaud, Serres, and Foville — Influence of the Optic Thalami and Corpus Striatum on the Motions of the Extremities — Researches of Andral — Diagnosis of Disease of the Cerebellum — Connection with the Generative System.

GENTLEMEN,—We were occupied at our last lecture in considering some of the phenomena of partial encephalitis, by which is generally meant, a localised inflammation of the deep-seated parts of the brain; because superficial inflammation of the cerebral substance is very rarely partial. I endeavoured to show that the diagnosis of this local encephalitis was to be drawn, in a great measure, from the occurrence of pain and muscular affections of *one side of the body:* in other words, that the phenomena of this disease were partial, so as to give us at once a distinction between general and partial inflammation of the brain. In cases of general inflammation, we have convulsions of both sides, delirium, and coma; in the partial form these symptoms are absent until complication takes place. Thus the supervention of delirium, or of convulsions on both sides, in a case where previously the signs of only *partial* encephalitis existed, would point out, in all probability, an extension of disease to the opposite hemisphere. I also endeavoured to point out the different modes in which partial encephalitis might be accompanied with symptoms of a general character, or affecting both sides; that there might be a co-existing inflammation of the membranes; or that the pressure of the diseased on the healthy hemisphere of the brain might be the cause of the complication. I stated, that some of the most remarkable cases of extensive destruction of the brain, without perceptible injury of the mental powers, were those in which a traumatic opening in the skull gave full scope to the swollen parts, and obviated the effects of pressure on the sound hemisphere. I also observed, that, in cases of local affections of the head, there are two causes which have a tendency to produce general symptoms. One of these is the cause which determines the pain and muscular affection of the opposite side; the other is the general determination of blood to the head; so that we may have cases in which the *actual inflammation* is limited to a part of one hemisphere, and yet, from the general determination of blood to the head, we may have coma and general symptoms.

To return again to the interesting consideration of great loss of cerebral substance with preservation of intellect, I have to remark, that this circumstance is one which some persons might quote against the opinion that the brain was the organ of intelligence; and I believe this fact has been laid hold of by the opponents of phrenology, and put forward as a powerful argument against the truth of its doctrines. Thus, for instance, in the case of Mr. O'Halloran's patient, who lost a large portion of one hemisphere, and yet, with all this mischief, the powers of the intellect remained unimpaired; it would not seem strange if a person should say, here is vast destruction of substance without any lesion of intelligence: how then can the brain be considered as the organ of thought? But let us look at this matter in its true point of view. In the first place, it is to be remembered that cases like this are rare,—that they are to be considered as the exception and not as the rule. I have already shown you, that it is a law in pathology that lesion of structure and lesion of function are not always commensurate. This

law applies to the brain as well as to all the other organs. To say that the brain was not the organ of intelligence, because in cases of extensive cerebral disease that intelligence was preserved, is false reasoning. A man will digest with a cancerous stomach;—is it to be argued from this, that the stomach is not the organ of digestion? I have seen the liver completely burrowed by abscesses, yet the gall-bladder was full of healthy bile. I have seen one lung completely obliterated, and yet the respirations only sixteen in the minute, and the face without lividity. What do these facts prove? Not that the health of organs is of no consequence, but that with great disease there may be little injury of function.

By reference to the original laws of organisation, we may (in some cases at least) arrive at an explanation of this fact. You know that organs are primitively double; and we find, that though the fusion at the median line is produced by development, yet that the symmetrical halves still, to a certain degree, preserve their individuality. Thus we see how the laws of organisation affect the phenomena of disease, and recognise a provision, acting from the first moment of existence, against the accidents of far distant disease.

Now, admitting that the brain is the organ of thought, we may suppose that, as in case of partial obstruction of the lung from inflammation, the remainder of the organ takes on an increased action, so as to supply the place of that which has been injured or destroyed. We know, that if one lung be hepatised the other takes on its functions, and carries on the process of respiration for a time. That this is the case, is shown, first by life being continued, and secondly by the stethoscope, which informs us that the respiration of the lung, which has a double duty thrown upon it, is remarkably intense, proving the force of its action; and it has been further established, that the lung which thus takes on a supplemental action may become enlarged and hypertrophied. May not this also occur in the brain? There is no reason why such a pathological phenomenon, occurring in one viscus, may not also take place in another. But the opponents of phrenology say, supposing the organ of causation to be destroyed, how can the person continue to reason? It strikes me that the only way in which we can account for this is, by supposing that other parts of the brain take on the functions of those which have been injured or destroyed. Nor is there anything extraordinary or anomalous in such a supposition. We see, almost every day, examples of this kind. We see that in certain diseased states of the liver, accompanied by suppression of its secretion, its functions are assumed by other parts, and bile continues to be separated from the blood by the kidneys, salivary glands, and by the cutaneous exhalants. Here is a remarkable case, in which the glands and other parts take on the performance of a function totally different from that in which they are ordinarily employed. We find, also, that when the urinary organs are obstructed, urine, or its principles, are discovered in parts of the system where we should not at all expect them. Thus we have a very remarkable case detailed in the American Journal of the Medical Sciences, in which we find that a young female, who laboured under paralysis of the urinary organs, discharged urea from almost every part of the body, even from the ears. Neither is there anything very extraordinary in this. In several instances of suppression of the menstrual discharge, do we not see a vicarious secretion taking place from the surfaces of parts the most distant, and unconnected with the uterine system? It is a well established law, that when the functions of organs are suspended or destroyed, other parts will often take on the action of the injured viscus. Now, supposing that a portion of the brain is to be looked upon as the organ of causation, and such portion is injured or destroyed, there is no reason why the remaining sound portion of brain should not take on, at least to a certain extent, in addition to its own, the functions of that part which has been injured. If, independently of any phrenological views, we admit the brain to be the organ of thought, there is no reason why we should not admit that the loss of intellectual power produced by lesion of one part may not be supplied by an increase of activity in the remaining portions. It is only by a supposition of this kind that we can account for the preservation of the integrity of mind in many cases of disease of the brain. If we admit the phrenological doctrines, we can suppose that when one organ is injured, another may take on an additional function, and in this way preserve the integrity of the intellect; so that, whether we reason from phrenology or not, the continuance of soundness of mind, in cases of injury of the brain, can be understood when you come to contrast it with other analagous pathological facts. I again repeat, that it is not more extraordinary that, in case of local injury of the brain, the sound parts should take on a supplemental action, than that bile should be eliminated by the salivary glands, skin, and kidneys, or that the principles of urine should be discharged from almost every part of the system, or that a vicarious discharge from the roots of the hair should supply the place of the uterine secretion.

On this subject one point should be always borne in mind, viz., that we may be wrong in saying that a patient is *quite sane* while he is still an invalid and in bed. Unless we can show that after his recovery, and in his various intercourse with the world, he preserves his original intelligence, it would be wrong to assert that there has been absolutely no lesion of intellect consequent on the affection of the brain. While lying at ease in bed, and unaffected by any moral stimuli, he may seem to possess a sound condition of mind, he may put out his tongue or stretch forth his hand when requested; he may give an accurate account of his symptoms, and answer all the

ordinary medical interrogatories with precision. But you are not from this to conclude that he is perfectly sane. Many persons under such circumstances have died in bed, and appeared to preserve their intellect to the last, but in such cases the test of sanity, *intercourse with the world,* could not be fairly applied, and hence I think that there are not sufficient grounds to pronounce a decided opinion as to the real condition of the intellect in such cases.

Before I quit this part of the subject, I wish to make a few remarks on the doctrines of phrenology. There can be no doubt that the principles of phrenology are founded on truth, and of course highly deserving of your attention, as likely at some future period, when properly cultivated, to exercise a great influence over medical practice. The great error of the phrenologists of the present day consists in throwing overboard the results of pathological anatomy. If a pathological fact is brought forward, as appearing to bear against the validity of their opinions, they immediately exclaim, "we dont recognise any fact or principle drawn from disease: our science has to do with the healthy and not the morbid condition of the brain." Now, this is altogether absurd. Phrenology, if true, is nothing but the physiology of the brain, and pathology is nothing but the physiology of disease. Phrenology must be tested by disease as well as by health, and if it does not stand the test of pathology it is wrong. If phrenology be a science founded on truth, if it is a true physiology of the brain, or of that portion of it connected with mental phenomena, one of two results should obtain,—either that it should be confirmed by pathology, or that the difficulties, which pathology presents, should be explicable in a manner consistent with the science. The phrenologists, in my mind, are doing a direct injury to the cause of their science, by their unnecessary and ill-timed hostility to pathology. It is idle to say, as they do, that theirs is the science of health, and that it is unfair to apply to it the test of disease. From pathology is drawn a host of facts, from which the doctrines they profess derive their principal support. The mere phrenologist, who understands not and despises pathology, is nothing better than a charlatan, and professes a science which he does not comprehend. If he would recollect that the brain in a state of health is most, and in a state of disease least, adapted to the purposes of thought, he would see that this is one of the strongest arguments in favour of his doctrine, that the brain is the organ of mind. The more healthy it is, the fitter is it to discharge the functions of intellect, and vice versâ, yet phrenologists are so absurd as to think that pathology has nothing to do with their science.

But besides confirming the doctrine that the brain is the organ of thought, there are innumerable facts drawn from pathology, which have a tendency to prove that particular parts of the brain are the organs of peculiar phenomena. We see an injury of one part of the brain, accompanied by a train of symptoms indicating some peculiar lesion of mind; we see an affection of another part attended by a different class of phenomena. Here pathology, the science which phrenologists reject and despise, goes to establish the ground-work of their doctrines, that the brain consists of a congeries of parts, having each a separate and distinct function. We find, for instance, that disease of one portion of the brain affects the intellect, of another, the generative organs, of a third, the muscular system. What does this prove but that the brain is not a simple organ, but composed of a congeries of parts, each of which governs a different part of the system or ministers to a peculiar purpose. Now, what is this but what the phrenologists themselves wish to prove?

Further, the professors of phrenology have placed all their organs on the surface of the brain, and for this they have been loudly censured. Phrenology, it is urged, knows, or professes to know, nothing about the central parts of the brain, which must be equally important with the superficial, and have confined their investigations to the surface alone. Now it is a curious fact, that the pathology, which they deny, in this instance furnishes the best reply to this objection. I mentioned at my last lecture, that if we examine the symptom of delirium, we find that it characterises the inflammation of the periphery, and is commonly wanting in that of the deep-seated portions. In other words, mental alienation is the characteristic of the disease of that portion of the brain, where the phrenologists have placed the intellectual organs. Here is a strong fact in favour of the doctrines of phrenology, derived from that science, which the mere phrenologist throws overboard and despises. Again, according to the researches of some celebrated French pathologists, there are a number of facts to show that there is a remarkable difference between the symptoms of arachnitis of the convexity and of the base of the brain. This conclusion, which after a most careful series of investigations was adopted by them, is borne out by the results of my experience, and appears to me to be established on the basis of truth. They have discovered that arachnitis of the convexity of the brain is a disease characterised by prominent and violent symptoms, early and marked delirium, intense pain, watchfulness, and irritability. We have first delirium, pain, and sleeplessness, and then coma. But in arachnitis of the base of the brain, the symptoms are of a more latent and insidious character, there is some pain, and the coma is profound, but there is often no delirium. What an important fact for the supporters of phrenology is this, and how strikingly does it prove their absurdity in rejecting the lights derived from pathology! Here we find the remarkable fact, that inflammation of the arachnoid, investing the base of

the brain to which the phrenologists attach comparatively no importance, is commonly unattended with any lesion of the intellectual powers, while the same inflammation on the convexity is almost constantly accompanied by symptoms of distinct mental alienation.

It is objected to the phrenologists that they know little or nothing of the central parts of the brain, that though these parts may be fairly considered to be of as much importance as any others, still they do not admit them to be organs of intellect. Now, what does pathology teach on this subject? It shows that we may have most extensive local disease of the central parts of the brain, that we may have inflammation, suppuration, abscess, and apoplexy, without the slightest trace of delirium. Indeed there can be no doubt that the central portions of the brain have functions very different from those on the surface. They appear more connected with another function of animal life, muscular motion and sensation. Then, let us examine the phenomena of old age. Every one is familiar with the fact that when a man arrives at an extreme age, he generally experiences a marked decay of intellectual power, and falls into a state of second childhood. Does pathology throw any light upon this circumstance? It does. From a series of ingenious and accurate investigations conducted by two continental pathologists, Canzevielh and Desmoulins, it has been found that a kind of atrophy of the brain takes place in very old persons. According to the researches of Desmoulins it appears, that, in persons who have passed the age of seventy, the specific gravity of the brain becomes from a twentieth to a fifteenth less than that of the adult. It has also been proved that this atrophy of the brain is connected with old age, and not, as it might be thought, with general emaciation of the body; for in cases of chronic emaciation from disease in adults, the brain is the last part which is found to atrophy, and it has been suggested that this may explain the continuance of mental powers, during the ravages of chronic disease; and also the nervous irritability of patients after acute diseases, in which emaciation has taken place.

I might bring forward many other facts to show that phrenology is indebted to pathology for some of the strongest arguments in its favour, and I think that those phrenologists who neglect its study, or deny its applicability, are doing a serious injury to the doctrines they seek to establish. The misfortune is that very few medical men have turned their attention to the subject, and that with few exceptions, its supporters and teachers have been persons possessing scarcely any physiological, and no pathological knowledge. Phrenology will never be established as a science until it gets into the hands of scentific medical men, who, to a profound knowledge of physiology, have added all the light derived from pathological research. To give you an instance of the mode of reasoning of the non-medical phrenologists. In their drawing-room exhibitions, they appeal with triumph to the different forms of the skull in the carnivorous and graminivorous animals with respect to the development of destructiveness; and all are horrified at the bump on the tiger's skull. But as Sir H. Davy well observes, this very protuberance is a part of the general apparatus of the jaw, which requires a more powerful insertion for its muscles in all beasts of prey. Phrenology, as generally taught, may answer well for the class of dilletantis and blue stockings, or for the purposes of humbug and flattery, but its parent was anatomy, its nurse physiology, and its perfection must be sought for in medicine. The mass of inconsequential reasoning, of special pleading, and of "*false facts*," with which its professors had encumbered it, must be swept away, and we shall then, I have no doubt, recognise it as the greatest discovery in the science of the moral and physical nature of man that has ever been made. I feel happy, however, in thinking that of late the science has been taken up on its true grounds, in Paris, London, and Dublin. Vimont's splendid work on Comparative Phrenology will form an era in the science. In London Dr. Elliotson has directed the energies of his powerful mind to the subject, and in Dublin we have a Phrenological Society, of which Dr. Marsh is the president, and my colleague, Dr. Evanson, the secretary, and under such auspices much is to be expected.

Having drawn your attention to the ordinary symptoms of local encephalitis, our next inquiry is how far we can diagnosticate the actual seat of disease from phenomena observed during the life of the patient. Do not suppose for a moment that this part of the subject is undeserving of your attention, in the strongest sense of the word. Recollect that the more accurate and extensive is diagnosis, the more certain and available is the practice of medicine. On this subject matters are not altered to the same extent as in the cases of chest, or abdominal diseases. In our knowledge of the two latter we have made vast strides within the last few years, but in cerebral affections, though much has been effected, much still remains to be done; and it is not improbable that some of the opinions on this subject still promulgated in schools require correction. If we examine the various cases of cerebral disease on record, we find that in some the paralysis was complete, and that sensation and muscular motion became as it were annihilated. In other cases the muscular system alone appeared to suffer, while in a third class we find that sensibility is destroyed, while the power of motion remains intact. Again, in some we have complete hemiplegia, in others the paralysis is but partial; in some the affection is slight and transient, in others it is incurable and permanent. The result of all this would appear to imply that there are

different states and seats of cerebral disease, producing different modifications of nervous phenomena. It has been taught that a paralysis of the organs of speech, points out a lesion of the anterior lobes of the brain, and there are many cases on record in support of this opinion. Here is a pathological statement strongly in favour of the doctrines of phrenology. But on the other hand it must be confessed that there are numerous cases on record of lesion of the powers of speech, independent of any affection of the anterior lobe; and hence as far as the diagnosis of lesion of the anterior lobe, derived from loss of speech is concerned, we cannot make up our minds. You are aware that the phrenologists place the organ of language in the anterior inferior part of the brain. Now when an affection of this portion of the brain is found to coincide with the loss of speech, it is all very well, but the difficulty is to account for those cases of loss of speech, in which there is no appreciable lesion of the substance of the anterior lobe. In investigation on this point, however, you must bear the following distinction carefully in mind. The organ of language of the phrenologists is not properly the organ of the *power of speech*, but that by which, as it were, thought is converted into language. A man, from paralysis of his tongue, might be incapable of speaking, and such a case, existing without lesion of the anterior lobes, might be most unfairly quoted against the phrenologists. Again paralysis of the upper extremities has been connected with disease of the optic thalami and posterior lobes of the brain. It is the opinion of Bouillaud, Serres, and others, that the optic thalami regulate the motions of the upper extremities, and it is a fact, that in many instances of paralysis of the upper extremities, disease has been found in these parts. We might term the following a synthetic case illustrative of the doctrine:—"A soldier was wounded in the right shoulder with a lance, in consequence of which he got an aneurism of the axillary artery, for which an operation was performed. At the moment the ligature was tightened he experienced exquisite pain in the situation of the ligature, which extended to the brachial plexus; this continued until the next day and then ceased. On the fourth or fifth day the pain returned with increased violence, and continued until the seventh day, when it became intolerable. He was blooded, but without any good effect, he then became comatose; his head was drawn backwards; he had alternations of stupor and excitement, and soon after expired. On dissection the ligature was found to embrace some of the principal branches of the brachial plexus, and there was an abscess in the posterior lobe of the brain, extending to the optic thalamus. Here we have a case of injury of the upper extremity, and that portion of the brain, which is supposed to govern it, was found in a state of manifest disease. Serres gives also the details of some experiments in support of this opinion. On removing the posterior part of the right hemisphere of the brain in a dog, he found that the left anterior extremity became paralytic; he prolonged his incisions into the corresponding portion of the opposite hemisphere, and found that the right extremity became paralysed. In another dog he plunged a bistoury into the posterior part of the right lobe, and found that the left anterior extremity became affected with convulsive motions. He then introduced into the wound a few drops of nitric acid, so as to produce inflammation of that portion of the brain, and observed that the convulsions of the left fore-foot became more violent; in fact, that the animal had all the symptoms of a local inflammation of the brain, namely convulsions, rigidity, and then paralysis. Rolando has performed a series of experiments with the same view, and his conclusions are exactly those of Serres. So that if we connect the results of these experiments with some facts drawn from pathology, we might conclude that the optic thalami, and posterior lobes of the brain, have a very important share in regulating the muscular motions of the upper extremity. I may here state, that, in this city, a case of a female occurred, who got an attack of severe pain in the left hand and fingers, which became afterwards contracted, and she had, in addition to this, alternate flexions and extensions of the fore-arm, *followed by resolution and paralysis*. On dissection there was an abscess found in the right optic thalamus; the rest of the brain was healthy.

With respect to those cases, in which there is paralysis of one of the lower extremities, it has been taught that it arises from disease of the corpus striatum. On the anterior lobe the following case is given by Serres. "A woman, 40 years of age, had an attack of apoplexy, from which she recovered with the left leg in a state of complete paralysis, and the left arm admitting of a slight degree of motion. Here was a case of lesion of both the upper and lower extremity of the same side, but in the former the paralysis was partial, in the latter complete. On dissection it was found that two circumscribed abscesses existed in the substance of the right hemisphere, the larger situated in the corpus striatum, the smaller in the optic thalamus. Another case is given of a patient who got paralysis of the side; the muscular power of the arm being completely destroyed, while the leg retained a considerable degree of motion. In this case the corpus striatum was but slightly affected, while nearly the whole substance of the optic thalamus was destroyed. I have also to remark, that Serres performed similar experiments on the corpus striatum in dogs, and came to the conclusion, that it governs the motions of the lower extremities. The structure, extent, and special action of the corpus striatum and optic thalamus, are said to afford some explanation, why, in ordinary cases of paralysis, the arm is more often affected than the leg, and does not recover so soon. The fact of the pro-

longations of the optic thalami being much more complicated and extensive than those of the corpora striata, is thought to explain their greater liability to disease.

There are, however, not unfrequent exceptions to this law, and it is not uncommon to meet with cases which militate against the doctrines laid down by Serres and other pathologists, particularly so far as regards the connexion between the corpora striata and the government of the lower extremities, so that I would have you look upon it as a point *by no means* fully established. The latest observations on this subject are by Andral, who brings forward many facts opposed to the opinions of Serres, Foville, &c. &c. Out of seventy-five cases of accurately circumscribed disease of the brain, the disease being hæmorrhagic or otherwise, he found that in forty, where the paralysis existed in both extremities of one side, there were twenty in which nothing was injured but the anterior lobe, or the corpus striatum; while in nineteen the lesion existed in the posterior lobe, or the optic thalamus. In these seventy-five cases, also, were twenty-three in which one arm was paralysed. In these, eleven presented the disease in the anterior lobe, or in the corpus striatum; ten in the optic thalamus, or posterior lobe; and two in the middle lobe. Finally, out of these cases were twelve of paralysis of one arm; ten of these presented disease in the corpus striatum, or anterior lobe, and two only with disease in the optic thalamus, or in the posterior lobe.

These facts, gentlemen, prove how uncertain the matter is yet. It would appear that when a simultaneous and equal injury of both corpora striata and optic thalami exists, it would be natural to expect complete paralysis of one side, and I believe there are some cases on record in support of this opinion. But when you have paralysis affecting both sides of the body, you are not to suppose that there is necessarily an affection of the corpora striata and optic thalami, for such symptoms, in the majority of cases, are found to depend upon either an intense congestion of the brain, or a large serous, or sanguineous effusion. The same phenomena are produced by the pressure exercised by the diseased on the sound hemisphere, in a case of local encephalitis, or by disease affecting the upper part of the spinal cord.

With respect to disease of the cerebellum, the only means of determining its affections consists in first considering the seat of the pain, if any, and in the next place the effect on the genital system. There are a great number of cases detailed in various treatises in proof of the close connexion between the cerebellum and the genital function. I shall relate a few of these. A man, aged thirty-two, got an attack of apoplexy, followed by violent erection of the penis, which continued until death: here we have a case of apoplexy accompanied by priapism. On dissection the whole of the cerebrum was found healthy; but there was an apoplectic effusion in the middle lobe of the cerebellum. Another case is given of a man, aged fifty-five, who died of apoplexy in a brothel, and who, after the attack, had violent priapism.

On dissection the substance of the cerebellum was found to be extensively destroyed, and there was an apoplectic effusion in the fourth ventricle. There is a remarkable case on record of a prostitute, in whom the clitoris was extirpated, as it was considered that it was the irritation of that organ which brought on a pernicious habit, by which her health was greatly impaired; and it was conceived that as soon as the supposed source of excitability was got rid of, she would give up her vicious propensity, and be restored to health. But in this instance it is probable that the effect was taken for the cause; for on her death, which took place some time after, the cerebellum was found to contain a number of chronic abscesses. Serres gives the case of a woman who died of an apoplectic effusion into the cerebellum. During the fit she had hæmorrhage from the uterus; and, on examining that organ after death, a large clot of blood was found within its cavity, and the broad ligaments, ovaries, and, in fact, every part of the generative apparatus were in a state of high vascularity. Yet this female was seventy years of age, and her menses had ceased at the usual period. There is a most important case bearing on this point on record. A gentleman, who was subject to constant and distressing nocturnal emissions, consulted his physicians, who, considering them to be the result of debility, prescribed various tonic and stimulant remedies. He used various preparations of iron, bark, camphor, opium, hyoscyamus, nitric acid, and many other things of a similar kind, but without advantage. From the fact of the failure of all these remedies, and the circumstance of his having complained of an occasional sense of uneasiness in the back of the head, his physician was led to think that his symptoms might have some connexion with an excited condition of the cerebellum; and, under this impression, had the back of the head shaved, leeched, and covered with a quantity of pounded ice. *From this time his symptoms began to decline rapidly, and in a fortnight he was quite free from complaint.* Now, this case, taken singly, would prove very little; but when we view it in connexion with the number of cases in which disease of the cerebellum has been known to be followed by excitement of the genital organs, it becomes of considerable importance. I have now seen two cases in which this connexion was observed. In the case of a young man who was brought into the Meath Hospital some time ago with paraplegia, it was observed that the penis was in a state of constant erection, and there were continual seminal emissions. On dissection an effusion of blood was found in the cere-

bellum, and another in the hemisphere opposite the paralysed side. There was another case of a patient who was attacked with apoplexy and paralysis of one side, but with the unparalysed hand he continued to attempt the act of masturbation, so that it was necessary to tie down his hand. On dissection there were several effusions in the substance of the cerebellum. All these facts strongly go to prove the connexion which subsists between the cerebellum and the generative function; and I think it would not be unsafe to make the diagnosis of disease of that organ in cases of cerebral disease, where the genital system was much excited.

CLINICAL LECTURES

DELIVERED BY

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LECTURE XVI.

On the Diseases of the Prostatic Part of the Urethra.

GENTLEMEN,—The prostatic part of the urethra is subject to irritation and inflammation in young persons, occasionally ending in abscess of the prostate gland; but these complaints are rarely idiopathic, and occur for the most part from the extension or metastasis of disease from the anterior portion of the urethra, and are generally curable. The diseases, on the contrary, which afflict elderly persons, usually originate in the gland, with little reference to the urethra generally, are by no means so well understood, and rarely admit of a cure being accomplished, although the symptoms and sufferings of the patient may be greatly relieved.

In young persons, the membrane lining the prostatic part of the urethra may be alone affected as a consequence of gonorrhœa, in which case it will be either from acute or chronic inflammation, and in both usually extending, in a greater or less degree, to the orifice, or even into the neck of the bladder itself. When the inflammation is acute, the patient is sensible of a great alteration in the symptoms; instead of a considerable discharge with little pain, and that little confined to the anterior part of the urethra, the discharge nearly ceases, or is greatly diminished in quantity; the pain is now referred to the perineum, and, as the patient expresses it, to the neck of the bladder. He complains of pain above the pubes, which is more or less permanent; of a constant uneasiness deep in the urinary passage, which is frequently augmented to an irresistible desire to make water, and which gives him great pain from the moment it passes from the bladder. The tenderness in the perineum is considerable, accompanied by a disagreeable sense of fulness, which prevents the patient sitting comfortably unless on a soft cushion; and there is an uneasiness and weight about the hips and left thigh, which causes great lassitude, and increases the anxiety of the patient, who feels otherwise ill, and has the usual symptoms of general irritation. The inflammation has, in this case, been suddenly extended to the prostatic part of the urethra, and should be subdued by general as well as local antiphlogistic means. If the person is young and plethoric, blood should be drawn from the arm: twelve or fourteen ounces taken away in this manner often give greater relief than anything else; and if followed up by a hot bath at 100°, in which the patient should be kept until he nearly faints, will often alone effect a cure. If the attack is severe, cupping on the perineum and on the sacrum should be resorted to; and leeches should be applied above the pubes, more particularly when pain is experienced in that situation. In fact, active depletion, and more particularly local depletion, always does the greatest good in these acute attacks of inflammation in young persons, whilst, in elderly individuals, when the symptoms are nearly as urgent, although the inflammation is not perhaps so acute, and more confined to the bladder, its efficacy is sometimes doubtful, the relief obtained being evanescent, the debility permanent. In these different cases (and they are not rare) I believe the difference to be this: in the young person, the inflammatory action is not accompanied, or has not been preceded, by any change of structure, whilst in the elderly man, a change of structure has been slowly going on, upon which the inflammation has supervened. If the inflammation is temporarily arrested by the depletion, it almost immediately returns, as the cause which induced it continues to exist, and assists in its reproduction.

Opium, and particularly morphia, is a most valuable remedy after depletion: it allays irritation, and assists materially in the removal of the inflammation. The various preparations of it may be given internally, or they may be used per rectum, in the proportions I usually recommend, of twice the quantity ordered for a pill or draught, and which is to be injected in a small quantity of starch or gruel, not exceeding two, or at most three, ounces. It must be repeated from time to time, so as to keep the irritation under command; and its constipating effects should be obviated by an occasional enema of hot water administered previously, and by small doses of castor oil, or some other gentle aperient medicine; for drastic purgatives are not useful in acute inflammation of the prostate, although active purgation is advantageous in chronic disease of this organ. The recumbent position should be observed, with the hips rather raised than otherwise. In young persons it will rarely be necessary to introduce a catheter, unless suppuration is about to take place, and there is a retention of urine, when it should always,

under such circumstances, be a very small and very flexible instrument, which is to be withdrawn immediately. A catheter is frequently allowed to remain in the bladder, when the inflammation is in a chronic state, with advantage. It is always injurious when the inflammation is acute; but is frequently useful when there is irritation without inflammation, if that peculiar state can be duly ascertained. The hot bath, used generally as well as locally, gives considerable relief; and the constitutional derangement, or the febrile symptoms, must be attended to in the usual manner; all food being withheld, and the drinks allowed being of the most bland and diluent nature.

When, from the continuance of the disease, the occurrence of rigors, and the increase of the febrile symptoms, the augmented sense of fulness and tension in the perineum, and the greater difficulty of making water, the formation of matter may be presumed; an examination per rectum will often give considerable information, in addition to the swelling which may be perceived externally. It is very desirable the abscess should neither break into the rectum nor into the urethra, nor that the matter should insinuate itself behind the bladder, nor indeed go anywhere except to the surface. The same precautions should be observed, and the same practice followed, as in abscess by the side of the rectum, by making an early puncture. If matter should not follow on the first day, it generally will on the second; and the straight sharp-pointed bistoury should be used for this purpose, and pressed on, from the perineum through its deep fascia, by the side of the urethra, and above the rectum, until the surgeon is assured that it has penetrated the swelling; the flow of matter from which will prove the fact, and the slight bleeding which will ensue must, under such circumstances, do good. An abscess which is opened in this way, or which opens of itself in this manner, usually heals with little difficulty. If it opens into the rectum it is always a serious matter, and it is by no means readily cured when it bursts into the urethra. If it passes behind the bladder death is often the result, after a very prolonged illness, of which I have seen some very unhappy examples; but these, as Sir Charles Bell has observed, generally occur in persons of a scrofulous habit.

Chronic abscess of the prostate, or rather an abscess the result of a lower or more chronic inflammation, is a much more frequent disease, occurring generally from forty to fifty, and even to near sixty years of age. It is usually the consequence of stricture, but is not always so; and is generally complicated with inflammation of the mucous membrane of the bladder, and ultimately with disease of the kidney, by which the patient is destroyed when the disease proves incurable.

One of my earliest friends was thirty years ago attacked with uneasiness in the back part of the urethra, a great desire to make water, and pain on passing it, without any discharge, but with a sense of fulness in the perineum, of weight in the hips and loins, and the uneasiness was increased on evacuating the bowels. I attributed this to the irritation arising from sitting continually with a lady to whom he was much attached, and whom, for the best of all possible reasons, he could not marry. This lasted three weeks, before it was removed by a strict antiphlogistic plan of treatment. He had another attack, at Lisbon, in 1809, which yielded in a similar manner; and he was quite aware of the difference between this disease and a common gonorrhœa, a disease he had contracted in the interval two or three times, and had been cured in the usual way, the last by commencing immediately with small doses of copaiba, and increasing the quantity until the cure was completed, after the manner that has been since recommended as new. In 1817 he had another attack, which was more obstinate, but ultimately yielded to a similar treatment, with the addition of a mild course of mercury. After this he married, and remained well for several years, but unhappily became a widower, and some months afterwards had a return of his complaint without any very evident cause. All the usual remedies now failed, and his disease gradually increased. During three years, he consulted all the most eminent surgeons in London, and at last died, completely exhausted, under the care of Dr. Prout. On opening the body, I found the prostate almost an empty sac, having been the seat of several abscesses communicating with the urethra. The internal surface of the bladder was in a state of chronic inflammation, but without ulceration, although, from the pain at the extremity of the penis, and the amazing quantity of discharge, almost apparently of a purulent nature mixed with the urine, considerable ulceration was expected. The ureters were much enlarged, and the kidneys diseased, that of the left side particularly being enlarged, softened, and on cutting into it, found nearly an empty lobulated bag.

When a stricture has been of long standing, and frequently impassable, accompanied by great straining, and occasionally even by retention of urine for hours, abscess in the prostate is of common occurrence, and the formation of matter is often accompanied by such well-marked paroxysms of fever, as to resemble and to be taken for ague. In some instances the fits became even regular for a time, and again irregular. I place before you several preparations showing this fact. In this particular one, in which the prostate seems to hang in rags, abscesses extended up between it and the back of the bladder and rectum, and would have killed the patient if he had not been cut off by ulceration of the gall-bladder, through the irritation of a large gall-stone. The disease in this case was originally stricture, and the

quantity of matter discharged at intervals, together with the particular uneasiness and tenderness of the prostate on examination per rectum, marked the disease, with which the bladder also sympathised.

The following case of a physician, a friend of mine, who has been under my care during the whole of his illness, drawn up by himself, is an instance I have always told him of abscess of the prostate, and, if I outlive him, I am to ascertain the fact.

"Feb. 15, 1830.—Nearly seven months ago, while riding on horseback in the country, I was surprised one morning to find that I had frequent calls to make water without any obvious cause, and that the contents of the bladder were expelled with force, as if I had been taking a strong diuretic. The urine, too, was of a wheyish colour, unlike the thin colourless transparent fluid I had been in the habit of passing in the forenoon. These symptoms continued upon me, and were attended in the course of a few days with ardor urinæ and pain in expelling the last drops, like a wringing tenesmus of the bladder, whenever, more especially, I mistook the call, and went to make water with only a small quantity in the bladder. During my whole life I have had a highly sensitive irritable urethra, and having, about ten days previously, been attempting to take oil of turpentine for ophthalmic inflammation, which I was quickly obliged to discontinue on account of the ardor urinæ that it induced, I attributed the symptoms to some remaining effects of that stimulus, and attempted to subdue them by warm-baths, camphor in large doses, hyoscyamus, &c., but without success. As I had once in my life, thirty years ago, suffered greatly from stricture, which was finally overcome by the perseverance of Sir E. Home with the caustic bougie, my friend Mr. Guthrie had little doubt of my symptoms being caused by some return of that affection, but a small sized instrument passed readily, and the stream of urine has never been diminished or abstracted. Ever since that time till very lately, I have been a miserable invalid, suffering at times the greatest distress from irritation, apparently in the urethra, and the spasmodic wringing tenesmus (bearing down) of the bladder above described; and I cannot satisfy myself or believe that any plan of treatment, whether the antiphlogistic, the antispasmodic, the alkaline, the alterative, or the stimulant (with copaiba, &c.), after the fairest trials, were ever of the smallest service to me. No matter what plan I followed, or however rigorously pursued, the quantum of distress was just the same, and the relapses or accessions and paroxysms, without any discoverable or even to be imagined cause, just as frequent.

For several months an instrument, on passing into the bladder, which has often been done to ascertain the state of the passage, and to sound for stone, always caused the greatest pain when it entered into and passed through the prostate portion of the urethra, and Mr. Charles Bell, on examining the prostate gland, thought he could distinguish a small pouch, or abscess there, as far back as three months ago. Latterly, however, at a subsequent examination, that gland appeared almost healthy and natural, yet the symptoms of distress and irritation were then greatly on the increase. The urine, from the day of the first discovery till very lately, had not once been natural; it was then of a wheyish colour; it became afterwards either albuminous or muco-purulent, frequently in a very high degree. The best appearance was like a mixture of honey and water, or rather of honey adulterated with wheaten flour to make it white; at other times, and then I always suffered greatly, it was actually purulent, like the sanious contents of an ill-conditioned abscess; at others, again, the last drops only were thick and white as cream, but it never was woolly or soapy. My state was that of a patient suffering more or less irritation at all times in the urinary passages, and never altogether free from tenesmus of the bladder, with an accession or relapse into great suffering and distress, about every week or ten days, when there was always a great discharge of muco-purulent sediment. After these I generally obtained comparative ease, but I possessed no power over their recurrence, which, for several months, actually seemed to be regularly periodical, rather than to depend upon any causes of exposure to weather or excitement from exercise or fatigue, for the worst of them happened while nursing myself with the greatest care, under the most approved modes of treatment, and what I cannot account for, when I have been reposing in bed after the middle of the night, or earlier in the morning when indulging on my sofa. Even now, when my symptoms are so much mitigated, if there be the smallest tendency to relapse or irritation, it is between the hours of three and six in the morning that I feel the symptoms in frequent calls to make water, with uneasiness in the urethra. At my worst times these were attended with distinct heavy throbbing, so severe that I could have often believed the bladder itself was in a state of suppuration. Such was my condition when, about three weeks ago, under the advice of Mr. C. Bell and Mr. Guthrie, I undertook to inject the bladder with warm water through an elastic gum catheter, which I had attempted repeatedly before with the silver instrument, but the prostate portion of the urethra would not bear the application. It gave immediate ease, and by perseverance with the same once, sometimes twice, in the day, the urine, in the course of a few days, actually became healthy, the bladder could retain, without pain, twelve, thirteen, or fourteen ounces of urine, and I became freed as nearly as possible from the symptoms and feelings of disease. The change was so rapid and extraordinary, so much beyond my expectations, and the failure of every other plan

of treatment, however skilfully conceived, had been so remarkable, that I could scarcely bring myself to believe or understand how the simple injection of warm water could have wrought such a miracle. Its truth, however, I consider to be established from the fact, that whenever I perceive the smallest tendency to relapse, which, in the sensitive state of my urinary organs, I am sure to feel on exposure to fatigue, the inclemency of the weather, neglect of my bowels, or departure from the strictest regimen in my diet, the warm water then is my sheet anchor of safety, giving the same relief as it did on the first application.

"June 8th, 1834.—My last report was dated February, 1830, now more than four years ago, when I flattered myself I had almost obtained a cure by injecting the bladder with warm water, but this relief did not last and I ultimately found this remedy as inefficacious as all the others I had tried. The Pareira brava, buchu, uva ursi, the Brixton parsley, galls, &c. were all brought into play in their turn, and all seemed to give some relief at first, but in all the relief was transitory and fallacious; the best of them seemed to be of the pepper tribe, such as the cubebs and the capsicum, but these too have long been discontinued as useless, and given place to the steady use of opium, through which I have derived greater comfort, and been enabled to take exercise and enjoy life in a degree I never expected in this world. My dose is now, and has been for months past, a steady one of one grain morning and evening, and when attacked with irritation I repeat it to as far as three or four times that amount if necessary, almost always with complete relief. I am not cured, and at my age (61) I never expect to be, but when I compare my situation now to what it was several years ago, I am most grateful for the improvement. The urine now is seldom mucopurulent; through the day it often, indeed generally, exhibits, more or less, flakes of albumen floating throughout the mass, and cannot otherwise in any way be called foul or unhealthy, except in the morning, when it is uniformly more loaded with mucous deposits, and less healthy in appearance than at any other time. It is then, too, just before getting up on first awakening that I have always more irritation and uneasiness than at any other time of the day, but at present I can throughout the day retain without distress ten, twelve, and fourteen ounces of urine, and I am seldom disturbed more than once in the night to make water. I recollect nothing else worth mentioning, except that when I pass a catheter I feel uniformly excessive tenderness and pain as soon as the instrument enters the membranous portion of the urethra, and that there is generally, more especially in the morning, a slight discharge of ropy mucus at the orifice of the urethra, such as is perceived at the termination of the cure of gonorrhœa. For the encouragement of others, similarly distressed, I ought also to add, that in all the former part of my life I considered opium to be a drug so inimical to my constitution, as to be inadmissible under any shape. It is now my sheet-anchor, and has proved as useful to my general health, as it has been beneficial to my local disease." In the beginning of 1834 the urethra was scarcely pervious to a No. 3 catheter, which I passed with difficulty, in consequence of the return of the old stricture, but which had been dilated. This gentleman is now in good health and good condition, capable of enjoying himself at table with his friends, and will, I hope, long continue to do so.

Inflammation, followed by abscess of the prostate, is always accompanied by irritability of the neck of the bladder, and which is frequently propagated to the kidneys. This is best allayed by washing out the bladder with warm water, and by leaving in it a small quantity, combined with from half a grain to a grain of the acetate of morphium. The soundness of the bladder is perhaps best shown by its capability of containing from eight to twelve ounces of urine at a time, but it is exceedingly difficult to discriminate between that irritation of the neck of the bladder which arises from sympathy with disease of the kidney, and that which occurs from disease of the part itself; and it is more difficult at a later period to ascertain which was the primary disease. If there be stricture of the urethra, it should be gently dilated, and the irritation may be removed by the means I have pointed out; but the bougie, or dilating instrument, must not remain or be passed into the prostate part, unless the patient cannot make his water, or the doing so is accompanied by more pain than the passing of the instrument, which should be the guide for our instruction. Few patients can bear a catheter in the bladder under these circumstances, and the occasional use of it must depend on the feelings of the patient as to the advantages derived from it.

A strumous habit has been supposed to render persons more liable to this complaint, but I have not observed that it does so, and believe that it does not, except in those persons who may suffer from it in early life. In the middle and later periods I do not think scrofula has anything to do with it. When the matter of the abscess has been discharged, change of air, particularly to the sea side, quinine, sarsaparilla, galls, the turpentines and balsams, all in very small doses, so as to be scarcely diuretic, and always to act as it were imperceptibly, often do good; and the patient should preserve as much as possible the horizontal posture, avoiding all unnecessary excitement. The advantages to be derived from the steady use of opium are too clearly shown in the preceding case to be disregarded.

The prostatic part of the urethra and the neck of the bladder are often affected in middle-aged persons, and sometimes in young ones, by mere irritation or low inflammation, which gives rise in both to troublesome symp-

toms. In young persons it is more usually from the sequel of gonorrhœa, in elderly ones it more often arises from the irritation of the urine, which is secreted of an undue and irritating quality, depending on a faulty state of the stomach and bowels.

When it follows a gonorrhœa, or has existed for some time as a sequela of it, the cure is to be accomplished by strict attention to the general health, diet and exercise, and by the use of the bougie. This is to be used only after an interval of three or four days, and should be a very soft one. It gives great pain on passing through the prostatic part of the urethra, and the point of the bougie comes out in all probability tinged with blood and matter. After two or three trials, a little purulent matter only is observable, and by a continuance of its use a cure is generally effected, but the patient is liable to a relapse, unless he is very careful to avoid all exciting causes of disease, and particularly that of intemperance. In some obstinate cases, where other means have failed, I have reaped advantage from the use of mild stimulating and sedative applications to the part affected, through the medium of a hollow bougie, in the manner I have already described.

On the Chronic Enlargement of the Prostate Gland.

This disease is, as far as we know, produced by those changes which take place in the body in its natural progress to decay, being commonly observed to a greater or less extent in all elderly men. It occurs in some at a much earlier period than in others, does not appear to depend on any previous irregularities of life, or scarcely to be influenced by them; and as it does not take place, or has not been observed in the *corpus globosum* or prostate of the female, which is destitute of a secreting structure, this part may reasonably be supposed to be the texture in which the peculiar change takes place constituting the disease.

It was formerly presumed to be of a scirrhus or malignant nature, from the hardness which occasionally accompanied its formation; but as it has not been observed to communicate an influence of this kind to the neighbouring parts, or to any other analogous textures of the body, which usually suffer from malignant diseases, the idea has been abandoned. The only extension of a similar disease that I have seen has been of an apparently chronic suppuration, of a scrofulous character, of the nearest absorbent glands. I have seen this in only two instances, and the first occurred in an old man in Wardour-street. The prostate was larger than a closed hand, had partaken of a suppurative process of this kind, and the whole pelvis was nearly filled up by a mass of disease of a similar character. In the more common kind of enlargement, the part is rather soft than hard, yielding a little to the touch, and not elastic or springy, like a spongy tumour. The enlargement is sometimes but trifling, in which case the prostate retains its natural shape, and merely projects a little into and around the orifice of the bladder; but when it is considerable, in very prolonged and neglected cases it is often as large as a full-sized orange. One lateral half is usually much larger than the other, and protrudes into the bladder, giving rise to one or more projections, which cause great distress to the individual, and the nature of which has been, I think, misunderstood. The left side, I am led to believe, undergoes this change more frequently than the right, although no reason can be given why it should be so; and whilst one projection is directly backwards and inwards, it sometimes is seen to form a second immediately behind the orifice of the bladder, and which is frequently mistaken for an enlargement of that part of the gland behind the entrance of the vasa deferentia, and which has been called by Sir E. Home the third lobe. Without denying that a third lobe may exist, and is occasionally diseased and enlarged, constituting a projection of an apparently similar nature, I am of opinion that it is of much more infrequent occurrence than has been supposed, and that some mistake has taken place on this subject. That it is, in fact, not in general the third lobe in a diseased state, but a continuation of the enlargement of the lateral lobe. In the lithograph drawing I show you, a disease of this kind is represented: the third lobe appears to be projecting in a very distinct manner into the bladder immediately behind the orifice of the urethra, and the enlarged left lateral lobe is also seen protruding into it, and forming a second projection by the side of the first. Dissection from behind, however, shows that these two projections are formed by one and the same part, viz.—the left lateral lobe, and that the idea of the smaller pyriform one being formed by the third lobe is an error. I have reason to believe, from several dissections of a similar kind, that the diseased appearance I have shown is more commonly referable to the lateral lobe than to the third lobe.

When the prostate becomes diseased in this manner, it does not descend and bulge in the rectum, as would be the case if the enlargement were equal in all directions; but it rather ascends and projects backwards and inwards, the bladder giving place to the enlargement rather than the rectum. The increase in size upwards of the prostate has also a particular effect upon the urethra, which is augmented in size with it, from its anterior to its posterior wall, and thus becomes a deep and narrow instead of a circular canal. This is shown in the drawing in a very distinct manner, and the size of it, and the quantity of urine which might lodge in it may be estimated, by supposing the two surfaces which

have been slit open to be applied to each other. The letter *f* marks a hole made by the improper use of the catheter in the under part of the membranous part of the urethra. The letter *g* the commencement of another to the right side, and nearer to the prostate. The letter *c* several bruised spots at the neck of the bladder, and to the right side of the smaller projection. These were made by the point of the catheter on its being forcibly carried into the bladder. When the parts were removed from the dead body, and the man died the day after he was admitted into this hospital, the catheter could not be made to pass these spots without considerable force being used at the moment of depressing the handle of the instrument, the point of which went below the projecting central part of the prostate, into the deep sulcus formed below it, and between it and the floor of the urethra. When, on the contrary, the point of the catheter was made to glide along, and to raise the upper surface of the urethra, it slipped into the bladder with tolerable ease. I apprehend and hope that the contemplation of this drawing will not only demonstrate to the student the state of parts in such cases, but impress on his mind the course the catheter should take, or be made to take, in all similar cases in order to enter into the bladder without doing mischief.

When one side of the gland only is materially lenlarged, it presses against the opposite side, and carries the urethra with it in a more or less oblique, or tortuous direction, constituting one kind of case in which an elastic gum catheter will pass very easily, without a stilet, when it will not do so with it, and is one in which a silver catheter should never be used. This state is generally discoverable by an examination per rectum.

The effect of these enlargements is first, to lengthen the urethra, so as to render a long catheter necessary; secondly to deepen it, so that it may sometimes contain within the boundary of the prostate a small quantity of urine, which may run through the catheter before it enters the bladder, and thus deceive the inexperienced surgeon. Lastly it deepens the curve of the urethra from the apex of the prostate to the neck of the bladder, which may, and generally will, form another obstacle to the passage of an instrument, whether it be from an enlargement of the third, or the lateral lobe, or from a valvular, membranous, or solid bar drawn across it by the very unequal enlargement of one lobe.

The true chronic enlargement of the prostate is usually slow in its progress, and may attain to great size, and continue for many years without doing much mischief. When even it does become troublesome, it is rarely on account of the disease with which it is affected, but in consequence of that which it induces primarily in the bladder, and secondarily in the urinary organs. It is not a curable although it is frequently a very relievable disease. If attended to in its early stages, its progress may in general be arrested. It is therefore of the greatest importance that elderly men should pay attention to the manner in which their urine is evacuated, and that they should cease to entertain the opinion, that a slowness and a difficulty in passing their water, is the necessary and irrelievable consequence of an advanced period of life.

PROVINCIAL MEDICAL ASSOCIATION.

We wish the medical practitioners in every large city and town in the United Kingdom would establish associations, such as we are about to notice, as these could not fail to be highly beneficial to the profession and the public, by keeping up a friendly feeling among practitioners, ensuring good moral conduct, etiquette, and increasing the respectability of the profession.

At a meeting of medical practitioners held at Bandon, Jonathan Clerke, Esq., M.D., in the chair, it was unanimously resolved,—

"That a Medical Association be formed, to be denominated 'the Western Medical Society.'

"That the Society be composed of the original members, and of all other properly qualified medical and surgical practitioners residing in the county or city of Cork, who shall before the first day of January every year notify to the Secretary their desire to become members of the Association.

"That after the commencement of the ensuing year, every person desiring admission must be balloted for, his admission or rejection to be decided by a majority of votes.

"That the qualification for admission be, a degree of doctor or bachelor of medicine from any of the universities, a surgical diploma from any of the colleges, or having served as naval or military medical officer.

"That the first annual meeting of the Society be held in Bandon in the month of May, the particular day to be notified to the members by the Secretary, and each subsequent meeting be arranged on that occasion.

"That the management of the Society be confided to a Committee, a Treasurer, and a Secretary, to be chosen triennially."

Honorary Members.

Dr. Stokes, Regius Professor of Medicine, T.C.D.
Dr. Macartney, Professor of Anatomy, T.C.D.
Dr. Barker, Professor of Chemistry, T.C.D.
Dr. Allman, Professor of Botany, T.C.D.

Committee.

Dr. Beamish, Bandon.
Dr. Clerke, Bandon.
Dr. Jago, Kinsale.
Dr. Warren, Kinsale.
Dr. Skottowe, Kinsale.
Dr. Donovan, Union Hall.
Dr. Cleburne, Ovens.
Dr. Nugent, Cork.
Dr. Bennett, Cork.

Treasurer.

Dr. Corbett, Innishannon.

Secretary.

Dr. Wood, Ballinspittle.

"That the senior members shall preside in rotation; seniority to be calculated from the date of degree or diploma.

"That at each meeting the members present be invited to propose some subject of conversation or discussion for the following day; the selection to be made by the President.

"That interesting communications from professional gentlemen, not members of the Association, with which the Society may be favoured through its Secretary, may also be proposed as subjects of disquisition.

"That all persons proposed as *honorary members* must be *unanimously* admitted.

"That the annual subscription be 1*l.*, to be paid in advance.

"The objects contemplated by the original members of the Association are a more general personal acquaintance and intimacy amongst the members of the profession than at present exists, and perhaps the diffusion of a more kindly feeling; the improvement which invariably results from the association and frequent intercourse of professional men; and the weight with which, as an Association, they may prefer any application for professional objects to the legislature."

Signed by order, and in behalf of the meeting, J. Clerke, *Chairman.*
S. Wood, *Secretary.*

Foreign Medicine.

HÔPITAL DES ENFANS MALADES.

A General Review of the Clinical Lectures, delivered by M. Baudelocque *during the three months of January February, and March, of the present year.*

(*Continued from page* 631.)

Phthisis Pulmonalis — Pneumo-Thorax — Death Four Months after the Attack— Tubercular Excavations of the Left Lung —Perforation of the Superior Lobe closed by a Semi-Cartilaginous False Membrane —Tubercular Peritonitis.

Adolphe Debroges, eight years of age, of scrofulous constitution, has had successively hooping-cough and measles, *and has been much given to masturbation.* Since the attack of measles he has complained of frequent cough, constipation alternating with diarrhœa, irregular febrile accessions, vomiting, and pain in the belly, progressive emaciation, and loss of strength. Within the last three days a sudden attack of acute pain in the left side of the chest, accompanied with much oppression. Admitted, the first of December, with the following symptoms:—intense dyspnœa; acute pain in the left side of the chest, increased by percussion; tympanitic sonorousness; absence of respiratory murmur, right side less resonant than the left; cough frequent, and dry; voice feeble; abdomen tumefied; pulse small, 120; skin dry; marasmus. (Marsh-mallow and syrup of gum; white looch, milk, and broth were prescribed.)

Diagnosis.—Phthisis pulmonalis, with tubercular excavation and perforation of the left lung, followed by pneumo-thorax.

On the 12th the fever became suddenly more intense, with agitation, delirium, and vomiting. Twenty-four hours after, a scarlatine eruption, affecting principally the skin of the trunk, running through its regular stages, and terminating in a few days by desquamation.

22nd. Countenance natural; pulse small, regular; cough slight; evident pectoriloquy under the left scapula; appetite voracious; diarrhœa; occasional vomiting; nocturnal sweatings. (White decoction, *decoction blanche*, opiate injections.)

Feb. 4th. Dulness of the left side; crepitous rattle under the clavicle of the same side, cavernous respiration under the left scapula; pectoriloquy with gurgling sound. Fever continues, with nocturnal exacerbations and sweatings; last stage of marasmus.

March 30th. The patient was seized in the middle of the night with acute pain in the abdomen, which was found the next day to be distended and tympanitic. Vomiting took place, followed by convulsive motions and death.

Autopsy thirty hours after Death.—Neck and Chest.—Tubercles in the sub-maxillary ganglia, the mucous membrane of the larynx and trachea pale and discoloured, but not ulcerated; all the mediastinal ganglia transformed into tubercular masses; pleura of the left side adherent; superior lobe of the corresponding lung containing two caverns of moderate size, one at its apex, the other at its base; the lining false membrane of a fibro-cellular texture, the posterior surface of the lobe covered by a semi-cartilaginous membrane of a line and a half in thickness, the remainder of the texture of the lung studded with tubercular deposits, and completely impermeable to the air; right lung partly adherent, but comparatively healthy.

Abdomen.—Peritoneal cavity containing a great quantity of gas, also a mixture of serum and fæcal matter. All the convolutions of the intestines adherent to each other, and forming a mass, firmly glued together, in the centre of the abdomen. Liver covered by false membranes, and adherent to the surrounding parts; its structure, as well as that of the spleen, filled with tubercles. Mucous membrane of the stomach thickened and brittle. Internal surface of the ilium and colon ulcerated. The intestinal tube had been lacerated to such a degree by the attempts made to unravel the convolutions, that it was impossible to ascertain the seat of the perforation, through which the fæcal matter had escaped into the peritoneal cavity, and caused acute inflammation of its lining membrane. Several of the abdominal ganglions had degenerated into tubercles. Nothing remarkable in the cavity of the cranium.

We should notice in this case the influence exerted over the production and progress of the tubercles by the scrofulous constitution of the patient, by masturbation, and by the diseases which had preceded the invasion of the cough, especially the measles. On the admission of the patient no doubt could exist as to the presence of a tubercular affection of the lung. Auscultation and percussion of the thorax, at the same time that they confirmed the diagnosis, indicated a perforation of the pleura-pulmonalis communicating with a tubercular excavation. The sudden attack of acute pain on the left side of the chest, with tympanitic sonorousness and absence of respiratory bruit and metallic tinkling, proclaimed the existence of pneumo-thorax. In all the cases where the latter symptom supervened under similar circumstances, which have been mentioned by Laennec, Andral, and Louis, death has soon taken place. In the present instance it is not surprising that dulness of the left side should have succeeded tympanitic sonorousness, and that all the other signs indicating air in the pleural cavity should have disappeared. The admission of air into that cavity, assisted probably by the effusion of a certain quantity of tubercular matter, caused inflammation of that membrane, which produced exudation of a pseudo-membranous structure, closing up the fistula. In the abdomen, the tubercular peritonitis, which had been indicated by the tumefaction of the region and the occasional vomiting; the ulcerations so frequent in these phthisical cases; lastly, the acute peritonitis following the perforation of the intestinal canal, and constituting the immediate cause of death, are all circumstances worthy of notice. It might be added, that tubercular peritonitis is of common occurrence in children.

Affection of the Liver resembling Phthisis Pulmonalis — Pleuro-Pneumony — Death —Autopsy.

André Guézin, 11 years of age, came into the hospital the 29th of February. Has lost all his relations from phthisis pulmonalis; has been long addicted to masturbation. On the 14th of February was taken with acute pain in the right side of the chest, which lasted till his admission, accompanied with accessions of fever, cough, and uneasiness. When he came in, the symptoms were decubitus on the back, acute pain under the right breast, increased by percussion, by

cough, or by deep inspiration; respiration short, and incomplete; no dulness or œgophony; mucous râle, especially under the clavicles; dry cough; skin warm; pulse 120; tongue moist; bowels torpid; countenance pale. (Mallow, gum julep, cataplasms to the part affected, milk.)

March 3rd.—Auscultation and percussion indicate effusion on the right side of the chest, complete dulness of the inferior half. (Emplastrum picis Burgun. to the right side.)

On the 8th, pain in the right side completely dispelled; effused fluid re-absorbed, and much less dulness. The patient experiences no sufferings, but is extremely pale and weak; inferior extremities slightly anasarcous; abdomen tumefied.

18th. Cough increased; fever intense with hectic flush of the face; sputa viscous, frothy, and of a rusty hue; pain which had left the right side is now seated on the left; respiration 36, pulse 124. (White oxide of antimony was prescribed.) The fever, dyspnœa, pain, cough, and expectoration continued to increase in severity. On the 26th bronchophony had succeeded the râle crepitant; pulse 140, respiration 48; some delirium accompanying the febrile accession, which is followed by profuse perspiration.

These symptoms continued to increase, and on the 29th the patient died.

Examination of the body twenty-five hours after death.—Neck and Thorax—Cellular tissue œdematous; mucous membrane of the larynx and trachea pale but not ulcerated; bronchi engorged with purulent mucus; right lung adherent; pleura pulmonalis covered with soft false membranes, but free from effusion; right lung permeable, except at the centre of the upper lobe, where it was hepatised; pulmonary texture friable, and exuding by pressure purulent fluid which sinks in water; pericardium contained two ounces of yellowish serum.

Abdomen.—Peritoneal cavity containing two pints of yellow serum; liver rather larger than natural, and containing in its right lobe a number of excavations filled with pus, and lined by false membranes; gall-bladder much contracted; spleen larger and softer than natural.

The severe disease of the liver in this case had not been indicated during life by any characteristic sign; the pain complained of on the right side was situated on a level with the breast, and plainly referred to phlegmasia of the pleura; every thing tended to prove the existence of an incipient tubercular affection; the œdema of the lower extremities, and the accumulation of serum in the abdominal cavity ought to have drawn attention to the state of the liver, but the dropsy became considerable only a few days before death, at a time when inflammation of the lung, which was rapidly progressing, threatened the life of the patient, and excluded the consideration of all other symptoms. As to the duration of the disease of the liver, nothing satisfactory could be ascertained. A friend of the patient's mentioned after his death, that he had a severe fall three weeks previous to his admission; this might have had some connexion with the affection of the liver, which seems to have preceded the inflammation of the chest, which latter was the cause of death. The irregular accessions of fever experienced anterior to, and during his continuance in the hospital, were symptoms of an incipient tubercular affection, or an internal suppuration. They might have been attributed to the formation of the abscess in the liver, but the latter disease is so seldom met with in children, that, out of 240 post-mortem examinations at this hospital for the last twenty-years, only one instance of it has been met with.

The probable duration of the Lives of Medical Practitioners.

Professor Gasper, of Berlin, states that the ordinary duration of life in the human being is seventy years; but that a very few medical practitioners attain this age, and scarcely one out of fifteen advance so far as eighty. Half the total number of practitioners perish before fifty. There is no profession, he states, in which there exists so much moral contention and fatigue, or which permits of less repose, the regularity of which is so essential for the interior as well as the exterior of life; none which exposes the body to such disastrous influences of the atmosphere, to such disturbance of nocturnal repose, to such watchings, to such irregularity of living, to such disorders of the digestive organs, and to such moral affections. To this I can add, he continues, the unknown number of medical men

who perish from contagion. This statement confirms the truth of the old adage,

"Medicè vivere est miserè vivere."

Influence of the Potatoe on the Health of Sailors.

The potatoe is an indispensable provision on board of ships, not only to vary the aliment, but to mix dry and fresh vegetables together; it modifies also the ill effects of salt meat on the constitution. This vegetable, eaten in a crude state, is very agreeable to sailors, especially if they have been deprived of fresh legumes for a long time; moreover, it is anti-scorbutic. The heat of vessels, when situated between the tropics, causes it to bud; the sprouts, however, are not good, in consequence of an acrid principle that they contain; but during the vegetation of this plant, the tubercle becomes more fresh and sweet, and sailors find it more palatable than the potatoe that does not germ.

The Chemical Changes produced in Coffee by Sea Water.

M. Girardin, Professor of Chemistry, and Member of the Committee of Salubrity at Rouen, has, by request of the Mayor of the town, analysed coffee thus injured. It appears from the result of this examination, that its chemical composition is much altered, as many of the constituents contained in the coffee seed, especially *caféine*, were not detectable, and the others had become so modified, that by re-actives their proper characters were not to be distinguished. The coffee examined contained no salts of copper, or any other metal, though it had remained at the bottom of the vessel coated in this metal. Nevertheless, he concluded that such injured coffee ought not to be exposed for sale. The same chemist had to examine a succedanum of coffee, sold by a grocer at Rouen, and found it composed of burnt rye. A person named Kint, in the United States, took out a patent for a confection of coffee composed of the same class of grain, to which he added some eggs, and a little burnt skin of the cod-fish.

A New Invented Oven for Baking Bread.

PROPOSED BY M. SOCHET.

This oven is to consist of an horizontal cylinder, made from cast iron, the bread is to be placed on an immoveable partition put in its centre; the tube, by receiving a circular motion, will successively expose the whole of its circumference to the heat of wood, charcoal, or any other kind of fuel that may be placed exterior to it.

MR. BANNER ON THE TREATMENT OF ABORTION.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—In my paper on Uterine Hæmorrhage, published in the Liverpool Medical Journal for June, it is stated in my remarks on Case 2, that "had the *hand* been introduced earlier there is every reason to suppose the cause of hæmorrhage would have been removed." In the relation of the case I particularly allude to the *cautious* introduction of the *finger;* and in another part of my paper I make the following observation:—"It occasionally happens that there is difficulty in reaching, with the *finger*, sufficiently far into the uterus to remove its contents. The introduction of more than *one finger* is of course attended with greater pain; fortunately, however, this is seldom necessary. The membranes, placenta, or fœtus, are generally felt protruding through, or contained just within, the orifice." It will be seen, therefore, that in mentioning the introduction of the *hand* in the passage alluded to, an error of expression has occurred. I think it but fair to myself to state this, as you have, in condescending to notice my paper in the 123rd No. of your Journal, laid particular stress on the impracticability of introducing a *hand* into the uterus in the early period of gestation. In this I quite agree with you; I think it quite impossible to introduce the *hand*. In Case 2 it was only necessary to introduce *one finger*, as will be found sufficient in the majority of cases, requiring interference. You state also, in reference to Case 2, "were we consulted in this case we should have acted thus: as the evacuation was sanguineous and not catamenial, and as the patient was so young, we should, in the *first instance*, have instituted a vaginal examination, to ascertain the exact state of the os uteri."

As my object in writing the paper on this subject was more to gain information than to

give it, I shall feel obliged by your informing me what would be your object in ascertaining the state of the os uteri; and whether, on finding the membrane, &c., protruding or just within the orifice, you would remove it? You also state, that, after making this examination, "you would have plugged the vagina." Am I to understand, that in all cases where there is discharge of blood from the vagina (however slight) you would institute an examination and plug the vagina. In the case related, it was not until the eleventh day that the symptoms appeared urgent. In Case 1, your practice was adopted. You go on to observe, "suppose a membrane had been developed in the os uteri, how, we beg to inquire, could it produce such profuse hæmorrhage?" In answer, I would extract the following passage from my paper:—"It is a question with many, whether so small a substance as a portion of the membrane, in the early stage of gestation, can be a cause of irritation; yet in how many instances the uterus appears to contract (at least we are justified in supposing so from the repeated expulsion of coagula accompanied with pains), and which generally cease on the removal of the exciting cause; if the substance were more bulky, the chances of expulsion would be greater. It appears sufficient to produce irritation, yet too small to be acted on." That it is possible to reach the uterus with the finger, in the early periods of gestation, you must admit. In proof of the low position of the uterus at this time, is the symptom of tenesmus, and also of incontinence of urine, from pressure of this viscus on the neck of the bladder, which are generally present in cases of early abortion, produced probably from a tendency to bear down. I was not aware before reading your last number, "that the ergot of rye will irritate the uterus from the moment of conception." I have not had much experience in the use of it; the observations I have made on this drug were drawn from the result of my own practice. I feel the presumptuousness of differing in opinion with you on these points, for my experience in the practice of midwifery must be very limited when compared with yours, yet so satisfied am I of the propriety of the practice recommended by me, that I have considered it a duty to write to you on the subject, nor shall I be nduced to alter the practice, unless stronger reasons than those given by yourself be deduced. My conclusions were come to from observation from *facts*, and until stronger reasons be given for desisting in the method than those I forward in support of it, I must be excused my adherence to it. Allow me to express my thanks for the very courteous manner in which you have noticed my remarks, and subscribe myself,

Your most obedient servant,

JOHN M. BANNER.

Liverpool, June 13, 1834.

Mr. Banner asks us, "what would be your object in ascertaining the state of the os uteri, and whether, on finding the membrane, &c. protruding, or just within the orifice, you would remove it?" In reply, we state that our object would be to ascertain whether the os uteri was dilated or not, or contained an embryo, coagulum, or membrane, and if so, to remove any one of these, and stop the hæmorrhage at once. But if we could not detect the cause of hæmorrhage, we should have accurately plugged the vagina, and arrested further loss of blood; and, if the ovum were not expelled, prevented abortion. The tampon, or plug, was especially necessary in the case alluded to, because ordinary means had failed to arrest the hæmorrhage. We beg to ask Mr. Banner in return, had he examined the first day, and discovered the membrane, would he not have removed it, as we would have done, and would not this have been as judicious as to wait until the eleventh day, when asphyxia was approaching, and when, after the removal of the membrane, life could only be saved by transfusion? We refer him to any recent work on obstetricy, either foreign or national, for the confirmation of our opinion. We might quote many, but we shall content ourselves with an extract from the able and judicious work by Mr. Ingleby. Speaking of early abortion, Mr. Ingleby observes, "When flooding threatens to be fatal, the tampon, or plug, by staunching the flow of blood, is at once effective and immediate in its action. This grand agent, though noticed by many of the earliest writers, was not applied at all conformably with the principles of science until advocated by Leroux. It is evident, however, that the efficacy of the tampon is far from being duly estimated, even

at the preseut day, notwithstanding all that Dewees, Burns, and other eminent modern practitioners have adduced in its favour *." "The plug, or tampon, recommended by Hippocrates, Moschion, Paulus Egenetus, Hoffman, Desormeaux, Lachapelle, Capuron, Velpeau, Duges, Smellie, Leroux, Denman, Hamilton, Burns, Merriman, Dewees, &c., is now generally employed †."

Mr. Banner inquires, "am I to understand that in all cases where there is discharge of blood from the vagina (however slight), you would institute an examination and plug the vagina? In the case related, it was not until the eleventh day that the symptoms appeared urgent."

In reply, we cannot but observe that the above question, which is a general one, is irrelevant to our remarks on the practice in the individual case which elicited our comments; but nevertheless we shall answer it. In every case of threatened abortion, we would institute an examination for the reasons already assigned; but we should not use the tampon when the discharge was slight, the os uteri undisturbed, the uterine action insignificant, and most probably controllable by rest and opium. But in a case like that which we criticised, in which a delicate woman, aged 28, "had parted with small coagula, and on the second day was restless, complained of heat of skin and thirst, the pulse quick, the discharge florid, small in quantity, but constant; and she had parted with several clots and shreds, which had been thrown away;" we most assuredly would have plugged the vagina, nor would we be content with the following plan. "She was desired to remain in the recumbent position; febrifuge medicine was ordered, with acid drinks." Neither would we have neglected to visit her until the tenth day, while "symptoms continued, and the patient became gradually weaker; the hæmorrhage had increased, the pulse had become more irritable, the patient more restless." Now, we repeat, that if the vaginal examination had been made at the first visit on the second day, instead of on the morning of the eleventh, the powers of life would not have been prostrate, or transfusion, the ultimum remedium, necessary at all. We believe it is an axiom in obstetrics, that the treatment of abortion is divided into preservative, palliative, and active. We ask the experienced obstetrician, which plan of treatment was adopted in the case under notice, by leaving the patient from the second to the tenth day without medical aid? Yet our opponent is so satisfied of the propriety of his practice in this case, that he has considered it a duty to write to us on the subject, and adds,—"Nor shall I be induced to alter the practice, unless stronger reasons than those given by yourself * be deduced; my conclusions were come to from observation from facts, and until stronger reasons be given for desisting in the method than those I have brought forward in support of it, I must be excused my adherence to it." Our conclusions, too, are drawn from facts, and from the multiplied experience of the numerous obstetricians whom we have quoted; and until stronger reasons be given, we shall continue the practice we have recommended. Mr. Banner, however, agrees with us on an important point,—that the introduction of the hand in the early months of utero-gestation is impracticable, and that in advising it "an error of expression has occurred." We are glad it is so: but Mr. Banner should be cautious in his expressions. Neither was he aware of the power of the ergot in exciting uterine irritation from the moment of conception; and he has not had much experience in the use of it. We are sorry for it, because his remarks were calculated to depreciate its value; and as we have employed it in a vast number of instances, and invariably with success, we regretted, on the grounds of humanity and the fame of our art, that so powerful and efficacious a remedy should be doubted. We have to state that our remarks on it, in No. 123, have already elicited fourteen letters from different places, requesting us to give an account of the mode of keeping it; and though we are extremely reluctant to appear in the

* A Practical Treatise on Uterine Hæmorrhage in connexion with Pregnancy and Parturition. By J. T. Ingleby, M.R.C.S., &c., Lecturer on Midwifery at the School of Medicine in Birmingham. 1832.

† A Manual of Midwifery, &c. By M. Ryan, M.D., &c. 3rd edition. 1831.

* Mr. Banner has addressed the above communication to Dr. Ryan.

pages of this Journal but as seldom as possible, we cannot but comply with so many requests.

We now terminate Mr. Banner's controversy, in the friendly spirit in which we indited our comments on his paper; and if he be not satisfied, we cannot help it. Our duties, as journalists, and his, as a respectable, zealous, and efficient provincial surgeon, are very different. We have this kingdom, all Europe, and our transatlantic brethren to satisfy; he has to maintain the validity of his own opinions.

Review.

The Natural History of Animalcules; containing Descriptions of all the known Infusoria, with Instructions for procuring and viewing them, &c. Illustrated by upwards of 300 figures, magnified on steel. By Andrew Pritchard, Esq. 8vo. pp. 196. London: 1834. Whittaker and Co.

The author of this work is entitled to great praise for the numerous improvements he has made in the construction of microscopes, whose almost incredible powers bring under our observation the ultimate structure of an endless variety of objects in natural history, among which those called animalcules are not the least remarkable. Myriads of these exist in a single drop of water, performing their functions with as great facility and freedom, as if the range afforded them were the boundless ocean. The knowledge of this fact must be interesting to the mind of every one who is accustomed to meditate on the works of nature, "and to recognise and adore the hand that guides her through all the vast variety of her stupendous operations." Our author proceeds thus:—

"As our acquaintance with the minute portions of the creation is exclusively dependent upon the properties of the microscope, every refinement of this interesting and valuable instrument must necessarily contribute something to our stock of knowledge on the subject; and indeed it is entirely owing to the very great perfection which it has now acquired, that a fresh spirit of research is widely extending itself,—a research into those recondite truths which may lead not merely to the gratification of our curiosity, but to some of the most important and scientific results."

After noticing the imperfect works of Müller, Ehrenberg, and Cuvier, which touched but slightly on the structure of animalcules, our author maintains, that an internal structure is discerned in some, equal to, if not surpassing, that of the large in vertebrated animals, and comprising a muscular, nervous, and, in all probability, a vascular system.

The mode of examining these objects is thus described:—

"In the selection of vegetable substances for infusions, such as stalks, leaves, flowers, seeds of plants, &c., care must be taken that there be no admixture of quinine in them, or the intention will be frustrated. Immerse these, whatever they may be, for a few days, in some clear water, when, if the vessels which contain them be not agitated, a thin pellicle or film will be discerned on the surface, which, under the microscope, will be seen to be inhabited by several descriptions of animalcules: the first produce are commonly those of the simplest kind, such as the monads. In a few days more, their numbers will increase to such an amazing extent, that it would be utterly impossible to compute those in a single drop of the fluid. After this, again, they will begin to diminish in numbers, and I have generally observed them supplanted by others of a larger species and more perfect organisation, such as the cyclidia, paramesia, kolpodæ, &c. It is worthy of remark here, however, that in their production they do not pursue any regular order, even in similar infusions. If the vessel be large, and the circumstances under which it is placed sufficiently favourable, a still higher description of animalcules will succeed, viz.—the vorticella, and, lastly, the brachioni; and thus a single infusion will repay for the little trouble of making it, with a great variety of species. Water in which flour has been steeped will be found to abound also with animalcules; and it is remarked by G. Leach, Esq., that the leaden troughs constantly appropriated for birds to drink out of, contain several descriptions of them, and more especially those of the wheel genus. In ponds, too, especially in the shallow parts, near their edges, and in the immediate vicinity of water-plants, prodigious quantities of all kinds may be easily procured; so that possessing, as we

do, such myriads of them all around us, that they impregnate almost every thing that we eat and drink, touch and breathe, an anxiety to know more about them, and the effects they produce, cannot but be regarded as rational and laudable."

The varied forms of these singular beings are illustrated by plates, and are said to be the following:—

"By a careful inspection of the drawings, it will be noticed that some animalcules resemble spheres, others are egg-shaped; others again represent fruits of various kinds; eels, serpents, and many of the invertebrated animals; funnels, tops, cylinders, pitchers, wheels, flasks, &c., &c., all of which are found to possess their own particular habits, and to pursue a course of life best adapted to their peculiar constructions: thus, for instance, while some move through the water with the greatest imaginable rapidity, darting, leaping, or swimming, others merely creep or glide along; and many are altogether so passive that it requires long and patient observation to discover any of their movements at all. One description are perceptibly soft, and yield easily to the touch; another are covered with a delicate shell or horn-like coat. Of the latter order there are different degrees of density, as in the volvox, gonium, &c., where the envelope is comparatively thick; and where, strange to say, the internal substance separates by the mode of propagation into several portions, forming so many distinct young ones, which, at their birth, burst the envelope, and the parent becomes entirely dissipated. In others of this order the shell is merely a plate covering the body, resembling that of the tortoise: sometimes it includes the body, so as to leave only two small apertures at the extremities, and at others it is bivalve, and encloses the creature like that of the oyster or muscle."

The singular methods of propagation of these animals demand notice.

"1. Animalcules propagate by a spontaneous scissure, or division of their bodies into two or more portions, each one forming a new creature, which, on its arrival at maturity, pursues the same course. These divisions take place in some genera symmetrically, as in the gonia, &c.; in others, by transverse, longitudinal, or diagonal sections. In these latter cases the produce have forms differently proportioned from those of the creatures from which they spring; for instance, figure 160 represents the young of 159, engendered by a transvere division: this circumstance, we may observe, renders it sometimes difficult to determine the species. 2. They propagate, in the manner before mentioned of the volvox and some other genera, by a distribution of the internal substance of the parent into a proportionate number of young ones, all of which at their birth issue forth, and leave behind them nothing but the envelope, soon to be dissolved. 3. They are produced from germs, shooting forth from the parent's sides, as represented by fig. 218, &c. 4. From spawn, which, in the act of being shed, carries along with it a portion of the parent animalcule, as shown by fig. 80."

Those interested in the study of natural history will find much curious information in this work.

COLLINS *v.* COLNAGHI.

THE following decision is extremely important at the present period, when a Parliamentary Committee is engaged on Medical Education. If Scotch Degrees in Medicine are no proof of professional acquirements, it is manifest that they should be, and moreover that Englishmen ought to be enabled to graduate in their own country without the absurd and tedious systems of Oxford and Cambridge;—in fact, medical degrees ought to be conferred in London:—

Lord Denman observed—"The Court had taken time to consider the question raised in this case, which was, whether a person, who had obtained the degree of doctor of medicine in a Scotch University, in the College of St. Andrew's for instance, could, without obtaining a licence from the College of Physicians in London, maintain an action, in the character of a physician, in this country. Their Lordships were of opinion that he could not; and they came to that conclusion on the words of the statute 14 and 15 Hen. VIII., c. 5. The first section declared who should practise as physicians in London. The third section of that statute recited, that in the dioceses out of London it was not likely there would be found

men fit to practise medicine, as required by the first section; and it enacted, that henceforth no man should practise in such place "without a letter of licence from the College of Physicians, except the graduates of the Universities of Oxford and Cambridge, which both accorded him all things for his advantage without any grace." This statute vested the power of granting such a licence in the College of Physicians; and Lord Holt, and the rest of the Court, in the case of the College of Physicians *v.* Lovett (Lord Raymond's Report, 472,) decided that even a graduate of the University of Oxford or Cambridge could not practise as a physician within London, or seven miles of it, except by letters of licence from the College of Physicians. A similar opinion was also held in the case of the College of Physicians *v.* West, in 10 Modern Reports, 353, and those decisions must bind the Court in the present instance. In the latter of these cases the Court adopted the opinion, that, by the last clause in the statute, none should practise in the country without a licence from the President and three Elects, unless he were a graduate of one of the Universities of Oxford and Cambridge. It followed, from the authority of that case, that the plaintiff here had no right to practise as a physician in the country without a licence from the College of Physicians, although there was not in the statute any penalty imposed upon him for so doing. This action, it was therefore clear, could not be maintained by him in respect of slander upon him in a profession which by law he had no right to exercise. In the case of Smith *v.* Taylor, 1 New Reports, 203, was a dictum of Lord Chief Justice Mansfield, in which he was supposed to say, that since the Union a degree, conferred by the Scotch Universities, had the same effect as a degree conferred by the English Universities. The Court did not think that Lord Chief Justice Mansfield meant to imply any such thing; but, if he did, they were of opinion that the dictum was totally unwarrantable by any authority. The verdict given for the plaintiff, with 20*l.* damages, must therefore be set aside, and the judgment of the Court must be given for the defendant."

THE

London Medical & Surgical Journal

Saturday, June 21, 1834.

DUTIES OF MEDICAL PRACTITIONERS IN CASES OF INSANITY.

MUCH surprise and interest have been excited by a police report, which appeared in the newspapers in the course of the last week. The owner of a house in the Hatton Garden district represented to the Magistrates of that office, that a young man, of apparently peaceable and quiet demeanour, had lately taken lodgings in his house; and that a party of men entered the house at a late and unseasonable hour of the night, and immediately proceeded to his lodger's apartments, whom they took into their custody, and finally carried him off. Upon being remonstrated with they produced, he alleged, some authority, or certificate, from Dr. Burrows, and said the young man had lately escaped from a lunatic asylum, to which they intended taking him back.

It was the duty of the Magistrates to have inquired more minutely into the circumstances, and to have satisfied the public, if they were satisfied themselves, that the liberty of this person was not restrained without a legal cause. After the late astonishing affair of Mr. Gee, to say nothing of former malpractices under the imputation of lunacy, it was not unreasonable to expect a little attention to such a statement as was made before them.

We are glad to find the public alarm has been since quieted by a paragraph in *The Times* of Wednesday, which explains some of the mystery attached to the original story, and relieves Dr. Burrows, who was the only party named, and others, from the imputation of lending themselves to an illegal transaction. The amended statement is as follows:—

"We are assured by respectable parties, that the unfortunate gentleman, whose case was inquired into at Hatton Garden Police Office on Friday last, and adverted to in a letter, signed Veritas, in *The Times* of yesterday, has never been placed in a lunatic asylum. By the desire of his father, who is a physician, and, after the careful examination of his case by another physician, eminent in his knowledge of diseases of the mind, this young gentleman has been placed under temporary restraint in a private lodging until he recovers from his present state of excitement. We never meant to insinuate that the parties concerned were to blame, but merely that the Magistrate disposed of the matter too hastily."

It may be desirable, before we dismiss the subject, to point out to medical practitioners their duty as prescribed by the legislature, when they are called upon to act in such trying emergencies, as to pronounce a human creature insane and unfit to be entrusted with his liberty. The act of parliament, by which these duties are pointed out, is the 2nd and 3rd W. IV., c. 107. It was passed on the 11th Aug. 1832, and is in force for three years and from thence until the end of the next session. In the interpretation clause we find that the word "Physician" in the act includes a Fellow or Licentiate of the College of Physicians; the word "Surgeon," a member of the College of Surgeons; and the word "Apothecary," any person authorised to practise under the 55th Geo. III., c. 194, or the 6th Geo. IV., c. 133. It is plain, therefore, that a mere graduate of any of the Universities is incapable of legally exercising any of the powers given by this statute. Inattention to this may cause very serious consequences. If a gentlemen, with an Edinburgh degree only, should presume to give the certificate we shall hereafter mention, he would render himself liable to an indictment for a misdemeanour.

We shall say but little on all that part of the act, which relates to the Metropolitan Commissioners and the Licences of Lunatic Asylums, and confine ourselves principally to the duties and responsibilities of medical practitioners.

The 27th section enacts that no person (not being a parish pauper) shall be received into any lunatic asylum in England without an order, according to a certain form annexed to the Act under the hand of the person by whose direction such insane person is sent; nor shall any such person be received into any such house without a medical certificate of two physicians, surgeons, or apothecaries in manner directed by the Act.

The 28th section enacts that the medical certificate shall be according to a form annexed to the Act, and shall be signed by two medical practitioners, not being in partnership, and each of them being a physician, surgeon, or apothecary, who shall have separately visited and personally examined the patient to whom it relates not more than seven clear days previous to such confinement; and such certificate shall be signed and dated on the day on which the party shall have been examined, and shall state that such person is insane and proper to be confined. And every such certificate shall, if the same be not signed by two medical practitioners, state the special circumstance which shall have prevented the patient being visited by two medical practitioners; and any patient may, under such special circumstance, be admitted upon the certificate of one medical practitioner, provided such certificate shall be further signed by some other medical practitioner within seven days next after

the admission of such patient. And any person who shall, knowingly and with intention to deceive, sign any such medical certificate, untruly setting forth any of the particulars required by the Act, shall be deemed guilty of a misdemeanour; and no physician, surgeon, or apothecary shall sign any certificate of admission of a patient to any licensed house, who is wholly or partly the proprietor, or the regular medical attendant of such licensed house; nor shall any physician, surgeon, or apothecary sign any certificate for the reception of a patient into any such house of which his father, son, brother, or partner is wholly or in part proprieter, or the regular professional attendant, on pain of being deemed guilty of a misdemeanour.

To complete our survey of this important act, we must add a few particulars relative to some other points. The administration of lunatic asylums in the London district is vested in certain commissioners, of whom not less than four or more than five must be physicians, and two barristers. These commissioners are empowered to license all houses for the reception of *two* or more lunatics in their district. In all other parts of England the licence is obtained at the quarter sessions. The justices at the Michaelmas quarter sessions appoint three or more justices, and one or more physicians, surgeons, or apothecaries, as visiters for the county. No person, except a guardian or relative, who does not derive any profit from the charge, or a committee, is authorised to receive or board any insane person in a house not licensed without the order and medical certificate already described. To guard against a possible abuse of authority, the Lord Chancellor is empowered to appoint a person to visit and examine any person confined as insane in the care of any guardian or relative.

To conclude: if any action is brought for the confinement or ill-treatment of any of his Majesty's subjects, insane or alleged to be insane, the parties complained of must justify their proceedings by the course of the common law, and derive no new justification from their being able to prove that the person had been confined upon such order and certificate as we have already described. The absence of an order or certificate, except in the case of a guardian or relative not deriving a profit, makes the confinement a misdemeanour under all circumstances; but, though the order be given and the certificate signed, they will not warrant any restriction of liberty. They do not alter the common law responsibility of parties for their own acts. To justify restraint, a jury must be satisfied there were reasonable grounds to believe the person restrained of unsound mind, and that the party acted in that belief.

This Act of Parliament does not apply, except in visitatorial powers, to the Public Lunatic Asylums.

MEDICAL FEES.

A PURE conceives it would be degradation to accept a fee less than a guinea, because that is the *least* fee he is likely to be offered by the *aristocratic* patients, of whose peculiar patronage he is so fond of boasting, (see Medical Pamphlets under the auspices of Pall Mall *passim*). Of course there is no limit on the other side, and woe betide the reputation of the noble peer, or wealthy commoner, who thinks, nevertheless, of offering him a mere guinea. This rule had another extremely beneficial effect for the *Pure* in high practice; it secured him a monopoly in his own class. The young practitioner, who, without the long experience of the heads

of the profession, was still perfectly competent to discharge his professional duties, finds himself excluded from practice till his head turns grey, because his valuable services can not be procured for less than the *minimum honorarium quiddam*, for which the *celebrated* Doctor So-and-so may be had.

It was the operation of this system—a part of the prime monopoly and extortion, that drove the respectable and industrious middle classes of society to seek medical relief in other and more reasonable quarters. Hence sprung the trading principle of calculating upon the profits of drugs as a remuneration for the expense and care of a medical education, and the anxieties of medical practice. Out of evil has grown good: the general practitioners of the present day, with some exceptions in the lowest quarters, are awake to the mischiefs of the trade system, and, with feelings truly honourable, are anxious to disabuse the ignorant portion of the public of its prejudices, and convince it it is better to pay a moderate sum for good advice than for bottles full of drugs. We are confident the fee system must be remodelled. The general practitioner must be allowed to charge a reasonable fee for his attendance, and the guinea system must be abolished.

The following passage from a French paper will show how they manage these things in France:—

"Madame Montessu, the dancer, who was for some time at the King's Theatre, was lately sued before the Civil Tribunal at Paris for the amount of a doctor's bill. Although the plaintiff, M. Melicque, is a man of some eminence, it appeared that he only charged the fair defendant *three francs a visit in the day and six francs for a nightly visit.* Even this sum, however, was thought to be too large by the defendant, who resisted it on that ground. The Court, however, did not partake in the opinion, and she was ordered to pay the amount of the bill, 200 francs, and the expenses."

SIGNOR MOSCATI—PHRENOLOGY AT HOME.

Our pages have never been illuminated with the Signor's critiques or phrenological dissertations. When the quarrel between him and Dr. Elliotson was fresh, we thought it utterly unworthy of public notice, nor would we, for the sake of a private grudge, annoy any man on earth in that tender point,—his vanity. We understand those, who had reason to be dissatisfied with the use made of their names in the business, are content with Dr. Elliotson's explanation,—so let it rest. We must decline publishing the Signor's letter. Dr. Elliotson has acquired some experience in Capital Lions. As the Signor is, it seems, a lettered man he will understand these lines—

Solutos
Qui captat risus hominum, famamque dicacis,
Fingere qui non visa potest, commissa tacere
Qui nequit; hic niger est.

The expression of the natural sentiments is the same at all times and in all places. On the coast of Africa the white man is said to grow *black* when his moral character becomes thoroughly depraved.

Touching phrenology, we advertise a certain lecturer and his *fair* class, that they shall find us *at home* if much more of their pranks get abroad.

PROGRESS OF THE PARLIAMENTARY COMMITTEE ON MEDICAL EDUCATION.

Mr. Warburton continues as zealous and as indefatigable as ever in the great cause of humanity—the reform of the medical profession. He has now collected a mass of evidence

relating to the two Universities, the Colleges of Physicians and Surgeons, and the Apothecaries' Company in this section of the kingdom, which of itself would inevitably lead to an improvement in the education of medical practitioners of all grades throughout the British empire. He has not as yet commenced with the examination of the Scotch or Irish corporators, nor is it likely he can during this session of Parliament, on account of a speedy prorogation. Nevertheless they cannot escape exposure.

Our remarks on the expediency of examining some lecturers belonging to what are superciliously and improperly called private schools, had the desired effect. Dr. Epps, Mr. Dermott, and Mr. Hetling of the Bristol Medical School, have been examined since our last, and also our colleague Dr. Ryan. Their evidence went to shew the comparative advantages and disadvantages of the favoured and unfavoured schools; and in addition, our opinions on reform, with which our readers are well acquainted, were fully submitted to the Committee. The ability, ingenuity, and extraordinary knowledge of medical abuses, displayed by the honourable chairman, have elicited the highest praise and the greatest respect from the crowded auditory in daily attendance. Every one is surprised at the extent of his information on the defects in every one of the corporations.

NEW REMEDY FOR INTERMITTENT FEVER.

Dr. Gillespie, Physician to the Baltimore Infirmary, prescribes the following pill, given an hour and a half before the cold or shivering fit, as effectual in preventing it, and also in intermittent neuralgia.

℞. Camphoræ, gr. ij; opii, gr. iss; hyd. subm. gr. v.

He thinks that the impression made on the nervous system by it is greater than the miasmata which produce intermittents.—*American Journal of the Medical Sciences.*

This is only a modification of our own plan, first tried by Dr. Trotter and Dr. Lind, namely, by exhibiting a full dose of laudanum an hour before the accession of the cold fit, a practice generally adopted in this country. We cannot help observing, also, that so small a quantity of camphor as two grains can have little influence, and the calomel still less. We have, however, respectable authority in favour of the combination, and shall try it on the first opportunity.

GASPARD HAUSER.

The history of the unfortunate Gaspard Hauser has given rise to so many absurd inventions, that the Bavarian Government have thought proper to order the seizure of every pamphlet which contains any thing respecting him. The relations and unknown murderers of Gaspard Hauser do not appear to be strangers to these productions, which are filled with the most contradictory versions. In some of them the unfortunate young man is represented as the persecuted and rejected heir of a princely family, and even of a reigning house; while others state that he was a maniac, and that having become the victim of the illusions which he had himself created, he terminated his life by suicide. Now that the patron of Gaspard Hauser, Lord Stanhope, has taken his departure, the King of Bavaria is the only protector of his memory. His Majesty has given orders that the investigation into all the circumstances shall be continued, and has given considerable sums of money for the purpose. The truth, therefore, is likely to be known, if truth can be elicited in a case where enthusiasm and party spirit have so much influence.

Foreign Hospital Reports.

HÔTEL DIEU.

Abscess in Front of the Axilla—Stagnation of Pus—Death—Autopsy.

Anne Coffurann, 30 years of age, of nervous temperament and feeble constitution, was admitted into this hospital, under the care of M. Sanson, December 26, 1833. In attempting to lift any weight she experienced acute pain in the superior part of the right side of the chest; there was great tumefaction in the right axilla, which was extremely painful, though the colour of the skin remained unchanged, accompanied with shiverings and fever. The danger of a deep-seated abscess was apprehended, though no fluctuation could be de-

tected; all means were employed to expedite the progression of the abscess. At first she was bled, and, in the course of five days, leeches were applied to the affected part, and baths were prescribed as frequently as she could bear them. At first, from this treatment, the symptoms became relieved, but in a short time they became worse, and fluctuation was evident.

M. Sanson endeavoured to ascertain the situation of the tumour, and believed it to be between the two portions of the pectoral muscles. It appeared to be immediately behind the axillary artery, which it had pushed forwards and outwards, and separated from the pectoral muscle and integuments by the coraco-clavicular fascia. From the depth of the abscess and its strong coverings anteriorly, M. Sanson feared that it would open into the cavity of the chest, or extend into the anterior mediastinum. He, therefore, wished to make an external opening as speedy as possible, though not the slightest inflammatory blush was perceptible on the cutaneous covering.

On the 6th of January, eleven days from her admission, he made an incision, two inches and a half in extent, dividing at first the integuments, then some of the fibres of the great and lesser pectoral muscles, when a small quantity of pus escaped from the orifice, in consequence of which, with a blunt pointed bistoury, the wound was enlarged, which allowed a free exit to the collected matter. The divided edges of the wound were separated by means of a dossil of lint; the pus that escaped was of a good consistence and healthy. The patient was much relieved, though she was still restless, and was unable to sleep.

9th. This morning she complains of pain on the right side of the posterior part of the chest, accompanied with diarrhœa. A starch injection was administered, which arrested the looseness, and leeches were applied to the painful part. The next evening the diarrhœa returned, an opiate clyster was administered, after which she obtained a comfortable night.

10th. Complains of a disagreeable odour from the suppuration; the wound to be washed with a mixture of the chloride of soda and water, and the bed to be sprinkled with the same fluid several times during the day. In the evening she became much worse, nausea and vomiting supervened.

In spite of all remedies the patient became weaker. Some wine was prescribed, of which she took but a very small quantity at a time. This appeared to rouse her from the lassitude and exhaustion of which she was suffering. A roll of lint was now placed in the axilla, and retained in this situation by means of a bandage, so as to approach the united edges of the wound. On the 16th all the symptoms appeared relieved; nausea and relaxation had ceased; strength much improved.

For some days the patient complained of slight pain in the cavity of the axilla, especially towards the edge of the omo-hyoid muscle. Every day this region was examined with the greatest care; skin remained unchanged; a probe was introduced into the wound, and directed towards the border of the omo-hyoid muscles, where she complained of the most suffering. No further diagnosis could be ascertained; the pain remained stationary.

28th. From the increase of symptoms a counter-opening was indicated. The application of compression was discontinued, in the hope of permitting the stagnant pus to escape by its own gravity, which however did not take place, neither was the counter-opening practicable from the deep situation of the abscess. For the sake of keeping up her strength, if possible, she was wheeled about in a chair, which, though it at first excited vomiting, appeared to revigorate her bodily powers; tongue brown and dry; no appetite.

All the symptoms evidently arising from the stagnation of pus, and the impossibility of making a fresh opening, M. Sanson decided on increasing the one already made. He thus prolonged the extent of the wound inferiorly, first ascertaining the exact situation of the artery; and by dividing the external lip of the wound beneath the lesser pectoral muscle, a large quantity of pus escaped; no hæmorrhage supervened. Some extract of bark was prescribed. The patient experienced slight alleviation; but, in spite of every precaution, the matter continued to collect, suffocation accompanied with cough came on, which daily appeared to increase, dyspnœa became intense, and on the 12th the patient died.

Autopsy.—On examining the abscess, a clot of blood was found in its cavity, and the axillary vein was perforated. The quantity of blood that had escaped could not be ascer-

tained, in consequence of being obliged to dislocate the clavicle, which much increased its quantity. The abscess extended from the sixth intercostal space to the clavicle, circumscribed internally, but externally the anterior walls were very thin, and extended between the greater and lesser pectoral muscles, also between the subscapular and serratus magnus. The intercostal muscles had become nearly absorbed, especially the third, through which the pleura could be observed; and, in one point, this membrane had contracted adhesions with the internal wall of the abscess. All the viscera were healthy.

HÔPITAL DES ENFANS MALADES.

Cephalalgia—Paralysis of the left Side—Strabismus—Prolapsus of the left Eyelid—Death—Autopsy.

—— Patie, three years and a half old, who had enjoyed perfect health up to the first of March last, when she complained of pain in the head, became dull, morose, and exceedingly indolent. In the course of a month from the attack of cephalalgia, without any apparent cause, she was seized with vomiting, which continued for two days, and then disappeared. She was always troubled with acute pain in the head, which became at intervals much more severe; at this time a sensation of numbness attacked the limbs of the left side, and strabismus of the left eye followed. The numbness increased so rapidly, that, in the course of three weeks, locomotion, or walking, was impossible. Somnolency came on; irregular accessions of fever supervened; diminution of appetite; constipation. She was free from delirium and convulsive movements of the limbs. Before her admission into the hospital, she had been under medical treatment. Leeches had been applied to the head, and a blister to the back of the neck; tepid baths had been prescribed, with cold lotions to the head.

When admitted on the 6th of May, she was unable to lie on the back; countenance anxious and emaciated; distortion of the mouth; strabismus of the left eye, with prolapsus of the right superior eyelid; voice feeble, articulation difficult, with paralysis of the left limbs, the superior extremity somewhat contracted; no pain in the head; tongue moist, but covered with a whitish mucus; no appetite; constipation; skin natural; pulse 92, scarcely perceptible.

Four grains of calomel were ordered to be given in two doses, and a clyster composed of two drachms of the leaves of senna with an ounce of mercurial honey; two setons were also ordered to be made behind the mastoid processes of the temporal bones; but, in consequence of the profuse suppuration caused by the blister, they were not applied. The symptoms continue the same; a scanty stool followed the clyster. (Six grains of calomel and rhubarb were prescribed, and eight leeches to be applied behind the ears.)

10th. No manifest change has taken place. (The camphorated liniment was ordered to be rubbed on the spine, and an infusion of the arnica montana was ordered.)

11th. Countenance pallid; incomplete occlusion of the right eye, strabismus of the left, the pupil of which is much dilated. All the other symptoms continue the same. (Sulphurous baths, infusion of arnica continued.)

21st. There is an erysipelatous blush around the wound, caused by the blister; extreme weakness; diarrhœa; evacuations involuntary.

22nd. Diarrhœa continues; stools bloody; difficulty of respiration; cough.

25th. Violet hue of the countenance; diaphragmatic respiration; tracheal râle; occlusion of the eyelids, by raising them the cornea appears dull, and the pupils somewhat dilated; pulse thready, very quick. Died during the day.

Necropsy eighteen hours after Death.—Head.—Dura mater healthy; soft fibrinous clots in the superior longitudinal sinus; arachnoid healthy; white substance of the brain not so elastic as natural; cortical substance healthy: an ounce of serous effusion in the lateral ventricles. On exposing the peduncles of the brain, the right was found much more voluminous than the left; in the substance of the former a tubercle about the size of a hazel-nut was discovered, in the cavity of which was found a poraceous fluid. The remainder of the brain and spinal marrow was healthy.

Some tubercles were found in the bronchial ganglions, also some miliary tubercles in the parenchymatous structure of the lungs.

There also existed a few tuberculous depo-

sitions in the mesenteric glands. The termination of the ileum presented ecchymotic patches, and there was slight *ramollissement* of the mucous membrane towards the termination of the colon. The other parts of these viscera were healthy.

We will here subjoin another case, the symptoms of which were similar, though the morbid production was situated in a different part of the encephalic substance.

Paralysis of the Right Side—Death—Tubercles of the Cerebellum and Annular Protuberance.

John Morque, ætat 11, had enjoyed good health till February, 1833. At this period he was attacked with brain fever, supposed to have been produced from fright; this affection lasted many weeks; and during convalescence his extremities became swollen, succeeded by abdominal effusion.

In the following August he came to Paris from Auvergne; the operation of paracentesis was performed, and nearly six quarts of serous fluid were discharged. A month afterwards the abdomen again became distended, and the same operation was again had recourse to, at this time seven quarts were evacuated.

A few days after the last operation, new symptoms supervened. The patient complained of an acute intermitting pain in the occipital region; strabismus, succeeded with imperfect vision, supervened, which at intervals, for a short period, was perfectly destroyed. Articulation of sounds became difficult, and stuttering was produced; the limbs of the right side became numb. In the course of three weeks the strabismus and difficulty of articulation subsided. During this time he had frequent attacks of vertigo and giddiness, and fell suddenly down, without losing any of his mental faculties. His sight, however, remained feeble, and his mouth became more and more drawn to one side. All mobility of the limbs of the right side was lost, which were œdematous and cold.

On the 21st of December he was admitted into the Hôtel Dieu, and was then in the following condition.

General emaciation; circumscribed blush on the cheeks; cephalalgia occupying the occipital region; incomplete palsy of the superior and inferior extremities of the right side, there being a slight power of movement of the fingers and toes, but was unable either to raise the arm, or to keep it in that position when raised; sensibility very obtuse. Articulation of sounds very difficult; answers to questions rationally; right pupil very much dilated, left somewhat contracted; tongue wide and moist, covered with a thick fur; moderate thirst; appetite tolerable; tenderness on pressure about the abdomen, especially in the epigastric region; diarrhœa, stools of a light colour and fœtid; skin hot and dry; pulse small, regular, 124; cough, no expectoration; slight difficulty of respiration; urine scanty, not albuminous. (Infusion of couch grass and gummy julep were prescribed.)

He remained much the same till the 31st, when violent delirium supervened, succeeded by a state of collapse.

Jan. 1st.—Countenance pale and anxious; voice feeble, articulation very incomplete; can scarcely protrude his tongue from the mouth; pupils equally contracted, but sensible to a bright light; pulse small, regular, but thready; urine and fæces pass involuntarily; abdomen much less distended than on admission.

White decoction; sinapisms to the feet; broth.

The symptoms continued to increase till the 5th, when death terminated the sufferings of the patient.

Autopsy.—Head.—Arachnoid healthy, but in the cellular tissue under this membrane some gelatinous and transparent secretion was perceived. At the anterior part of the left hemisphere this liquid was thinner, and more of the colour of wine; very slight effusion in the lateral ventricles; cortical substance healthy. At the external and lateral part of each lobe existed a tuberculous mass, about the size of a bean. These masses were of somewhat harder consistence than the substance of the cerebrum. The middle lobe of the cerebellum contained a tubercle of the size of a walnut; also in the annular protuberance there was found a tuberculous deposition, of a harder texture than the pons Varolii, and prolonged itself to the peduncle on the left side; in the right peduncle this deposition appeared also to exist, also in the superior wall of the fourth ventricle, surrounded by medullary substance.

Chest.—A similar tuberculous deposition

was found throughout the parenchymatous structure of the lungs.

Abdomen.—In the cavity of the peritoneum about a quart of serous fluid, of a brick colour, was contained; adhesions of the abdominal contents with the peritoneum. The surface of the peritoneum was of a darker hue than natural, more particularly above the umbilical region; several ulcerations about the intestinal tube were apparent, also in the ileo-cæcal valve. All the abdominal organs were healthy, with the exception of the left kidney and the bladder, the first forming a complete cyst, and containing in its ureter a calculus, the second, on its superior and posterior part, having a tuberculous ulceration.

BOOKS.

A Series of Anatomical Plates in Lithography, with References and Physiological Comments, illustrating the Structures of the Different Parts of the Human Body. Edited by Jones Quain, M.D., Professor of Anatomy in the University of London. Fasciculus XIII. Taylor.

Sketch of the Medical Topography of the Hundred of Penwith, comprising the District of Land's End in Cornwall. By John Forbes, M.D., F.R.S., Physician to the Chichester Infirmary, &c. 8vo. pp. 119. Worcester: Tymbs and Deighton. Two plates.

CORRESPONDENTS.

Mr. Hodgson.—We published the list as furnished to us, but cannot return to it after so much time has elapsed.

C. S.—We shall insert a short article on the subject at our earliest convenience.

Cosmo.—The communication bearing this signature contains a great deal of sound sense, but it is written in so offensive a style, that we are surprised how the author could expect any Journal to publish it. He may defend chemists and druggists as long as he pleases, but, in so doing, he surely violates all good feeling in heaping a string of the most opprobrious epithets on the physicians and general practitioners of this country. We agree with him that there are many conscientious and honourable individuals in the drug trade; but had he been present at the Parliamentary Committee last week, and heard the description of the frauds and villainy in the adulteration of medicines, he never could have written the paper before us. His knowledge must certainly be of a singular description, when he boldly asserts, contrary to all the evidence before Parliament, that chemists and druggists are better qualified to prescribe and compound medicines than general practitioners or apothecaries. We can inform him, however, for his satisfaction, that his friends will be compelled to receive a medical education and obtain a licence.

A Successful Candidate, who received a prize at King's College, cannot seriously suppose that we would re-publish the names of those who received medical certificates.

The Marquis of Moscati cannot expect that we could publish his letter, which refers to a controversy in other journals, and after these had refused to insert it. He will find his communication at our publisher's.

A. Z.—We are obliged to our correspondent for the trouble he has taken, but he has not shown the priority of claim he imagines. He will find by referring to vol. 7, 1831, of the monthly series of this Journal, that he is in error.

Erinensis.—We have no taste for personalities. The Dublin College of Surgeons are like other men. "To err is human, to forgive divine."

The report of the case of hydrophobia in St. Thomas's Hospital in our next. It reached us too late for this number.

METEOROLOGICAL JOURNAL.

MONTH. June, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
12		60	64	52	29·52	29·41	60	69	S.	E.	Cloudy	Cloudy	Rain
13		59	65	60	29·50	29.58	68	70	W.S.W.	S.S.E.	——	——	Cloudy
14	☽	63	70	60	29·65	29·52	70	72	S.	S.	——	Fine	Fine
15		65	71	60	29·61	29·50	68	65	W.S.W.	S·	Fine	——	Cloudy
16		65	67	55	29·43	29·42	65	63	S.S.W.	S.W.	——	Showy.	Fine
17		62	68	54	29·52	29·63	63	64	W.	W.S.W.	Rain	Fine	——
18		64	68	62	29·76	29·72	64	66	S.W.	S.S.W.	Fine	——	——

50, *High Holborn*. William Harris and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 126. SATURDAY, JUNE 28, 1834. Vol. V.

LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London Session 1832—1833.

LECTURE XCV., DELIVERED APRIL 25, 1833.

Gentlemen,—In noticing the surgical diseases of particular regions of the body, I must not forget to bring under your consideration *scrofulous caries of the spine.* Perhaps, however, I may not be altogether justified in calling this affection a caries of the vertebræ, because it is alleged that one variety of it begins, not with a morbid alteration of the cancellous structure of any of those bones, but with ulceration of the intervertebral substance. But as the disease, in whatever texture it begins, soon leads to caries of the spine, I think the name sufficiently appropriate. By adding the epithet *scrofulous,* we also distinguish this caries from other kinds of caries, necroses, and simple absorption of parts of the vertebral column, not usually productive of any paralytic affection of the lower extremities.

In whatever manner the disease, which I now mean to speak of, commences, if it be not checked in its progress, it occasions a destruction of the bodies of the vertebræ and intervertebral substance, leaving, as Mr. Brodie correctly says, the posterior parts of the vertebræ unaffected by it; the necessary consequence of which is an incurvation of the spine forward, and a projection of the spinous processes posteriorly. The same pathologist adverts also to the frequent and early complication of the disease with chronic inflammation of the membranes of the spinal cord, and even of the latter organ itself, which, in consequence of the curvature, and, as I have reason to believe, still oftener in consequence of the disease around the spine, quite independently of the mechanical effect of the curvature itself, becomes disqualified for the performance of its highly important function. This observation is founded on the fact of many cases being upon record, in which the most surprising degrees of curvature, from destruction of the bodies of the vertebræ, were not accompanied by paralysis.

Here, gentlemen, I show you a preparation illustrating the earliest change perceptible in the most common form of the disease, that which begins in the bones. You see in the cancellous structure of the cervical vertebræ, small cells are formed, in consequence of the removal of a portion of the natural texture.

I have already explained to you some of the circumstances described by Mr. Brodie, whose pathological observations on this subject are the best with which I am acquainted. In addition to the information which I have given you on his authority, you should be apprised that suppuration sometimes, and especially in the scrofulous cases beginning in the bones, occurs at a very early period of the disease, and, in other examples, not until a very late stage of it.

Gentlemen, I have in a former lecture endeavoured to give you some idea of the changes in the shape of the spine produced by rickets; there the curvature is lateral, and the spine is twisted, not from any carious affection of the vertebræ, but from their being only imperfectly developed, and not calculated to resist the preponderating influence of the muscles, and weight of the parts which the column has to sustain. However great such ricketty curvature and deformity may be, no paralysis is induced. I have also made you acquainted with that kind of absorption of the bones, which arises from the pressure of aneurism, and other tumours upon them, and which has peculiarities marking it very completely as a different affection from what is denominated caries; for in no situation does it lead to the formation of abscesses; and, in the spine, it is particularly remarked by all pathologists, that it does not give rise to paralysis. When we were on the subject of aneurism, I exhibited to you a specimen of aortic aneurism, which had occasioned such an absorption of the lateral part of the spine, that the medulla spinalis was exposed; yet even in that case, I believe, there was no paralytic affection of the

lower limbs. It is conceivable, however, that the mischief might have gone on till palsy had been excited by its effects upon the medulla spinalis; and I have certainly read of a case, or two, in which the pressure of an aneurismal tumour in the abdomen was the cause of paralysis. Such an occurrence, however, is at all events exceedingly rare.

The greater number of individuals, afflicted with scrofulous caries of the spine, are infants or children; yet many adults also suffer from it, especially after having been weakened by fever, or a long mercurial course. I have not seen any case, in which it began beyond the age of forty-five.

It may be asked, how are we to distinguish scrofulous cases, commencing in the bodies of the vertebræ, from others, which begin in the intervertebral substance? Now, the only information that I can deliver in reply to this question is a remark made by Mr. Brodie, that where the disease is of a scrofulous origin, affecting the cancellous structure, he suspects that it is more immediately followed by suppuration, than where it commences in the intervertebral cartilages; and that, in the latter cases, the pain and tenderness in the carious part of the spine are more considerable than in scrofulous examples.

Gentlemen, let us next consider the general symptoms of caries of the spine. In the early stage, the patient will have pain and tenderness in that portion of the spine which is the seat of disease; and, as I have stated, perhaps these symptoms will be most strongly manifested in those cases, in which the disease begins in the intervertebral substance. If the patient be old enough to describe his complaints, he will tell you that he is annoyed with a feeling of tightness of the chest, uneasy sensations at the pit of the stomach, a torpid sluggish state of the intestinal canal, perhaps some disturbance in the functions of the urinary bladder, and weakness, aching, numbness, and cramps in the muscles of the lower extremities. Now, it is scarcely necessary for me to say, that very similar symptoms may proceed from other causes; and even some of the information respecting the symptoms now enumerated, as appertaining to the early stage, cannot always be obtained, because the patient may be an infant. Hence, until some inequality or projection becomes perceptible on the spine itself, and until the want of control over the muscles of the lower limbs and the paralysis are more established, the diagnosis is generally obscure. The muscles and parts affected with paralysis, must, of course, be those which derive their nerves from the portion of the medulla spinalis below the seat of the disease. Generally there is impairment of motion and sensibility together; but sometimes one limb will retain more or less sensibility, yet be deprived of the faculty of motion.

In different cases, the symptoms differ considerably. Sometimes there is great pain in the part affected, sometimes none. In many instances, the paralysis comes on early, and often even before there is any material curvature forwards; but, in some cases, you will see the spinous processes making a considerable angle posteriorly, in consequence of the bend of the spine forwards, and the destruction of the bodies of the diseased vertebræ, yet without any paralysis having taken place. Such a case we have now at the Bloomsbury Dispensary: the patient, a girl 6 or 7 years of age, has had for some time disease of the uppermost dorsal vertebræ, with a great curvature forward, and corresponding angular projection backward; but it was only a few days ago that she began to suffer paralysis, which affects not only the muscles of the lower extremities, but those of the trunk, so that she cannot support herself in a sitting posture. The first blister, which was applied, produced a remarkable diminution of the paralytic affection, enabling the child already to sit up, though she cannot walk. The true cause of most of the symptoms is a morbid state of the spine and parts connected with it, attended with irritation and disease, and perhaps sometimes compression of the medulla spinalis itself. The morbid state of the spine, gentlemen, which I am now calling your attention to, always precedes the deformity observable in the vertebral column itself. Indeed, the curvature forward, in such a degree as to produce the angular projection of the spinous processes posteriorly, cannot happen until the bodies of the diseased vertebræ have been seriously injured by caries. The deformity is of a peculiar kind, and such as nothing can produce, except the destruction of one or more of the corpora vertebrarum, the spine being bent forwards, as I have already explained, so as to form an angle backwards. In the preparation before us, you see an example of the kind of deformity, resulting from scrofulous disease of the vertebræ. The bodies of two, namely, the sixth and seventh dorsal vertebræ, are completely absorbed, permitting those below and above the deficiency to join, and be united by anchylosis. The spinous processes are also soldered together. In this case, you may observe, that the sides of the thorax are pressed downwards and backwards, so as to lessen, in a very serious manner, the dimensions of the hypochondriac region. You may likewise remark, that the bones are large and well developed, which is very different from what is noticed in rickets. In curvatures from other causes, there is not an angular projection of the spinous processes; but the bend forms the segment of a circle, generally affecting a great extent of the spine, and often assuming the lateral inclination or spiral figure, with a very conspicuous leaning above towards the right side.

In most cases of scrofulous spine, paralysis of the lower extremities, and even more extensive paralysis, will come on sooner or later; but, in rickets, where the spine may be said to

be deformed rather from an imperfect development of the bones than from disease of them, palsy of the legs is not produced, however great the lateral or spiral curvature of the back. Professor Cruveilhier, in the 4th Livraison of his Anatomie Pathologique, gives us the particulars of a case, which proves how very far even scrofulous disease of the vertebræ will sometimes advance without causing paralysis, though this is a deviation from what is most common. In Cruveilhier's case, no paraplegia existed, though not less than five of the bodies of the dorsal vertebræ had been totally annihilated, and the alteration in the shape of the vertebral column was such, that the upper half formed with the lower an extremely acute angle, which would have been still more acute, if it had not been prevented by the eleventh and fifth actually touching one another. The intervertebral foramina were all preserved, though more or less deformed, contracted, or displaced backwards. In those which were most diminished, the corresponding intercostal nerves must have been compressed, and consequently the action of the intercostal muscles impaired, explaining partly the cause of the asthmatic disorder with which the patient was troubled. The engraving, which I now show you, will enable you to understand how nature contrived to maintain the integrity of the vertebral canal, and to keep the spinal cord from being compressed in the midst of such a surprising deviation of the vertebral column from its natural configuration. Although the bodies of five vertebræ were demolished, anchylosis took place, and the medulla suffered no pressure or irritation adequate to paralyse the lower extremities. A beautiful specimen, illustrative, I think, of an equally extensive destruction of the bodies of the vertebræ, and of as sudden a bend of the spine, will attract your attention when you go into the museum of this University. Cruveilhier also gives the particulars of a child, ten years old, brought to the dissecting room, in which only a few vestiges of the bodies of the third, fourth, fifth, sixth, seventh, eighth, ninth, tenth, and eleventh dorsal vertebræ were left. According to this pathologist, diseases of the vertebral column, like those of every other part of the osseous system, are seated, not in the osseous tissue itself, but in the cellular or medullary tissue occupying its interstices. When this cellular tissue inflames, sometimes it pours out pus in abundance constituting an abscess, but sometimes in a more scanty quantity so as to admit of absorption. The cells of the osseous tissue, being distended by the development of the cellular tissue, and deprived of the materials of nutrition, may be entirely absorbed; and thus Cruveilhier accounts for the total disappearance of the texture of bone, without a vestige of it being left. You are probably aware, gentlemen, that Cruveilhier's doctrine is, that all disease is seated in the cellular tissue of organs, the other tissues being, according to his views, only liable to simple atrophy or hypertrophy.

Gentlemen, the observations which I have delivered must have apprised you, that the removal of the deformity of the spine, even when you succeed in curing the disease, must be altogether impracticable. There must always remain an angular projection backward, which will be greater or less, according to the part of the spine affected, and the extent of the destruction of the bodies of the vertebræ

Notwithstanding what I have said, you are not to conclude that every bend of the spine forward is from scrofulous disease. We have the authority of Mr. Brodie for the observation, that a curvature of the spine in this direction may arise from other causes, as a weak condition of the muscles, or a ricketty affection of the bones. Generally, he says, in such cases, the curvature occupies the whole spine, which assumes the form of a segment of a circle. Occasionally, however, the bend occupies only a portion of the spine, usually that composed of the superior lumbar and inferior dorsal vertebræ, the curvature being always gradual, not angular, a circumstance in which it particularly differs from the curvature resulting from caries.

One common effect of scrofulous caries of the spine, is the production of an abscess around the diseased bone. Yet, it frequently happens, that the caries will go on to a vast extent, and even so as to demolish the bodies of several vertebræ, without any abscess being produced. Disease of the spine may continue for years without suppuration; and abscesses sometimes lie upon the diseased bone, but are not detected till after death, when the body is examined.

As I have in a former lecture noticed scrofulous disease of the upper cervical vertebræ, and of the articulations between the atlas and the condyles of the os occipitis, it is unnecessary to repeat the subject; but I may remind you of an observation made by Mr. Brodie, which is, that the pain is greater in such cases than in others, where the disease is in the dorsal or lumbar vertebræ. When abscesses form from disease of the cervical vertebræ, the matter generally collects amongst the muscles of the neck, or behind the pharynx, into which it may pass. As the disease advances, the arms become paralytic, and this while the muscles, which derive their influence from the spinal cord below the neck, remain under the control of the will. Afterwards, however, the paralysis extends to the muscles of the trunk and lower extremities. These, and many other important facts, you will find recorded in Mr. Brodie's work.

Gentlemen, the most approved plan of treating scrofulous caries of the spine consists in employing, in the early stage, cupping or leeches over the part, followed by the application of blisters, caustic issues, a seton, or the moxa. With the local abstraction of blood, you would of course join other mild antiphlo-

gistic remedies, especially aperient medicines, composed of rhubarb and the carbonate of soda, castor oil, or the sulphate of magnesia. After beginning with these means, counter-irritation, or issues, setons, a perpetual blister, or the moxa, may be tried; and these remedies may be assisted with the medicines and regimen usually recommended for other scrofulous diseases, particularly bark, chalybeates, and iodine, with the benefit of a light nutritious diet, and pure country air if it can be conveniently had. One thing is quite essential, namely, the diseased spine should be kept as quiet as possible, and therefore the patient ought to remain very much in the recumbent position. When the disease has existed a considerable time, and a conspicuous angular curvature is formed, I think Mr. Brodie's advice should be followed, which is, to let the patient recline on his side instead of on his back; or if this posture be disagreeable, he should not lie on an absolutely flat surface, but be supported with pillows, so that his position may have no tendency to restore the spine to its original figure, which would only have the pernicious effect of disturbing the completion of the anchylosis, by which alone the cure can be accomplished.

Of late years, issues and blisters, from having been employed in these cases for immoderate periods of time, and without discrimination, have become objects of abuse by certain practitioners. Yet, that they frequently produce great benefit, I am convinced by repeated experience. The little girl at the Bloomsbury Dispensary, a few days ago, with disease and great angular projection of the uppermost dorsal vertebræ, I have told you, became free from paralysis of the trunk a day or two after a blister had been applied. At the same time I am of opinion with Mr. Brodie, that issues are chiefly useful in the early stage of the disease with the view of preventing suppuration, and that they are of no service after an abscess has actually formed. He likewise suspects that issues are of little or no service where scrofulous disease of the cancellous texture precedes ulceration of the cartilages. If this be true, we see, then, the reason why so many cases are not benefited by this plan; but it is a point for further investigation, and one on which I cannot say, that my experience agrees with what has now been suggested.

Besides the carious spine, the medulla and its coverings are liable to chronic inflammation and its effects, as a consequence of external violence. Cases are likewise sometimes met with where scrofulous tubercles form in the medulla itself. Any of these changes may of course impair the functions of this important organ, and bring on paralytic affections. The treatment must be regulated by principles applicable to diseases of joints, and comprise very much the same means which have been advised for scrofulous disease of the bodies of the vertebræ; local bleeding, counter-irritation, quietude in the recumbent position, and medicines and regimen for the improvement of the health in general.

The next disease, gentlemen, claiming your attention is *Spina bifida*, *hydro-rachitis*, or the *cloven spine*, which is a congenital malformation, consisting in a deficiency of one or more of the spinous processes and arches of the vertebræ, which, indeed, are sometimes deficient throughout the whole extent of the vertebral column.

Now, gentlemen, in consequence of the deficiency of the back part of the spinal canal, the theca vertebralis protrudes, and forms a kind of pouch filled with a limpid fluid. The swelling is of different sizes in different cases, according to the extent of the malformation in the bones, and the age of the individual. The most common situation of it is on the lumbar vertebræ; but it may take place on the dorsal or cervical ones, and even over the sacrum. In some cases an aperture is left in the bodies of the vertebræ, in addition to the absence of the spinous processes. All the processes are occasionally deficient, and the vertebræ small, and not properly developed. The swelling is soft, and attended with fluctuation, and sometimes a degree of transparency. It generally subsides when compressed, but returns as soon as the pressure is removed. The skin retains its natural colour, and there is no pain in the part, unless it be compressed.

Children born with spina bifida seldom live more than a year. They are generally weakly and emaciated; and very often afflicted with paralysis of the lower limbs, and of the sphincters of the bladder and rectum. However, I have seen some children with spina bifida, who had a healthy appearance and suffered no paralytic complaints. In particular, I remember such a child under Mr. Maul, of Southampton. Sometimes, also, instead of dying in infancy, they live to the adult age, as was the case with a young woman whom I saw some years ago under the care of Mr. Copeland Hutchison, and an engraving of whom I now show you. The urine and feces passed involuntarily. The tumour was of such enormous size that it measured in the vertical diameter thirty inches.

With very few exceptions spina bifida proves fatal, and this in the greater number of instances within the first year from the period of birth. Some children thrive for a few years, and appear to suffer little or no inconvenience; but no sooner does the tumour burst, or is it punctured, than convulsions usually come on, and the little patient suddenly dies. This was the final result of the case in which I saw a little boy about two years old, that was in perfectly good health, and with the free use of his legs, though he had a spina bifida on the sacrum nearly as large as his head.

Gentle pressure on the tumour was suggested as worthy of trial by the late Mr. Abernethy, with the view of producing an absorption of the fluid, and, if that object could not be accomplished, he deemed the experiment of letting out the fluid by a small puncture,

and then closing the opening with sticking plaster, quite warranted by the commonly fatal course of the disease. This was done in one example, the puncture being repeated every fourth day for six weeks, and regularly healed; but at length one of the punctures failed to unite, the sac inflamed, pus was formed, and the result was fatal.

Sir Astley Cooper tried the effect of puncturing spinæ bifidæ with a fine needle. In one case the fluid was discharged, and the cavity obliterated by the adhesive inflammation, so as to produce a radical cure. This gentleman, however, besides the radical treatment, if it can be so called, as it is only supported by one or two instances of success, has a palliative method, which consists in treating the protrusion on the principle of a hernia, and applying a compress and bandage to it.

Spina bifida when joined with hydrocephalus, paralysis of the lower extremities, and involuntary discharge of the urine and feces, is entirely a hopeless case.

The same observation applies to examples in which the spinal cord itself is deficient.

In many children, the bodies of the vertebræ are not perfectly developed, the ossification of the cranium is not complete, and the disease is associated with other deformities, such as club feet. All these circumstances were illustrated in the case from which this preparation was taken. The child lived only three days.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XXV.

Great variety in the symptoms of Encephalitis—General Conclusions as to the Contraction and Paralysis—Case of Convulsions after the removal of Pressure—Symptomatic Œdema—General Cerebritis—Sympathetic Affections, General and Local—Enteritis simulating Local Cerebritis—Prognosis in Cerebritis—Neuralgic Pains a Symptom.

Gentlemen,—To-day we again take up the subject of encephalitis, and allow me here to observe on the extraordinary variety and complication of the symptoms of this disease. Unless you study with extreme care a great number of separate cases of cerebral disease, you will never be able to get clear ideas on the nature of this affection, so peculiarly interesting to the pathologist, and the practical physician. More circumstances seem to combine in creating a variety in the symptoms of cerebral affections, than in those of any other viscus of the body. We have in the case of cerebral disease all the variety of symptoms depending on the peculiarity of the part engaged, on the complication of local encephalitis with arachnitis, on the results of pressure, the nature and extent of effusions, the difficulty created by the phenomena of neurosis, and many other circumstances.

At my two last lectures, I drew your attention to some cases of local encephalitis, in which the disease was pointed out by certain affections of the muscular and generative systems. There are several other circumstances connected with this part of the subject, which are also deserving of attention, and it is necessary that you should be aware that there are other sources of diagnosis in cases of local encephalitis besides those already mentioned. There is no doubt, that though, in many cases, the occurrence of contraction, spasms, and pain in the extremities, precedes that of paralysis, yet we may have paralysis from local cerebritis coming on *without these precursory signs*, and as suddenly as in cases of apoplectic effusion. This important fact you must never lose sight of.

Of this I have now seen several instances. I recollect a remarkable case of a man who had been bled in the cold stage of an ague, with the effect of stopping the intermittent. In a few days symptoms of pneumonia set in with great prostration of strength. These were followed by signs of disease of the brain, which were that the patient became suddenly nearly insensible, and on that day was observed to have his hand constantly placed on the right side of the head. Next day, without any preceding spasms or contractions being observed, he was found paralytic of the left upper and lower extremities, with paralysis of the left sterno-mastoid and loss of sight in the left eye. On dissection we found softening of the two anterior thirds of the right hemisphere, which were of the consistence of thick cream. The disease engaged the corpus striatum, but the optic thalamus was healthy.

Another remarkable instance occurred lately in a person labouring under aneurism of the innominata and hemiplegia. Here the paralysis came on suddenly, and its cause was found to be an abscess of the brain. I must observe, however, that there were some precursory signs in this case, though contraction and spasms were not observed. The patient had violent headach, and was subject for some time to occasional numbness and pain in the affected arm.

I repeat it, you may have the greatest variety in the succession and combinations of the symptoms of this disease, and this observation applies to the lesions of muscular motion, sensation, the state of the intelligence, and the organic functions. You must study numerous cases to get an accurate idea of this disease. I would advise you to examine the writings of Lallemand, Bouillaud, Abercrombie, and Serres on this subject, and then consult the last edition of Andral's Clinque Medicale, where you will find the value of the symptoms discussed in a most impartial and philosophical manner. In this splendid work

you will find many cases of cerebritis, in which the symptom of spasm and alternate flexions and extensions was wanting. Indeed he looks upon it as a symptom which cannot yet be called pathognomonic.

We may, I think, come to the following conclusions on this subject:—

1st. That local encephalitis is often accompanied by various forms of muscular contraction in the parts afterwards to be paralysed.

2nd. That in some cases the paralysis is not preceded by muscular contraction, though various lesions of sensibility may occur.

3rd. That the paralysis may be gradual (which is the most common case), or sudden.

4th. That the contractions may be intermittent, periods more or less elapsing, when the symptom is absent.

5th. That in general the contractions occur in the first, the paralysis in the second stage.

6th. That in a few cases the reverse occurs.

7th. That in some cases, general or partial convulsions, and in others, tetanic symptoms, precede the paralysis.

You will see in the Gazette Medicale, for October 1833, the particulars of a most interesting case, recorded by Berard, jun., of fungous tumour of the dura mater, which was not accompanied by any alteration of muscular motion. This was removed, with the adhering portion of the dura mater, when the patient was attacked, for the first time, with loss of consciousness and convulsions of the trunk and extremities. The operator, justly concluding that the sudden removal of the partial resistance of the brain was the cause of the symptoms, applied a piece of agaric to the denuded surface, and made gentle pressure upon it, when he found that immediately the convulsions ceased, and the intelligence was restored. Thus, gentlemen, does disease often become a second nature, and its want is the cause of symptoms.

As far as we see of the brain, this pathological fact appears certain, that injuries of the upper part of that organ are accompanied by more marked and distressing symptoms, than similar lesions of the lower part. There seems, indeed, to be a decided difference between the sensibility of the superior and inferior parts of the brain. The great proportion of those cases, in which there was extensive latent disease of the brain, have been cases in which disease predominated in or towards the inferior surface of that organ. In this situation it has been proved by numerous examples, that you may have extensive disease without those symptoms of muscular or mental derangement, which ordinarily characterise inflammatory affections of the brain. I recollect the case of a patient who was brought into our wards complaining of feverish symptoms, with pain of the left temple, extending to the eye of the same side. With the exception of this pain, he had no cerebral symptoms of any kind; his intellect was sound, and he was quite free from muscular pain, rigidity, spasms, or paralysis. He was ordered to take some opening medicine, and to have leeches applied over the seat of the pain, but derived no benefit whatever from their application. This led me to suspect that something unusual was going on, and more particularly when I observed that the leeches were repeated without any decided benefit. One morning, on going into the ward, I looked about for him for some time to no purpose; in fact, his countenance was so altered that I could no longer recognise him. During the night, the globe of the eye was almost suddenly thrust forward by an enormous œdema of the soft parts of the orbit, and the pain became excruciating. It was then conceived that the pain, complained of on admission, was the result of disease of the bones of the orbit, and that abscess had formed behind the eyeball. Under this impression, and in accordance with the earnest request of the poor sufferer, it was determined to make an incision to give exit to the confined pus. A curved bistoury was cautiously though deeply introduced over the eyeball, but on withdrawing it, only a small quantity of serum escaped. The swelling went on increasing, and the eyeball was pushed forward so as to be raised above the level of the nose. A curved bistoury was then carried extensively round the orbit but without giving exit to any matter. Under these circumstances, I came to the conclusion that it was an example of deep-seated abscess of the brain, with symptomatic œdema of the orbit. This œdema of superficial parts, in cases of deep-seated disease, is, you know, a thing of common occurrence, and may be observed in many instances of hepatic abscess, acute pleuritis, and other inflammations. In fact, there is such a remarkable sympathy between deep-seated parts and the integuments over them, that you may have this œdema in deep-seated inflammation of any organ. The patient now became gradually worse, his agony was intolerable, and the protrusion continued undiminished, but he had not either delirium or convulsions. He sank into a state of profound coma, in which he remained for about twenty-four hours, when death put a period to his sufferings. On dissection there was no pus found in the orbit, and its bones were healthy, but in the inferior part of the anterior lobe of the brain there was an abscess, about the size of a large walnut, resting on the cerebral surface of the orbit. I have since learned from several of my friends, that they have witnessed cases of the same description. It is an interesting disease, and one which you should be acquainted with. I think the existence of the following symptoms should lead you to suspect it. First, pain in the head, preceding the appearance of a tumour of the orbit, and this pain not affecting the orbit itself; for observe, in this case the pain was referred to the temple and not to the orbit. The next thing, is the pain resisting ordinary treatment, and being followed by a sudden

œdema of the parts within the orbit and protrusion of the eyeball. These two circumstances, when occurring in conjunction, should, I think, lead you to suspect acute internal disease. Again, in those cases where abscess supervenes on caries of the internal table of the bones of the cranium, the affection is much more chronic than in this or similar instances of deep-seated abscess of the brain. With respect to this remarkable symptom of local inflammation of the brain, this external œdema, I shall relate the history of another case, as I am anxious to throw as much light as possible on this obscure subject. It may appear strange, that when a dense bony plate and an extremely strong membrane (besides other parts) intervene between the integuments and the seat of disease, that local œdema of external parts should take place as a consequence of internal inflammation. Strange, however, as it appears, it is true, and the intervention of the skull does not prevent it, as will be seen by the following case.

A boy was admitted into the Meath Hospital, complaining of severe pain in the situation of the mastoid process. He was of a scrofulous habit, and had for a length of time a discharge of matter from both ears, with slight loss of hearing. Some time before his admission the discharge had been very copious, but on being exposed to cold it was diminished in quantity, and he immediately was attacked with severe pain behind one of his ears. When he came into the hospital he was screaming with agony, but had no delirium, and the muscular system was unaffected. But what was chiefly remarkable in this case was, that, on the second day after admission, a distinct tumour formed in the upper portion of the neck, about an inch and a half behind the mastoid process. So distinct, indeed, was it, that it was generally believed that the disease was periostitis of the base of the skull, which had run on to suppuration. An incision was made over the tumour, and the knife was carried down to the bone, but no matter could be discovered. The patient became gradually worse, the pain was dreadful, but there were no convulsions. Shortly before death he had a few slight muscular twitches, with delirium, and died in great agony. During the whole course of the disease, the discharge from the ear had continued and was remarkable for its fœtor. On examining the brain, we found neither abscess nor arachnitis. On slitting up the longitudinal sinus, a remarkably fœtid odour was perceived, which increased as the incision was prolonged in the direction of the left lateral sinus. Here there was a quantity of extremely fœtid matter, of an almost cheesy consistence, and mixed with blood, and a communication was discovered between it and the internal ear, the bones of which were carious, and its cavity filled with the same kind of pus. Here we have a curious example of œdema of the external parts depending on deep-seated disease.

I shall now relate the particulars of a case in which, although the symptoms of an affection of the brain were better marked than in the foregoing, still they were by no means so decided as one would have expected from the appearances revealed by dissection. A patient was brought into the Meath Hospital, with symptoms which were thought to be those which mark the ordinary form of delirium tremens. The man had been a great drunkard, but for some time back had given up the use of ardent spirits. He complained of severe and constant pain of the ear, which he stated to be of twelve weeks' standing, and that it was this which first induced him to give up drinking, as he found that it was always aggravated by the use of spirits. On admission, he appeared to labour under a highly excited state of the nervous system; he had general tremors, and was incapable of keeping up a connected conversation, though he could answer a few questions accurately. Here we observe a remarkable difference between this and the last case detailed, in which there was not the slightest evidence of any lesion of the intellectual powers. In the present case, the symptoms were pain, tremors, and incapability of supporting a rational conversation, but no decided constitutional symptoms. The pain, which had never abated since its commencement, became now violently exacerbated, he moaned frequently, and kept his hand constantly applied to the affected side of the head. To this last symptom I beg leave to direct your attention, as it is an exceedingly common one in cases of local inflammation of the brain. After a few days the mouth was drawn slightly towards the affected side, and it was found that the tongue was protruded in the opposite direction. Symptoms of fatuity now became more distinct, followed by coma, and the patient sank. During the whole course of the disease he had no spasms or paralysis of any of the limbs. On dissection there was a circumscribed abscess found in the substance of the middle lobe of the brain. The abscess itself was encysted, but the substance of the brain round it was soft, particularly at its inferior part, where it was found to be connected with a carious state of the squamous portion of the temporal bone. There was a considerable degree of softening in that part of the brain which lay between the abscess and the corpus striatum. Here we have a case in which pain of the ear is chiefly complained of; but, in addition to this, it was observed that the patient could not sustain a connected conversation, that there was some fatuity, that the mouth was drawn to one side, and that coma came on before death. Under such circumstances there could be less hesitation in pronouncing the disease to be an affection of the brain; and accordingly we find, on dissection, unequivocal marks of disease of the middle lobe, in addition to the caries of the temporal bone.

I might detail many cases of a similar kind, without being under any apprehension that I

should be occupying your time to no purpose, for the recital of such cases is better calculated to convey information on this obscure subject than any lecture. I shall, however, content myself with one or two more. A man, addicted to the use of ardent spirits, was brought into the surgical wards of the Meath Hospital in a state bordering on coma. It was thought at first that he was labouring under typhus fever, and, under this impression, no particular attention was paid to the cerebral symptoms for the first day or two. At the end of this period, it was learned that he had fallen in going up stairs, while in a state of intoxication. His head was shaved, but no signs of wound or contusion discovered, though his friends persisted still in their statement that he had fallen while intoxicated and hurt his head. When admitted into my wards he appeared moribund; his pulse was imperceptible at the wrist, he had extreme coldness of the limbs, and a disposition to the formation of gangrenous spots about the ankles. He was in a state of stupor; but when roused answered questions tolerably well, and said that he had no pain in his head. The remarkable feature, however, in this case, was a great degree of muscular rigidity, affecting all the extremities. The fore-arm was flexed, and he had not the power of extending it. The penis was in a state of permanent semi-erection, but there were no seminal emissions. Here was a case in which, taking all circumstances into consideration, the cause of the disease seemed to be in the brain. He had been drunk, and was supposed to have got a fall while in that state; he was comatose, from which, however, he could be roused; and he had rigidity of the limbs, with erection of the penis. With this view I came to the determination of treating it as a case of general inflammation of the substance of the brain. I concluded that there was no arachnitis, from the fact of his answering correctly when roused, while I felt convinced that if there was not actual inflammation of the substance of the brain there was at least very intense and general irritation. The treatment in this case was successful. After warming the extremities by wrapping them in flannel, and the use of artificial heat, the head was shaved, a large number of leeches applied, and an ice cap ordered to be worn constantly. The leeching was repeated, and he used the ice cap for four days. On the second day after this plan of treatment had been entered upon, there was some improvement, but on the following day the accuracy of our diagnosis of inflammation of the brain appeared, for the patient had violent spasms of the right arm and leg. These, however, subsided, the coma, rigidity, and other symptoms also disappeared, and the patient slowly but perfectly recovered. In addition to the means of treatment already detailed, the patient's system was placed under the influence of mercury.

A question might arise as to the exact nature of this case. Was it a case of actual inflammation of the substance of the brain, or was it mere sympathetic irritation produced by some other disease? It may be said that it was a case of gastro-enteritis, with a sympathetic affection of the head. It certainly might be so, but the great probability is that it was not; because such symptoms as were exhibited in this instance are very rarely the result of gastro-enteritis; and if it was a gastro-enteritis, it is not likely that such complete success should have followed treatment directed to the head. These circumstances make it likely that it was general irritation or inflammation of the substance of the brain itself; and, if so, the case strongly illustrates the utility of mercury, leeching, and cold applications in the reduction of encephalitis. The man was brought into the hospital in a dying state, and recovered under the influence of physiological treatment.

While I am on this part of the subject, namely, the possibility of the head being sympathetically engaged in some instances to a very remarkable degree, I may say that the following conclusions on this point seem to be fairly drawn. That when an affection of this kind depends upon a gastro-enteritis, the signs of cerebral irritation are *general* rather than *local*. In children who are labouring under apparent symptoms of cerebral affection, it has been long known that the irritation of the brain may depend on a variety of causes. In adults, too, the symptoms of cerebral irritation may be the result of various affections, of gastro-enteritis, worms in the intestinal canal, hysteria, hypochondriasis, and many other diseases. In most of these cases, however, particularly with respect to children, the symptoms are general, being pain, delirium, coma, and convulsions on both sides. But we very seldom witness the occurrence of symptoms of local irritation of the brain, as produced by sympathy with some other disease, though it is a fact that they may occur occasionally, and without our being able, after death, to discover any existing local encephalitis. A young female was admitted into one of the surgical wards of the Meath Hospital for some injury of a trivial nature. While in hospital she got feverish symptoms, which were treated with purgatives, consisting of calomel, jalap, and the *black bottle*, a remedy which deserves the name of the *coffin bottle*, perhaps better than the pectoral mixture so liberally dealt out in our dispensaries as a cure for all cases of pulmonary disease. She was violently purged, the symptoms of fever subsided, and she was discharged. A few days afterwards, her mother applied to have her re-admitted, and she was brought in again and placed in one of the medical wards. Her state on admission was as follows:—she had fever, pain in the head, violent contraction of the fingers, and alternate contractions and flexions of the wrist and fore-arm. These muscular spasms were so great, that the strongest man could scarcely control the motions of the left fore-arm. In addition

to these symptoms, she had slight thirst, some diarrhœa, *but no abdominal tenderness.* On this occasion a double plan of treatment was pursued, the therapeutic means being directed to the head in consequence of the marked symptoms of local disease of the brain, and to the belly, from the circumstances of abdominal derangement observed in this and in her former illness. She died shortly after with violent spasms of the hand and fore-arm; and as she had presented all the ordinary symptoms of a local inflammation of the opposite side of the brain, we naturally looked there first for the seat of the disease. After a careful examination, however, no perceptible trace of disease could be found in the substance of the brain, which appeared all throughout remarkably healthy. She had all the symptoms which, according to Serres and Foville, would indicate disease of the optic thalamus, or the posterior lobe of the opposite side, yet we could not find any lesion whatever of its substance after the most careful examination. But, on opening the abdomen, we found evident marks of disease; *the lower third of the ileum, for the length of six or eight inches, was one unbroken sheet of recent ulcerations.* This case I look upon as a very singular one, showing that we may have well-marked symptoms of a *local* irritation of the brain depending on a sympathetic cause. It is fortunate, however, for the study of medicine, that such cases form the exception and not the rule. I may remark here on the latency of the enteritis as to the pain. There was no abdominal tenderness, a fact illustrative of the great law which so particularly applies to gastro-enteric disease, *that when the sympathetic affections are prominent, the usual or local symptoms are proportionally latent.*

With respect to the prognosis in cases of local encephalitis, the following conclusions seem to be well grounded. As a general rule, the prognosis is to be unfavourable, from the nature of the organ, its importance to life, and the frequently complicated and obscure nature of cerebral affections. In local encephalitis you have always two things to apprehend,—the acuteness of the disease and its subsequent effects. The patient may die of acute inflammation, or, if you control this, of the chronic disorganisation which frequently supervenes, terminating in apoplexy, paralysis, and other consequences. On the other hand, it is consolatory to reflect, that experience has proved the possibility of curing both general and local inflammation of the brain. There are numerous cases on record in proof of the success of well-directed treatment. The annals of surgical science are filled with cases of extensive injury of the brain successfully treated; and it is equally true, that medicine can exhibit many instances of well-marked idiopathic inflammation of the brain brought to a favourable termination. In making our prognosis on a case of local encephalitis, much will depend upon the extent to which the muscular system is affected. Spasm of one extremity is more favourable than spasm of both; and an affection of the muscles of the face is not so unfavourable as of those of the extremities. The next thing to be considered is the age of the patient. In the very young, and in persons advanced in life, our prognosis is not to be so good as in the case of one removed from these extremes, as neither of the former admit of such active treatment; but of the two, it is better to have to manage the disease in a child. It is also singular how well children will often bear active treatment.

There is another point which should not be omitted. There are, in some cases of local inflammations of the brain, muscular contractions and extensions, alternating with a state of rigidity, while in other cases the rigidity is permanent. It is not easy to say which of these cases is the worst, but I believe that the most unfavourable are those in which we have chiefly violent contractions and extensions. Again; with respect to the cessation of the spasms, it may be considered either as a favourable or a most unfavourable symptom. The circumstance of the cessation of the spasms must have been produced by some modification in the state of the cerebral affection. If it be accompanied by a return of the power of transmitting proper motion to the affected limb, it is then a sign of great value, as showing that the cerebral irritation is nearly gone. But if the spasms subside, in consequence of the supervention *of resolution and paralysis*, then the cessation is a symptom of a most unfavourable kind, as showing that actual disorganisation has taken place, which seems to be incurable.

It may be necessary to remind you that if the patient has, combined with these spasms, alternations of delirium and coma, it affords grounds for making a bad prognosis, as such symptoms indicate that the inflammation has extended to the periphery of the brain, and the arachnoid membrane. The state of the intellect is also a matter of importance; the more intact and undisturbed it is, the greater is the chance that the affection of the brain is confined within a small compass. Here, however, I am anxious to impress this upon your minds, that the absence of delirium should not mislead you, or induce you to form any favourable conclusions on that account alone, in cases of encephalitis, for it is a fact that we may have extensive and fatal disease of the substance of the brain without delirium. I need not tell you that convulsions, or paralysis of one side, do not indicate so unfavourable a prognosis, as where both sides are engaged. Lastly, you should bear in mind that cases of inflammation of the substance of the brain are very subject to relapse. All these circumstances should be taken into account, and a favourable prognosis should be always formed with a great deal of caution.

I alluded in a late lecture to the occurrence of pain in some particular part of the extremities, as a premonitory sign of this disease.

A remarkable case, bearing on this point, has come to my knowledge, and I think I cannot better employ the remaining part of our time, than in giving a brief abstract of it. A lady got a pain in the lower part of the tendo Achillis, which was considered to be rheumatic, and very little notice taken of it. There was no swelling, heat, or tenderness on pressure, in the painful part, and the nature of the disease was so imperfectly understood, that all the efforts of her medical attendants were directed to the heel, but without any benefit whatever. Matters remained in this state for some time, when she was suddenly attacked with convulsions and coma, and died. On opening the head some hours after her demise, a large abscess, together with an apoplectic effusion, was found to exist in the opposite hemisphere of the brain. There are various other examples of a similar kind. I have no doubt that many of those anomalous pains are frequently connected with incipient disease of the brain. I know the case of a gentleman, labouring under a painful affection of the face, which had got the name of tic douloureux, and had been subjected to all the variety of treatment which persons labouring under that affection so commonly undergo. But it has since been proved that his complai t is by no means analogous to what has been termed tic douloureux, for it has been most successfully treated by shaving the head, and applying leeches and an iced cap over the seat of the suspected irritation. At present, whenever an attack comes on, he immediately gets a bladder, containing a quantity of pounded ice, applies it to his head, and in this way obtains relief. This shows that the severe pain in his case, which many would confound with a local affection of the nerves of the face, is decidedly the result of a morbid sensibility of the cerebro-spinal centre.

LECTURES

ON THE

PHYSICAL EDUCATION AND DISEASES OF INFANTS AND CHILDREN,

BY DR. RYAN,

At the Westminster Dispensary, 1833.

LECTURE XX.

Rules for the use of Therapeutics in Diseases of Infants—Purgatives—Anodynes and Soothing Syrups—Emetics—Aromatics—Absorbents—Antacids—Saline Medicines—Blisters—Irritants—Mustard Poultices and Fomentations—Antimonial and Stimulating Ointments and Liniments—Blood-Letting—Venesection—Leeching—Cupping—and Dry-Cupping.

Gentlemen,—I shall now direct your attention to the precautions necessary in applying our remedial agents to the diseases of infants and children. It may be laid down as a general proposition, that a very small number of medicines are employed by the most experienced practitioners in the complaints of early life. Sydenham considered that weakness and ascescence of the stomach were the predisposing causes of the diseases of infants; and, to correct these, he used two remedies in his practice,—infusion of rhubarb and animal sal volatile. Harris maintained that ascescence in the bowels was the cause of almost all infantile complaints, and seldom prescribed any remedy but crabs' eyes. Armstrong held that increased mucous secretion of the intestinal canal was the chief cause of diseases in early life, and preferred ipecacuanha. Others, who considered the glandular and secretory systems most commonly affected, introduced mercury. The eastern practitioners were of opinion that theriacs, which consisted of a variety of aromatic medicines, were indispensably necessary to fortify the system. It was only within a short period that a correct pathology and treatment of infantile diseases were determined.

In the year 1777, the French government ordered a small box of medicines, with instructions for their use, to be arranged, and transmitted to the remote parts of the kingdom. This order confided their choice and preparation to M. Lasonne, and their distribution to M. Lenoir. M. Guenet was deputed to prepare a small book on the diseases of infants at the breast, which was inclosed in each little medicine chest. This beneficial order led to the happiest results. The magistrates in the departments superintended the distribution of the works and medicines, and, according to M. Leroy, were the means of preserving more than twenty millions of infants, who would have perished through ignorance or the want of medicines. (Medecine Maternelle.)

An order of this kind is unnecessary in this kingdom, as a humane public secures the best medical aid to the poorer classes of society. But in remote parts of the country, where medical advice cannot be always obtained, and where there is a young family, it would be advisable to have a few medicines for domestic use. These should principally be cathartics, and a few others, which I shall mention; but parents ought never attempt to treat the diseases of their children, unless when medical aid cannot be procured. They never should employ patent medicines, such as Dalby's Carminative, Godfrey's Cordial, soothing syrups for hastening the cutting of the teeth, or quack medicines of any sort. All these are dangerous in the hands of private individuals, are pretended cures for a variety of different diseases, and are not used by educated members of the medical profession, who are unacquainted with their component parts, and consequently would do an act of injustice to their patients and to their own reputation, by substituting unknown for

efficacious remedies. There is no fact better established than that a vast number of delicate children are annually destroyed by the use of narcotics under the title of soothing syrups.

I have already noticed the difficulty of distinguishing their diseases, even by the most experienced practitioners; and hence the danger of parents and nurses attempting to treat them.

Let us now consider the medicines most commonly employed in the treatment of the diseases of children.

Purgatives.—The principal purgatives used for infants and children are manna, castor oil, rhubarb, magnesia, senna leaves (infused), calomel, Epsom and Rochelle salts, jalap, scammony, aloes, camboge, and sometimes elaterium.

New-born infants are generally purged with manna or castor oil; and nurses also use sugar and butter, or what they suppose to be syrup of violets, which is not now kept in the shops. When the mother has breast milk, there is no need of exhibiting aperient medicines to the new-born infant.

A small piece of manna, dissolved in warm milk, or half a teaspoonful of castor oil, is the best aperient for a new-born infant. The French employ a syrup of chicory, the active ingredient of which is rhubarb.

I have already stated that it is impossible to fix the doses of medicines for infants, who differ in vigour and constitution; and the best rule is that we should always exhibit an under dose, and repeat it, if necessary.

As most children are fed with artificial and improper aliments, as pap, gruel, &c., besides the breast, ninety-nine in a hundred of them labour under irritation in the digestive tube, —the stomach and bowels; and, under such condition, purgatives, which aggravate the mischief, must be administered with caution and judgment.

Gastric and intestinal irritation generally exist when an infant suffers from hiccup, griping, flatulency, curdled or green motions, or when it is two, three, or five years of age, and craves for cold drink, picks its nose or lips, and has alvine motions of a dark, green, white, or black colour. When these symptoms are present it would be highly improper to administer senna, jalap, scammony, camboge, or elaterium; manna, castor oil, magnesia, rhubarb, and calomel, combined with aromatic powder, are the best remedies. If the former were administered they would probably induce inflammation, ulceration, or softening of the coats of the stomach and bowels, and most likely destroy life. The antimonial medicines, as the wine of this name, tartarised antimony, or tartar emetic, James's powder, antimonial powder, the oxide of antimony, and the powder or wine of ipecacuanha or hippo, are also contra-indicated and dangerous.

When an infant's motions are unhealthy or depraved during the first year of its life, castor oil, rhubarb and magnesia, rhubarb and calomel, with aromatic powder and loaf sugar, are the best aperients. The doses must depend on the strength of the infant. Let us suppose it is healthful and ordinarily developed for its age: it may be ordered a teaspoonful of castor oil alone, or combined with a drop or two of oil of aniseeds to prevent griping; or three grains of rhubarb, five of calcined or carbonate of magnesia, three of aromatic powder to prevent griping, and ten grains of finely powdered loaf sugar; or the same proportions, omitting the rhubarb or magnesia, and substituting one grain of calomel. Any of these powders is best administered in honey, jelly, treacle, sweetened gruel, arrow-root, or some other thick fluid. The dose may be repeated every four or six hours until it operates. One dose is sufficient in general; and in all cases there is danger that diarrhœa may be induced. Great caution is always necessary on this account.

Calomel is now a favourite purgative for infants, especially with those of the intestinal school, who refer every disease to derangement of the stomach and liver. Dr. Underwood was the first who exhibited it to children. He states, that he never saw it produce bad effects. It has long been observed that this or any preparation of mercury very rarely causes salivation in children, though it has been given to the amount of 180 grains in croup by a very venerable and celebrated Professor, Dr. Hamilton of Edinburgh. Nevertheless, it should not be frequently repeated alone as a purgative in ordinary health, as it renders the body extremely susceptible of the influence of cold, and predisposes to inflammation or congestion of the organs in the head, chest, and abdomen.

It is also to be remembered, that though calomel or other preparations of mercury very rarely induce salivation, even in the largest doses, numerous cases are on record, in which mercury caused ulceration and mortification of the gums and cheeks, which proved fatal. I heard of a case of hydrocephalus in which calomel was continued so long as to cause mortification of the whole of the integuments of the lower jaw, and finally a total separation of this bone from the upper jaw; and what was still as remarkable, the practitioner congratulated himself on the excellence of his treatment! I need scarcely state that the unfortunate infant died a most miserable and deformed object.

Gangrene of the gums or cheek is comparatively of rare occurrence; but it may, for anything we can foresee, happen in any individual case. The late Dr. Clarke had observed salivation in three cases only, under three years of age, and his practice was the most extensive in diseases of women and children.

Calomel is often given to children who refuse other medicines, as it is tasteless, and may be administered in a very small bulk, combined with honey, jelly, or mixed with butter and sugar and spread on bread. When

continued for several days, it renders the evacuations from the bowels of a green colour, and of a slimy appearance. It stimulates the liver and the glands of the bowels, it diminishes the action of the heart and arteries, and supersedes blood-letting in certain cases. It is, however, a most valuable remedy when given in small doses morning and evening, combined with aperients as above mentioned, in cases in which the alvine evacuations are of a brown or dark colour, and extremely fœtid, as we often observe, from the age of one to five years. In such cases the liver is not acting properly, as it is well known that good bile gives the yellow colour to the fæces. It may be ordered as follows in such instances, and the quantities increased according to the strength and constitution of the infant: calomel six grains, rhubarb twenty grains, aromatic powder ten grains, sugar thirty grains, to be mixed intimately and divided into six papers or packets, one of which is to be taken morning and evening, unless it acts more than twice on the bowels. When the motions are brown, the hydrargyrum cum cretâ, or mercury with chalk, which is a milder and safer preparation than calomel, may be substituted for it in the above prescription. One, two, or three packets will, in most cases, restore the motions to the healthful yellow colour. As there is generally irritation in some part of the mucous lining of the bowels in such cases, the diet should be mild and nutritious, as arrow-root, sago—gravy with either—or mashed potato, &c.; but solid animal food should be avoided. When these powders are necessary, the infant should be carefully preserved from cold in winter and spring. During the first three months of life, the dose of calomel, as a purgative, is from half a grain to a grain; under the first year, from one to two grains; from the second to the fifth year, from three to four grains; and from the fifth to the seventh year, not more than four or five grains. The dose should be smaller when the constitution is delicate. It should not be given alone as a purgative, and it often acts violently in four or five grain doses even on adults.

The stronger purgatives are sometimes required for new-born infants. These must be administered with the greatest caution; so much as three teaspoonfuls of castor oil, four grains of calomel, and ten of rhubarb, have been given without the desired effect. It is an admirable axiom, that in all diseases we should use the mildest remedies first, and, when these fail, have recourse to the more powerful ones.

Rhubarb has long been a favourite purgative for children. Sydenham first introduced it into vogue, and considered it almost an universal remedy in diseases of infants. In France they make a syrup of the extract of rhubarb and chicory, which is a favourite aperient for new-born infants. Sydenham infused it in water, and ordered it to be administered with wine. M. Leroy imitated his example. Most practitioners prefer the tincture, though many still employ the infusion and extract. The powder is generally ordered as an aperient for children; and it is usually combined with magnesia, and aromatic powder, or ginger, as already stated. It is a safe and valuable medicine, and often stops diarrhœa when mild. It is also added to saline medicines, such as Epsom salts, and causes it to act mildly and efficiently. Rhubarb has fallen somewhat into disuse of late years, in consequence of its variable effects; but this arises from its being often adulterated with two or three parts of turmeric. Nevertheless, there is scarcely any remedy so generally employed in the treatment of the diseases of children from one to five years old From the age of three to seven years, the infusion of senna with ginger, sweetened with sugar, and mixed with milk, is given like tea without detection, and is a safe and excellent purgative. A few grains of ginger should be mixed with the senna leaves before infusion, to prevent griping or intestinal irritation. The saline purgatives, such as Epsom salts, Rochelle and Glauber salts, are now very rarely exhibited to children. They are very unpleasant to the taste, and are not better than other aperients. Rochelle salts is sometimes added to veal broth prepared without common salt, and is divested of its taste. Few children could be prevailed upon to take any of the saline remedies. They in general dislike medicines, and therefore we must select those which are most free from taste and odour, and sweeten them whenever we can. There is a great difficulty in getting children to take medicines of any kind, and life is often sacrificed in consequence. If we reason kindly with a child who has any degree of sense, and if we give him some reward, he will show his tongue, take medicine, and even hold out his arm to be bled in some instances. When life is in danger, and persuasion has failed, compulsion is necessary, and this may be effected by closing the nostrils, and holding the hands, inclining the body horizontally, when any medicine placed in the mouth must be swallowed. Parents do not act harshly by having recourse to these means, however disagreeable to their feelings, for the preservation of their children. The temper of children becomes irritable and changed during disease; they are generally peevish, refuse to remain in bed, or to be kept sufficiently warm in the arms of the nurse, by means of a shawl or blanket. They are often seized with inflammation of the lungs, which may be relieved by leeching, &c., but will lay the foundation of consumption or asthma. Few children permit a sufficient examination of their complaints, without their fears and passions being excited, and this arises from the injudicious conduct of parents in threatening them, when they require correction, to send for the doctor to bleed them or give them medicine. Every practitioner will acknowledge that it is of the greatest advantage to administer medicine as

early as possible, as life may be saved by the timely use of an aperient, an anodyne, a warm-bath, or leeches to the head or chest.

Calomel, rhubarb, jalap, scammony, and camboge, are ordered in extreme cases of constipation, when milder means fail, and also in cases of worms or dropsy. The various formulæ will be given under the treatment of the diseases.

Elaterium is seldom ordered for children; but I have heard of a child under four years of age, who was supposed to be dying of anasarca and ascites after scarlatina, and who was ordered two grains of elaterium in divided doses in five or six hours, which caused twenty watery motions from the bowels, and completely cured the dropsy in the limbs, and abdomen. The practice should be adopted, however, with great caution. Clysters are sometimes necessary, but the cases which require them will be described hereafter.

Anodynes—Narcotics.—Parents and nurses destroy a great number of infants by anodynes, such as laudanum, syrup of white poppy, formerly called diacodium, Godfrey's Cordial, Dalby's Carminative, and various soothing syrups; every one of which should be excluded from the nursery medicine chests when medical advice can be obtained. These remedies are given, however, by almost every mother and nurse to allay pain and produce sleep. All medical practitioners are unanimous in the opinion, that this class of medicines requires the greatest caution and skill in their administration. The mortality of infants caused by anodynes is incalculable. It was immense during the last century in some foundling hospitals, and is still considerable, in consequence of the universal custom among mothers, wet-nurses, and those who have the care of infants, of exhibiting soothing syrups.

"Nothing" says the late Dr. John Clarke, in his Commentaries on the Diseases of Children, "is more uncertain than the effects of opium on young subjects, and it ought never to be employed, even by medical men, except with the greatest caution, as it sometimes acts with much violence, and has proved deleterious even in very small doses. Half a drachm of genuine syrup of white poppies, and in some instances a few drops of Dalby's Carminative, have proved fatal in the course of a very few hours to young infants." The practice of exhibiting anodynes to children is not new. Harris alludes to it two centuries since, and remarks that it swelled the dead, and rid those who had the care of infants of further trouble. Hoffman states that he had seen children labouring under epilepsy and stupor from the use of diacodium and other narcotics. The late Mr. Haden, in his excellent and popular work on the diseases of children, states, that one grain of Dover's powder, which contains but one-tenth of a grain of opium, proved fatal to an infant; and he mentions another case in which one-sixth of a grain caused sleep for two days; he relates a third case of a child who was destroyed by one drachm of syrup of poppies; and he was called to a fourth case, in which half a drop of laudanum had narcotised a child affected with diarrhœa. He observes, in conclusion, that opium and all narcotics should be prescribed by medical practitioners only. I might quote many other writers in support of this opinion, that the greatest caution and skill are requisite in medical practitioners when prescribing opiates for infants. I shall now state the result of my own observation and experience. My testimony is entirely in attestation of the truth of the preceding statements. The greatest caution, skill, and judgment, are required in prescribing anodynes for infants. I have known a teaspoonful of a mixture composed of one drop of laudanum and an ounce of simple syrup, narcotise a new-born infant. There is scarcely a week in which I have not observed infants under the influence of an over dose of some soothing syrup or other at the Dispensaries which I attend. Mothers usually deny, at first, having used any such remedy, but, when pressed, they confess it with fear and alarm. When an infant is stupified for six, twelve, or twenty-four hours, its breathing becomes laborious, there is a determination of blood to the head, or a predisposition to "water in the head," it cannot awake to take food, absorption goes on, and rapid emaciation, great debility, and death, are the ordinary consequences. It has been long observed by medical practitioners that infants, dosed with anodynes, seldom thrive, are generally feeble, and are usually destroyed by some disease peculiar to them before the fifth year. The digestion is impaired and destroyed by a constant use of narcotics in infants and children, as well as in adults. Those in the habit of taking opium afford ample evidence of the truth of this position.

During the first month of infantile life, a mixture, composed of two tablespoonfuls, that is, an ounce of simple syrup, and two drops of laudanum, or ten drops of syrup of poppies, may be given in the dose of a moderate sized teaspoonful, every two or three hours, until the infant ceases to scream, or falls asleep. In either case the dose should not be repeated for some hours, unless pain or restlessness returns.

I have known cases, in which four drops of syrup of poppies, given to a vigorous infant of five months old with some sugar and milk, induced sleep in less than a minute. About this age, infants suffer more or less from teething, their bowels are disordered, and their sleep is disturbed. These symptoms occur in most cases from errors in diet and physical education, and require the use of anodynes, combined with carminatives. In such instances, the following combination, or one very similar to it, is generally prescribed by obstetricians:—dill water, an ounce; calcined magnesia, a scruple; loaf sugar, three drachms; oil of aniseed, four or six drops;

syrup of white poppies, half a drachm; dose, a teaspoonful three or four times a-day. If this should act as a sedative, and cause sleep, we may substitute two drops of the sedative solution of opium, or four drops of laudanum tincture of opium. The dose may be repeated until relief is obtained, or sleep be produced.

Anodynes are also useful when children are affected with troublesome frequent cough, unattended by wheezing, flushing of the face, and dependent upon irritation in the throat, caused by exposure to cold. In such cases we prescribe mucilage of acacia, or gum arabic, eight drachms; syrup or oxymel of squills, one drachm; compound tincture of opium, or paregoric, half a drachm; sugar, or simple syrup, two drachms and a half; a teaspoonful may be given every hour, until it causes drowsiness, and then it is to be discontinued until this goes away. When the cough is very urgent, we may add one drop of hydrocyanic (prussic) acid to this mixture with advantage, as this is a powerful sedative, and posseses great power in controlling laborious or spasmodic respiration. I have repeatedly added two drops of this acid to the mixture in cases of inflammation of the lungs or their lining membrane (bronchitis) with the happiest results, after lecching, emetics, blistering, and warm bathing had failed. I remember a case to which I was called by my friend Mr. Hughes, of Holborn,—the infant of Mrs. B——, in which we used this quantity of hydrocyanic acid, and ordered a teaspoonful of the mixture containing it every hour, until the breathing was relieved. I have employed this combination in a vast number of similar cases, and also in hooping-cough, with advantage. Great care is necessary to discontinue the medicine as soon as relief is obtained.

Anodynes are also beneficial in diarrhœa of infants. The following mixture is generally efficacious; but there are cases in which more powerful astringents are necessary:—chalk mixture, three ounces; syrup of poppies and aromatic confection, of each one drachm; loaf sugar, two drachms; oil of aniseeds, four or six drops; dose, a teaspoonful, three or four times a-day, or in bad cases, after each motion. In violent cases, in which there are ten, twenty, or thirty motions in one day, it will be necessary to add three drachms of tincture of catechu, and one drachm of extract of logwood to this mixture.

Emetics.—The emetics usually employed in diseases of children are, antimonial wine, ipecacuan or hippo wine, or tartarised antimony (tartar emetic), or powder of ipecacuan in water, in the proportion of one grain to the ounce of water or syrup. These medicines are contra-indicated when there is irritation in the stomach evinced by hiccup or vomiting; and in the bowels, indicated by diarrhœa, black, brown, white, green, or any coloured motions, unless yellow. Antimonial emetics produce most irritation, and may readily induce inflammation, softening, or ulceration of the stomach, each of which will speedily end in death. Parents, especially among the lower classes of society, are too much in the habit of exhibiting emetics, and often do irreparable mischief. They never should employ them when medical advice can be obtained. Dr. Clarke has known a quarter of a grain of tartarised antimony excite vomiting and death of a child, which was previously in no danger. I have been told of a druggist, whose common fever powder for children is five or seven grains of tartarised antimony; he never weighs it, but guesses at it; and I need scarcely state, that any child who takes this quantity is poisoned, or rather murdered. It is melancholy to think that such ignorant men are allowed to prescribe and destroy human beings with impunity in the greatest nation on earth. Nevertheless, the fact is so.

It is also to be remembered, that, in cases of inflammation of the lungs in children, it is dangerous to urge tartarised antimony in proportionally large doses as in adults, on account of the liability of causing inflammation of the stomach. I shall read to you a letter from a former pupil of mine, who is now in Paris, giving the history of death, caused by repeated doses of tartarised antimony for inflammation of the lung, in a child of three years of age, which was written to me as corroborative of the validity of my opinion. Some late French writers, M. Trousseau, &c., have, however, used the oxide of antimony in cases of adults, with invariable success, in similar cases, while others have as strongly condemned it, as inert and useless. M. Bouillaud observes in his clinical lecture, in April, 1834, "the white oxide of antimony had been fairly tested, it did not produce vomiting or diarrhœa, and its effects were completely null.—(London Medical and Surgical Journal, No. 119, May 10, 1834, vol. 5, p. 473.)

The older practitioners ordered emetics much oftener than the moderns, and these very seldom employ them at all. The community, however, is still prejudiced in favour of these remedies, and it is therefore very desirable to point out their effects.

Dr. George Armstrong recommended ipecacuanha in almost every disease of children, while others advised antimonial wine as generally—both were in error. Antimonial medicines are still very much employed in diseases of children and adults in this country; and it is the more necessary to inform the young practitioners of their comparative effects when injudiciously administered.

Aromatics.—The aromatics which are most generally used in the treatment of diseases of infants are, oils of aniseed, carraways, cloves, peppermint, aromatic powder, cinnamon, and ginger powders, and aromatic confection. These stimulate the muscular coats of the stomach and bowels, expel flatulency, and, according to the majority of writers, prevent purgatives from causing griping. The aro-

matic powder, ginger, and aromatic confection, are also combined with drastic or powerful purgatives, such as scammony, aloes, camboge, calomel, and elaterium, to prevent their griping effects. Some practitioners deny that they possess this power; but if any one of these will take a full dose of any of these medicines, with and without the addition of aromatics, and report that he has suffered equally from griping, I shall freely give up my position.

Aromatics and carminatives are much used in different countries, combined with aliments, drinks, and medicines. The ancient Greeks, according to Sonini, gave them to their children very freely; and, in this country, we use condiments, spices, and aromatics with our food, drink, and medicines. I feel convinced that the milder aromatics ought to be combined with such medicines as require them when prescribed for children.

Absorbents or *Antacids*.—Harris, who had great experience in the diseases of children, was of opinion that nearly all proceeded from acidity in the stomach and bowels; and he recommended earthy substances, as chalk, magnesia, &c. to neutralise this, and to form a mild aperient. It is well known that a teaspoonful of magnesia and a teaspoonful of lemon, or, in some cases, of orange juice, will form a neutral compound which will act as an aperient on many delicate persons who suffer from acidity of the stomach or indigestion. This class of medicines are mere palliatives, unless when other treatment is employed. The principal medicines of this class ordered for children are, calcined magnesia, prepared chalk, chalk rubbed into a powder with mercury (hydrargyrum cum cretâ), carbonates of soda and potass saturated with lemon juice or tartaric acid, in the forms of effervescing draughts or soda powders; carbonate of ammonia, &c. Quicksilver or mercury is triturated with chalk into a bluish powder, and, when combined with small doses of rhubarb or aromatic powder, is, in proper doses, one of the most effective and safe medicines when the motions from the bowels are unhealthy, when a child is feverish, picks its nose, is peevish, refuses every kind of food, and desires cold water, or some other cold drink. When these symptoms are present the disease is called infantile remittent fever, worm fever, fever from teeth, and "water in the head," by most mothers. The abdomen is enlarged, and the mesenteric glands are often affected.

Under such circumstances, we generally succeed, in a few days, in removing the fever, and restoring the motions to a yellow, healthful colour, by the combination just mentioned. The disease is caused by improper diet or by dentition. It is caused by improper diet, because most families allow their children, from one to five years of age, to dine at the same table with themselves, and partake of the same food, which is injurious, for the following reasons:—Children are gluttons; they never masticate animal food sufficiently, whether they have teeth or not; they bolt their food, the gastric fluid in the stomach cannot soften or chymify it, the consequence is, that it passes partially changed into the first portion of the bowel (duodenum), the bile is now mixed with it, but does not dissolve all of it or reduce it into chyle; it irritates the surface of the bowel, and the lacteals or absorbent vessels which pass to the glands in the mesentery, and on to the thoracic duct which conveys the chyle or nutriment to the heart to be mixed with the blood; as the repetition of food renews the irritation in the lining membrane of the stomach and intestines, in the lacteal and mesenteric glands; irritation, inflammation, or ulceration of the bowels is the result, attended by fever; or the mesenteric glands enlarge, obstruct the passage of the chyle to the heart, and general emaciation follows. Parents are surprised at the voracious appetites of children labouring under mesenteric disease, and at the emaciated appearance of their limbs and body, while the abdomen is swollen. The explanation is this, —nature demands food, but this is not conveyed through the mesenteric glands to the heart, a new supply of blood is cut off, the absorbents of every part are in action, and every part, except the mesenteric glands, which are composed of absorbents, emaciates. The emaciation is extreme before death, the features shrink, the eyes become prominent, and the visage either resembles that of old age or assumes an unearthly appearance. This has led the vulgar to imagine that their children had been "overlooked, bewitched, or replaced by some supernatural being, or by the diseased offspring of others." The real nature of the disease in such cases is irritation, inflammation, or ulceration of a greater or less portion of the mucous or lining coat of the intestines, a disordered secretion of liver, and hence the depraved motions from the bowels. The best remedies are the hydrargyrum c. cretâ, or calomel in very small doses, combined with rhubarb, compound powder of chalk with opium, continued for ten or fifteen days successively, and then the judicious use of iodine both internally and externally will remove the enlargement of the mesenteric glands, as many of you can attest from ocular proof at the Dispensaries which we attend together. The dose of the hydrargyrum c. cretâ for an infant under a year old, is one or two grains combined with rhubarb, as already stated, night and morning. No medicine restores the bowels to a healthful state sooner than this, unless when the evacuations are black, and then calomel should be substituted for it in the preceding prescription.

Calcareous medicines, as lime-water, the solution of the muriate of lime, &c., have been long exhibited in enlargements of the lymphatic system or glands, as in scrofula, rickets, &c. and these are now replaced by iodine and its preparations, which, when genuine and judi-

ciously administered, are astonishingly efficacious in every form of scrofula. The most ample attestations of the truth of this statement are daily afforded at St. John's Hospital and the Western Dispensary.

Saline Medicines.—The carbonate of soda, saturated with lemon-juice or tartaric acid, and sweetened, has successfully cured two children affected with purpura, after every other remedy had been tried at two public Institutions in vain. I believe the neutral salts have great influence on the blood, though I cannot assent to the theory of Dr. Stevens.

Mr. Cameron, a naval surgeon, in his work on Diet, lays claim to the priority of discovery as to the effects of saline medicines on the blood, and states that his patients who had been deprived of vegetables, who had become pale, and threatened with scurvy, acquired a florid or high complexion by the use of nitrate of potass or common nitre. I need scarcely observe that the neutral salts have been used in febrile and many other complaints from time immemorial. The world, however, is indebted to Sir Gilbert Blane, Bart., for the discovery of an effectual cure for sea-scurvy, to which purpura is so nearly allied. In cases of children predisposed to the latter disease, the use of ripe subacid fruits will be beneficial; but, in general, these should be sparingly allowed on account of the predisposition to ascescency, according to some, or irritation of the stomach and bowels, in the opinion of others, in early life.

Blisters and Irritants.—I have stated on a former occasion that the skin of young infants, and even of children, is extremely irritable, and liable to be inflamed by the slightest external injury. A slight burn on the finger of a child may cause convulsions and death in a few hours. The bite of an insect—a gnat for example—on a young infant may excite inflammation in a few minutes, and therefore we cannot be surprised that the irritation of a blister, a mustard fomentation or poultice, the antimonial ointment, or powerfully stimulating liniments, may rapidly induce violent inflammation in infants, and this has often been followed by mortification, sloughing, and death. The experienced part of the profession never allow a blister to remain on a young infant, or a child under five years of age, longer than three or four hours; in fact, they order it to be removed as soon as the skin is reddened. It is quite unnecessary to allow the blister to *rise*, as it is popularly termed. If any of the blistering plaster remains on the skin it should be always washed off with tepid water. I cannot agree with a recent writer on diseases of children, who advises the reddened and tender part to be covered with new flannel, to prevent the child taking cold. The irritation which would be produced by such a plan would be intolerable; and I cannot but express my surprise at such a recommendation. Some writers advise that a piece of fine muslin should be placed under the blister to prevent the absorption of the flies, and the strangury or pain in evacuating the urine which follows it. Others order powdered camphor to be sprinkled on the surface of the blister for the same purpose. Whenever a blister is applied to children, some mucilage of acacia or gum arabic—for example a quarter of a pint—ought to be mixed with the drink. I have repeatedly seen mortification, sloughing, and ulceration caused by blisters on different parts on children, when left applied for twenty-four hours, which is, unfortunately, the usual period.

Blisters have long appeared to me to be too slow in their action; and that inflammation in the head, chest, or abdomen, might prove fatal, before they produced the desired effect. The object of a blister is to cause local or counter-irritation; and this can be done in a minute or two by rubbing the skin with warm oil of turpentine. When the skin is reddened by this remedy, it should be discontinued, as it would produce intense pain, but this can always be very speedily abated or removed by the constant application of cold water for a few minutes. The superior advantage of this remedy is, that its effect is sudden, and it does not induce strangury or painful micturition. In my own practice I have for six years ceased to order blisters, for the reasons I have assigned. My learned and experienced friend, Dr. Copland, was the first to advise the application of turpentine, as a substitute for blistering, in the former series of the London Medical and Surgical Journal, the London Medical Repository, of which he was the editor. There is also a valuable paper in the Dublin Journal of Medical and Chemical Science, for March 1834, by Dr. Little, of Belfast, on the value of the application of warm turpentine in diseases of the lungs, hooping-cough, asthma, bronchitis, pulmonary consumption, &c., and in croup.

Mustard Poultices and Fomentations.—These are often applied to the feet and legs in cases of inflammation of the brain, lungs, or abdominal viscera, and should always be removed so soon as they excite pain. I have known a mustard fomentation excite pain in a child of two years of age in less than a minute, and if continued might induce convulsions, or be followed by its usual consequences when applied too long, inflammation, ulceration, or gangrene. I have known several cases of adults, in which mustard poultices were applied for twenty-four hours, when the patients were supposed to be dying, convalescence occurred, and also most painful ulceration of both legs as high as the calves.

I witnessed a case of typhus, in which mustard poultices were left on for thirty hours as the man's life was despaired of. He, however, convalesced; both legs mortified, and it was necessary to amputate both below the knees. Another case was that of a gentleman, who was attacked with erysipelatous inflammation of the scalp and delirium tremens. It was supposed by three physicians, who were also practical surgeons, that effusion into

the brain had taken place, and under this impression, mustard poultices were applied to his feet and legs. He was declared to be moribund; when I exhibited his habitual stimulus, he convalesced and recovered. There are two similar cases of erysipelatous inflammation of the scalp, related by Sir Astley Cooper in his lectures on surgery, which were considered mortal, and which were cured by gin after the usual remedies failed. The mustard applications did not redden the skin. In six weeks after his convalescence, both his legs ulcerated, and he was confined to his sofa for three months before the ulcers had healed. There is also caution required in using hartshorn and oil, and other stimulating liniments.

The antimonial, or tartar emetic ointment, is sometimes employed in diseases of children, but great caution is necessary as to its use. It causes an eruption of pustules, like small-pox, which are very painful. This remedy should never be applied over an ulcerated or blistered surface, as it excites a degree of pain which few can bear. This ointment should rarely be applied to children.

The medicines I have named are sufficient for the infantile medicine with the addition of hartshorn or sal volatile, and olive oil. Anything else required may be had from the druggist.

Blood-letting—Leeches—Cupping—Dry-cupping.—The best rule that can be laid down on the abstraction of blood by bleeding from the arm, or opening the temporal artery or jugular vein, is to be guided by the effect produced, and not by the quantity of blood which is taken. It is an axiom that we should make a free orifice, which allows the blood to flow rapidly, gives the system a sudden shock, causes fainting, or an approach to that condition which is desirable whenever venesection is necessary, and does all the good that can be expected, at the least loss of the vital fluid. It is known to most practitioners that the removal of six or eight ounces of blood from a large orifice will cause fainting, while the abstraction of ten times the quantity, from a small orifice, will not produce the same effect. It appears to me that the safest and best precept with regard to blood-letting is, to make a large orifice, and allow the blood to flow until the countenance changes, giddiness, or loss of vision is complained of, and then cease. As constitutions differ, there can be no fixed rule, I imagine, as to the quantity of blood to be taken. The directions now given by the most scientific and experienced practitioners are, bleed from a free orifice to the approach of fainting. There are some of the old school who order twenty or thirty ounces of blood to be drawn, a vein is freely opened, eight or ten ounces are abstracted, the patient faints, and the operator binds up his arm. I am disposed to think that most of you have repeatedly acted in this manner.

Venesection cannot be easily practised on young infants, on account of the smallness of their veins, but its necessity is efficiently obviated by leeches. New-born infants, when properly fed and preserved from the influence of cold, very seldom require leeches, unless when attacked with purulent ophthalmia. A leech to each eyelid will be sometimes required in this desperate disease, though a single leech, applied to the chest in cases of catarrh or bronchitis, will afford the most decided relief. It is to be recollected that the skin is extremely vascular and irritable, and that the loss of blood from one leech-bite has frequently destroyed life. When the bleeding is excessive, the countenance becomes pale, the eye glassy, the forehead and extremities cold, the respiration difficult, and should fainting occur, it will be almost impossible to rouse animation or to preserve life. The usual means of arresting the bleeding are, the application of cold water, vinegar and water, agaric, compression, cauterisation with caustic or a wire heated to redness. Leeches should be applied over a bony surface, so that efficient pressure may be made to stop the bleeding if necessary. It is wrong to leave any discretionary power to nurses, the practitioner should not leave until he has arrested the bleeding, as infants and children have frequently sunk from exhaustion; and there is at all times the greatest difficulty in restoring them. It is now generally agreed that leeches cause a determination of blood to the part on which they are applied, and also that in congestion of the brain they should be placed behind the ears, along the jugular veins, or to the neck near the roots of the hair, and not on the forehead, temples, or crown of the head, as is usually done.

Cupping.—This operation is rarely performed on children, on account of the vascularity and sensibility of the skin, though it has lately (1834) been very strongly recommended by Dr. Burne, at the Medical Society of London. He stated that he had repeatedly ordered it for children of all ages with the best success. It appeared to me to be pregnant with danger in cases of very young infants, and extremely likely to induce convulsions, or congestion of the brain or lungs by the violent screaming which I should think it would excite. I have not tried it, and therefore cannot speak from experience; but very extensive observation enables me to state, that dry cupping has superseded the necessity of general and local bleeding in my practice in most of the diseases of children; and it is a remedy, even in cases of adults, which will generally supersede local bleeding in a great number of instances. It possesses this great advantage, that it requires no scarification, no loss of blood, and that we may apply as many glasses as the extent of surface over the affected part will admit. In cases of infantile diseases it is invaluable.

Dr. Blundell has arranged a table of the quantity of blood that may be taken at the following ages; but I cannot help thinking, that any fixed quantities are as objectionable as attempting to determine the exact doses of

medicines. If constitutions were alike, and children of the same age equally vigorous and well developed, then we might go by fixed rules; but until then I should be guided by the effect produced, and not by the quantity abstracted. You will of course adopt whichever plan you think most reasonable and best.

During the first month an ounce may be taken; from the second to the fourth month, two ounces; from the fourth to the eighth month, from two to three ounces; from the eighth to the twelfth month, from three to four ounces; from the twelfth to the eighteenth month, from four to five ounces; from the second to the third year, from eight to ten ounces; and from the sixth year to the eighth, from eight to twelve ounces. These were the quantities as set forth in Dr. Blundell's Lectures, in the Lancet for 1826; but it appears by Dr. Castle's edition of the Principles and Practice of Obstetricy, &c., by Dr. Blundell, just published, p. 832, "What quantity may be safely drawn at once must be determined by circumstances; but the following tabular statement of quantities of blood, which I have taken away myself at different ages, may perhaps be of some service as a guide:—

From a child of	oz. aver.
2 months old	from 1 to 1½
4 months old	— 1½ to 2
8 months old	— 2 to 3
12 months old	— 3 to 4
18 months old	— 4 to 5
3 years old	— 8 to 10
6 years old	— 10 to 12

The quantities in this table are the same as in the former account, unless that in the latter there is no mention made of the quantity for an infant of one month old.

Notwithstanding the authority of the justly celebrated obstetrician just quoted, for whom, in common with the cultivators of medical science in this and all countries, I entertain the highest respect, I feel bound to inform you that I act on the precept already mentioned—bleed from a free orifice, and be guided by the effect produced, and not by the quantity taken.

When it is necessary to open a vein in children, a ligature is applied round the wrist or instep, the limb immersed in a basin of warm water for the purpose of congesting the part and rendering the veins more apparent. In all cases of children I would advise you to watch the countenance, and if you see it becoming pale or collapsed, as already described, stop the flow of blood, whether from a vein, by leeching, or cupping, should you employ this last operation.

At our next meeting, gentlemen, I shall commence with Pædonosology, or a Description of the Pathology and Treatment of Diseases of Infants and Children.

Foreign Medicine.

The inefficacy of Chlorine in Phthisis Pulmonalis.

BY A. TOULMOUCHE, D.M.

(*From Archives Générales de Médecine.*)

The paper written by M. A. Toulmouche on this subject is divided into two distinct parts,—one in which he points out the inefficacy of the employment of chlorine in phthisis, the other in which he proposes to show the efficacy of this medicine in chronic pulmonary catarrh. The first contains remarks on seven cases, all of which were characteristic of confirmed pulmonary disease, and the patients died, after having been submitted to the treatment of chlorine for a longer or shorter period. It will be unnecessary to dwell on this part, as most practitioners are aware of the inefficacy of this remedy, as well as all others that have been attempted in this affection. Nevertheless, as there are some medical men who still believe that the non-success of medicaments, especially that of which we are speaking, arises from their mode of use, we will enter in a short account of the method adopted by M. Toulmouche.

In the first case of which he speaks, the chlorine was commenced about two years after the premonitory symptoms of this disease, and continued for fifty days; in the second, at the termination of a few months, and continued for sixty days; in the third, at the termination of three months, and employed for fifteen days; in the fourth, five months, and continued for forty days; in the fifth, at the end of four months, and used for four days; in the sixth, after the tenth day, and employed for fifteen days; finally, in the seventh, commenced a few days after a relapse, and continued for fourteen days.

The author states that he would have annexed a much greater number of observations, if he had not been fearful of making it irksome to the reader; for, with the same unsuccess, in his particular practice, he has experimented on more than sixty phthisical patients, and on nearly twenty others at the Penitentiary in the west.

A pretended case of phthisis, that he believed to have cured by the employment of the chlorine, made him suspect that if he con-

stantly failed in this affection, he was able to succeed by its use in chronic pulmonary catarrh: he therefore prescribed it in these cases, and its use has since been crowned with the greatest success.

Case.—M. D., aged 36, tall and thin, of a very irritable, nervous temperament, had always enjoyed good health, in spite of all kind of bodily indulgences. A constitutional syphilis supervened at the time of his marriage; moral inquietude followed, his general health soon became affected, cough with mucous expectoration, and profuse perspiration supervened. I examined him carefully (he states), and immediately opposite the superior spinatus fossa of the right side, and supposed there was pectoriloquy, but this was uncertain. A blister was applied, sea air was recommended, without an amelioration of the symptoms; in fact, emaciation and feebleness continued to increase.

On the 27th of October I commenced the inhalation of chlorine, and it was continued till the termination of the month.

On the 5th of November, the sore throat, which originated from syphilis, and had for a long time existed, looked healthy, and its ulcerated surface diminished, cough became less frequent, and the patient slept well; the profuse nocturnal perspirations diminished, and pains of the chest ceased.

Jan. 20th, 1830.—He returned to his occupations, cough had entirely ceased, and the cure was completed.

Four months afterwards M. D. died from acute gastritis, complicated with cephalitis. At the autopsy, the lungs were discovered healthy, with the exception of a dilatation of the bronchi at the superior and posterior part of the right lung, which easily explained the deception of the resonance of the voice, and made me believe that in that spot there was imperfect pectoriloquy.

M. Toulmouche relates two more analogous cases, and would, he states, have added more, if it was not for the length of his essay, and if he had wished only to point out the utility of the chlorine medication in chronic catarrh.

On the Cure of Fistula Lachrymalis by Perforation of the Superior Maxillary Sinus.

BY M. LAUGIER, SURGEON TO THE HOSPITAL NECKAR.

This new method has been proposed by the reporter for some years, but has remained quite unnoticed till the present day. He has again revived it, and attached to it an importance which at first he had not perceived. In a long account, written by him in the Archives Générales de Médecine, he commences by showing how he was induced to propose this artificial opening. He studied on the dry bones of the face, the opening proposed by Woolhouse through the unguis, when he recognised that the partition which separated the maxillary sinus from the nasal canal was also thin and brittle, and that a perforation in this point would be more favourable for the passage of tears. For, in fact, when the os unguis is perforated directly and horizontally, the artificial opening corresponds to the narrowest part of the nasal cavity, and is not in relation with the lachrymal sac, or when the instrument is directed from above downwards, and the oblique course has a few lines of length in the pituitary membrane, the chances are too great for its obliteration by a perforation on the side of the sinus; on the contrary, the opening is always inclined to the lachrymal sac, its course is short, direct, and opens into a large cavity; and, finally, whilst the pituitary is thick, soft, and a little adherent to the unguis, the sinus is lined by an adherent mucus, nearly fibrous, and but slightly disposed to thicken, even in the state of inflammation.

After minute researches, he finds that an opinion so simple and natural has not been premeditated by any author. But in a work by M. Briot, entitled Sur les Progrès de la Chirurgie Militaire depuis les Guerres de la Revolution, he finds an observation connected with this subject. M. Briot and M. Picot not being able to find the nasal canal, the latter, in manœuvering to discover the passage, used too much violence with a blunt pointed stylet, fractured the wall of the maxillary sinus; and what at the time was thought a bad accident, became a source of cure for the patient. In the Traité des Maladies de la Bouche, by Jourdan, we find the history of a lachrymal

fistula, that opened in the maxillary sinus, followed by cure after the ablation of a molar tooth. But these observations remained useless, even in the hands of their authors, and M. Briot even believed at the time, that the probe had traversed the plate of the orbital fossa.

Convinced of the priority of the discovery, M. Laugier published it in the first instance to replace the operation of Woolhouse, but he has now reproposed it as a general method in substitution of the seton and canula. The following case will show the mode of putting it in practice.

A woman, 72 years of age, was admitted into the Hospital Neckar for fistula lachrymalis of the left side, which she had been troubled with for a long period, and was accompanied by slight inflammation. Leeches and emollient cataplasms were employed without any effect, and the operation was decided upon.

The instruments consisted of an ordinary bistoury, and a small trocar, the body of which was bent, about six lines from its point. The patient was placed as in the ordinary operation, says the author, and the puncture being made, some pus escaped upon the cheek. The bistoury being slightly raised with the left hand, I glided on the blade the body of the trocar, the point below, and the convexity of the line above and within. As soon as it had entered into the superior part of the nasal canal, by raising the handle of the trocar, and turning its convexity towards the root of the nose, I inclined its point towards the external wall of the canal of the nose, and with the greatest facility caused it to penetrate the maxillary sinus. The direction of the instrument left no doubt on this point. In withdrawing it, I turned it from behind forwards, and from before backwards, and upon itself, the body of the trocar grinding, as it were, round this new formed passage. The patient suffered but slightly during the day; the succeeding days a slight quantity of blood and pus were discharged on blowing her nose; the application of emollients were continued on the internal angle of the eye, the swelling gradually decreased, and on the 15th day from the operation, the patient left the hospital completely cured, the nose even had become humid.

M. Jobert at the Hospital St. Louis, has treated successfully many cases of this obstruction by this method, but the particulars of his cases are faulty. The only objection that we can make to this operation is, that the nasal orifice of the superior maxillary sinus is frequently obliterated, which must be newly perforated in the most inclined part to permit of the operation.

There is another method, also indicated by M. Laugier, of acting on the external wall of the nasal canal, which is by only distorting this wall towards the maxillary sinus; if this comminutive fracture, at all times, without perforation is possible. By this means a considerable widening of the nasal canal is produced, but simple perforation appears to him at present preferable. What is the value of this new operation? In every case it ought certainly to supersede the perforation of the os unguis, and the latter, without doubt, should be abolished from practice. As to its acceptation as an ordinary method, that of course must depend upon difficulties. The canula of M. Dupuytren is so easily placed, so sure in its results, and so rarely accompanied with inconveniences, that it will be an impediment against every rival operation. Nevertheless the method of M. Laugier will have at least this great advantage, if in the course of the operation the surgeon is unable to find or open the nasal canal, it will leave him a very simple resource, and one that appears to us free from inconveniences.

Reviews.

The Liverpool Medical Journal. Published monthly, under the Superintendence of an Association of Physicians and Surgeons, chiefly attached to the Medical Charities of Liverpool.

(*Continued from page* 605.)

We resume our notice of this new and promising contemporary, and are happy to find it contain so much practical information given by men of experience. The hospital and dispensary reports are very numerous and concise, they remind us of what medical officers of public charities may do in imitation of Scarpa and Sabatier, with their fifteen beds each, if they were disposed to avail themselves of the opportunities they enjoy. Many experienced

practitioners have also enriched the pages of the periodical before us, as will appear by the following communication, which is next in order for our notice.

"Practical Observations on Uterine Hæmorrhage after Delivery, and the means of Prevention. By J. Latham, Surgeon.—I am well aware that the means I am about to recommend so strongly, have been mentioned by some few modern writers on this subject: to originality of thought, therefore, I make no pretensions.

"My sole object here, in coming before my brethren, is to make those means, if possible, more extensively known; and, what is more essential, that they should be more generally adopted, by which, I am quite sure, life would be often spared.

"From an extensive practice in midwifery of upwards of thirty years, few practitioners could have met with a greater number of alarming cases of Uterine Hæmorrhage after delivery than myself. When I reflect on some of the worst of those cases, the deluge of blood has been so great, that I shudder at the thought. Indeed, it has often been a matter of great surprise that life has not been more frequently extinguished; and it appears to me, that this subject has not had the attention paid to it which its importance demands.

"There is an old saying, and a very true one, 'It is better to prevent than to cure,'—which is my principal aim. No doubt the tranquillising plan is desirable for the patient's comfort and safety during labour: and that it is requisite to prohibit the improper use of stimulants; to guard against hot rooms; encouraging the recumbent posture, and keeping the lower extremities warm. If the patient has suffered from hæmorrhage in a former confinement, I would strongly recommend the membranes to be ruptured as soon as practicable, with a view to excite the early contraction of the uterus; and should the pains be violent, threatening hasty delivery, to retard somewhat the expulsion of the head of the child, by moderate pressure on the perinæum.

"I believe it is a common practice, almost immediately after the head of the child is born, to lay hold of it, and, by forcibly pulling it, hurry away the remainder of the body, rather than to leave it to the efforts of nature to accomplish. This last would be a far more safe and desirable practice, and one by which the fundus uteri would be forced lower down towards the pubes, and, in all probability, would prevent the irregular contraction of that viscus.

"It would be dangerous for a practitioner in midwifery to consider, that all probable cause for anxiety for the safety of his patient was at an end, on the delivery of the child; in fact, it might be correctly said to be then just begun; and we should fall far short of doing our duty by leaving the patient too soon afterwards; for, if any fatal consequences should ensue from hæmorrhage, when blame is attached (particularly to the young practitioner), I am very sure it would do much more harm, as has been often said, than the loss of a dozen by sickness.

"The sooner the better (at all events after the birth of the child), a bandage should be applied, and by placing several folded napkins under it, on the abdomen, immediately over the uterus, a more uniform pressure can be made.

"It will be well here to observe the necessity of making an early examination as to the state of the uterus (particularly when the result of a former labour leads to an expectation of hæmorrhage), and to endeavour without delay to assist its contraction by extending the hands over that viscus, firmly and evenly grasping it—the patient lying on her back. Time and experience have convinced me of the advantage of this means in particular, when persevered in, over every other. Should 'flooding,' notwithstanding, come on, in addition to the above, the usual form of cold applications should be freely used. By these means, I think, there will be little to fear from retention of the placenta within the cavity of the uterus, which is an appalling circumstance, and attended sometimes with danger.

"As my object principally is to urge the necessity of the preventive means, I must again be allowed to say, that by prompt attention, and firm adherence to the above remarks, a complete contraction of the uterus from its fundus will, in all probability, be obtained,—the only safeguard against 'flooding;' and on which the safety of the patient mainly depends.

"I conclude, in full confidence that these remarks will meet the approbation of those professional gentlemen who have, or who have had, an extensive practice in midwifery."

"*Wavertree, near Liverpool,*
"*April*, 1834."

The practice recommended by Mr. Latham is exceedingly good so far as it goes; and is what was adopted until a recent period. But in our opinion there is a more efficient mode of managing the class of cases under notice, than the above. When hæmorrhage is expected after delivery, it appears to us, that the ergot of rye is the remedy before the rupture of the membranes, when the labour is natural, the infant's head presenting, the pelvis undeformed, and the os uteri considerably dilated. We cannot assent to the opinion that "should the pains be violent, threatening hasty delivery, to retard somewhat the expulsion of the head of the child, by moderate pressure on the perinæum." It appears to us that if the pains were violent, or, in other words, the uterine action strong, there would be little, if any danger, of after-hæmorrhage. On this principle we should exhibit the ergot of rye to increase the pains, which would also cause the expulsion of the placenta, the contraction of the uterus, and the prevention of hæmorrhage. We might mention many cases, in which this plan prevented hæmorrhage. We fully agree with Mr. Latham that it would be safer to allow the uterus to expel the body, after the head was born, than to pull it away forcibly, an operation which no one but an ignorant obstetrician would be anxious to accomplish. It is evident that if the uterine action was increased by the ergot, and rendered permanent, there would be no necessity for bandaging the abdomen, applying pillows, or grasping the uterus—all excellent proceedings when there were no better. Mr. Latham and ourselves agree in the opinion that a complete contraction of the uterus is "the only safeguard against 'flooding,' and on which the safety of the patient depends;" but we accomplish it by different means. We take leave of that gentleman with every sentiment of respect for the soundness of his opinions, and the excellence of his practical precepts.

The next paper is "On the use of Strychnine in Amaurosis. By Hugh Neil, Surgeon to the Liverpool Ophthalmic Infirmary." The author relates some interesting cases of amaurosis, and concludes, "that in no instance have I seen strychnine useful in amaurosis, if internally administered; nor in any have I seen it successfully used when the iris had completely lost its motion."

In many cases detailed, the remedy was effectual, though it did not produce twitchings; in some instances a bitter taste was perceived on the palate, and in others in which the happiest results were anticipated, the writer has been disappointed. We are not surprised at this last declaration, as it is extremely difficult to procure strychnine in a genuine form. Mr. Neil maintains that this medicine may be advantageously used in almost every form of imperfect amaurosis. "I think," says he, "it might also be used with much advantage in many of the atonic diseases of the ear." We fully agree with him in the last opinion, as we have cured many nervous persons of deafness with this remedy.

The last paper, "On Hemiplegia during Pregnancy. By Dr. Roberts, of Rhyll," is worthy of attentive consideration.

"The patient, aged about 40, of rather spare habit, had had several children, but during her preceding pregnancies she had not suffered from any of the accidents to which women in that state are liable, and the course of the present pregnancy had been, up to the last month, equally favourable. About the middle of the last month, while crossing the street, without having complained of any premonitory symptoms, she was observed to fall down in a fit. She was carried home immediately. I was sent for, but did not see her for two hours: at this period she was sitting in a chair, supported by two persons. The power of speech, and of motion on one side of the body, was completely lost: the sensation on the same side was not very perfect. She appeared to be in the complete possession of her senses. On inquiry, I found she never had any similar attack previously, nor any symptom which might indicate a tendency to determination of blood to the brain. Her bowels had been costive. She was bled to approach of syncope. Immediately after the bleeding the power of motion in the affected side was slightly improved, and the patient expressed herself as better. Purgative medi-

cines were ordered, but, from a mistake on the part of the patient's friends, were not given until the following day. At 7 P.M. on the following day I again visited her, accompanied by Mr. Hargreaves, surgeon, of Burnley, where the case occurred. At this period, several pretty free evacuations had been effected. The countenance appeared more lively, and the woman in every other respect appeared improved. The hemiplegia, however, remained. Considering the advanced period of pregnancy, I regret that at this period no examination was made into the state of the neck of the uterus. In an hour after I was sent for to visit the patient in great haste, and in about half an hour found her completely delivered of both child and placenta. The uterus was perfectly contracted, and no flooding had ensued. In the course of a few weeks, by the use of purgatives and mild antiphlogistic treatment, the motion of the side, as well as the power of speech, was restored.

" The favourable termination of this case relieved my mind from a considerable degree of anxiety as to the result. Not being able, on referring to different works on midwifery, to find any similar case to guide my prognosis, I had my doubts whether the paralysis might not extend to the womb, and prevent the expulsion of the child, or the still more important degree of contraction requisite for the prevention of mortal hæmorrhage. In Dr. Cheyne's work on Apoplexy, a case which occurred in the practice of Dr. Kellie, of Leith, is recorded, presenting circumstances very similar to those in the preceding case. The following short abstract is given, with the observations of Dr. Kellie and Dr. Cheyne.

" 'J. A., aged 32, of spare habits and slender form, married, the mother of two children, in the ninth month of pregnancy, was seized during the day, while washing, with acute pain in the head, giddiness, and disposition to syncope. The pain was momentary, and she continued her occupation. She felt, however, unusually languid and fatigued, and complained of shivering on going to bed. The next morning she was found in a profound sleep, and breathing high. On awakening her, she opened one eye, groaned, and could not speak. Dr. Kellie now visited her, and found her completely paralytic on the right side. She was bled and purged freely. Examination of the neck of the uterus was made, when no indication of the commencement of labour was found. In the evening, on re-examination, it was found more relaxed than in the morning. On the following morning, she was found much in the same way, having given no indication of pain or suffering. On examining her, however, labour was found nearly effected, and in a few minutes she was delivered of a living child. The placenta was naturally thrown off; the uterus contracted vigorously, and no flooding ensued. The symptoms of the apoplectic seizure, however, grew worse, and she died at six o'clock the following morning.'

" On this case, Dr. Kellie observes, 'The ease with which the uterus performed its important functions, in this case of paralysis, is deserving of notice. While the patient was apoplectic, and unconscious of her sufferings, or at least so deprived of the power of voluntary effort and motion as to be unable to express her condition and sufferings by any external signs, the uterus appears, as an involuntary muscle, to have acted in the most perfect manner in expelling the fœtus and secundines, and to have afterwards preserved its tonic contraction; so that the flooding which might have been anticipated did not take place after delivery.' The following remark made by Dr. Cheyne on the latter case, I quote as an apology for publishing my own. 'I have nothing to add to the remarks of this accurate and acute observer, but that I do not know a case more worthy of record than this, which I owe to his friendship.'"

The next part of our contemporary is devoted to hospital and dispensary reports, some of which are worthy of notice. These we shall place under contribution in our British Hospital Report department. We congratulate our Liverpool brethren on the value of their labours, and we trust they will long continue to add to the records of medical science.

The American Cyclopædia of Practical Medicine.

Notwithstanding the fulsome puffing of the monopolists in this metropolis, and their silly declarations before Parliament that they alone stand pre-eminent as the renovators of the medical sciences, they have not as yet ventured, as a body, to arrange any systematic

work, except that miserable one, the Medico-Chirurgical Transactions. In other nations, the whole of the distinguished professors associate and produce Dictionaries and Cyclopædias of Medicine, which reflect honour on themselves and the countries to which they belong. Our Gallic brethren have already published eight or ten systematic Dictionaries, consisting of more than a hundred octavo volumes, while we, who in our own conceit are far their superiors, have produced one compilation in four volumes octavo,—the Cyclopædia of Practical Medicine. Let us contrast this with the work of our American contemporaries.

The Cyclopædia of Practical Medicine and Surgery, a Digest of Medical Literature. Edited by Isaac Hays, M.D.

The indefatigable editor of this work has long conducted our valued contemporary, the American Journal of the Medical Sciences, with great ability and judgment; and his accurate translations of Broussais' Physiology applied to Pathology, and other works, are well known to those who cultivate modern medicine. He is assisted in the Cyclopædia by most of the medical professors in the United States; and they have undertaken to compress into eight volumes a *complete Library of the Medical Sciences.* They have laid the French Dictionaries, Copland's Dictionary, the Cyclopædia of Practical Medicine, and the Encyclopädisches Wörlerbuck der Medicinischen Wissenchaften under heavy contribution. They inform us that their work will not be like ours, but what it ought to be.

"This work will present a digest of the existing state of knowledge in all the branches of the healing art; in special, regional, abnormal, and general anatomy; in physiology, pathology, therapeutics, materia medica, pharmacy, hygiene, surgery, obstetrics, legal medicine, and medical police. The main object of medicine, the curing and preventing of diseases, and affording relief for injuries, will be kept steadily in view; and the development which each subject will receive, and the mode of treating it will, in a great degree, be determined by its importance in reference to practical medicine. Whatever is truly philosophical in medicine is also useful, although the application of the science to the art requires much reflection and sound judgment; it is therefore not intended to restrict the term practical medicine, as has sometimes been done, to the mere description of the symptoms of diseases, and an enumeration of the remedies employed in their treatment; such a restriction is derogatory to the dignity of medical science, and degrades it to a gross empiricism."

In this kingdom the profession is wofully disunited,—we have University against University, College of Physicians against College of Physicians, College of Surgeons against its rival, Apothecaries' Company against its namesake,—all contention, strife, and disunion. Nevertheless, if we look to our monographic works, they are admirable; but our conjoint productions are miserable. We cannot comprehend why there should not be a unity of feeling—a national pride, which characterises every Englishman,—a cordial co-operation among the members of a liberal profession, and a display of talent, which, united, would eclipse all other countries. Our motto unfortunately is—*Divide, et impera.*

THE

London Medical & Surgical Journal

Saturday, June 28, 1834.

BASTARDY — INDISCRIMINATE SALE OF CERTAIN MEDICINES.

The subject of bastardy is connected with some heinous crimes, of which the medical profession is so peculiarly cognizant, that we shall make no apology for offering some remarks on the proposed amendment of the Poor Laws, concerning the maintenance of bastards, and the opposition it has excited.

It has been said that certain anomalies in the law of property to the prejudice of women could only be accounted for by the fact that men were the legislators. How far the observation is also applicable to the laws that regulate or control the intercourse of the sexes, is an extensive and interesting topic.

The universal practice of mankind, founded without doubt upon physiological distinctions, has recognised the right of the male sex to make the overtures of marriage, and has thrown upon the other sex the task of yielding to, or resisting these importunities. From this commerce arises the most odious breach of faith of which a man can be guilty,—the detestable, selfish crime of seduction, for which the law seems to despair of giving the wretched victim any adequate reparation; for the unfortunate woman has no action against her seducer, unless upon the breach of a promise of marriage. Under the fiction of compensating a father or master for the loss of her services, damages may perhaps be recovered; but not one shilling of them can the injured female claim directly. Whether this moral wrong should be left still without redress, civil or criminal, or what are the difficulties the legislature has to encounter in making the guilty violator of chastity amenable to human laws, it would take us far from our immediate purpose to consider. Such, however, as the law is, it is plain it does not reach that lowest class which is the subject of the Poor Laws. Unfortunately, the law really applicable to them has broken down the only effectual safe-guard of female purity; for, whatever may be the defects of the proposed alteration, it cannot be denied that bastardy has increased to a frightful degree under the operation of the existing laws. It is quixotic to expect the sense of honour to be extremely delicate amongst the lower orders; the loss of character is scarcely felt amidst a host of offenders; and the chance of securing a husband under the terrors of the magistrates, with the certainty of procuring an ample provision by a repetition of the offence, are temptations too great for common frailty. It is idle for persons with little experience of the sadly altered maxims of a pauper population, to apply to its situation the principles that govern a more cultivated order of society. With regard to those who are aware of the difference, we are at a loss to assign a motive for their perversion of the simple truth, or their allusion to the filthy abominations of Carlile in discussing this subject. It is but too true that the present system has disarmed the lower class of females of their natural caution, and has swelled the list of another fruitless source of misery—improvident marriages.

It were vain to expect that any system could abolish the crime of seduction altogether. But if any could accomplish it, that at present in operation has as good a claim to the rare merit as any other, as it has tended to make the female the willing, if not the inviting accomplice of her paramour:—seduction she can seldom allege.

The only plausible objection we have heard raised to the proposal of throwing the burden of an illegitimate child upon the mother, is the apprehension that such a change would lead to more frequent attempts to procure abortion, and perhaps to child murder. The latter crime is seldom attempted under the mere pressure of poverty. It more usually arises from the desire of concealment under a burning sense of shame, and has never been frequent among the lowest orders. Upon this point we are much struck with the following observations, which we extract from a report to the Commissioners published in their report.

"Desertion of children, with infanticide, were objections sometimes urged against the plan. But the great majority of clergymen, magistrates, and others

whom I examined on the subject, thought hat the former would not be more frequent than at present, and that abortion and infanticide would be less frequent, not only from there being fewer cases to give rise to them, but because the man who is now the first to suggest these crimes, especially that of abortion, and to assist in their execution, could no longer have an interest in doing so; and the female, left to herself, from maternal feelings and natural timidity, would seldom attempt the destruction of her offspring."—p. 175.

There is much weight in these remarks. At the same time, if any means could be devised for punishing effectually the betrayer of female innocence among the poor, without making the punishment operate as a mere inducement to after-marriage, we should hail the improvement with satisfaction.

We humbly submit to the serious consideration of Mr. Warburton whether some check ought not to be put to the indiscriminate sale of certain medicines, which we will not more particularly name. A little private inquiry will satisfy him of the necessity of adopting this suggestion. In our opinion, every apothecary and druggist should be sworn to keep the medicines we allude to, together with certain poisons, under lock and key, and to suffer none but himself or a sworn assistant to dispense them, upon a proper recipe. Most advisedly do we recommend the adoption of some such course in compliance with the earnest entreaties of many respectable medical practitioners. Knowledge is power. In proportion to our command over medical agents for purposes of health, are the abuses of the same agents for the most guilty purposes. We hope it is sufficient merely to allude to this subject.

CORONERS— THEIR ABOLITION RECOMMENDED.

Sir William Blackstone, the great panegyrist of all our legal institutions, affects to lament the decay of the ancient dignity of Coroners, and the mercenary motives that influence persons to seek the office in modern times.

"Now, indeed," observes the celebrated commentator, "through the culpable neglect of gentlemen of property, this office has been suffered to fall into disrepute, and get into low and indigent hands; so that although formerly no Coroners would condescend to be paid for serving their country, and they were, by the statute of Westm. I, expressly forbidden to take a reward, under pain of great forfeiture to the king, yet for many years past they have only desired to be chosen for the sake of their perquisites, being allowed fees for their attendance by the statute of 3 Hen. VII. c. 1, which Sir Edward Coke complains of heavily, though since his time those fees have been much enlarged."

Of the offices at the present day recognised in the constitution, and whereof we may trace the duration to a very remote period, that of Coroner retains some of its earliest features unaltered by the lapse of time; a circumstance to be attributed, perhaps, to the little attention paid by the legislature to the duties attached to it. The sheriff has long ceased to be elected by the freeholders. The Coroner is still chosen by popular election, notwithstanding the total change of times and manners. Were an officer to be now-a-days for the first time appointed to superintend the serious inquiries into the causes of death, which by mere accident form the principal business of Coroners in modern times, no

person would dream of throwing the responsibility of a fitting choice upon the freeholders of a county, or even upon the constituents of a reformed House of Commons. The appointment would be vested either in the ministers of the crown or in some local body, by which the abilities and qualifications of the candidates might be somewhat better estimated than by the crowd of a hustings. The election of a Coroner is attended with great expense, as great, it may be, as that of a Member of Parliament. The candidate is generally some ambitious attorney, who seeks the office for professional notoriety. His ignorance of medicine (to use the word in an enlarged sense) he pretends not to conceal. The election is almost invariably the consequence of party intrigue, with this additional curse, that few but the least educated and most prejudiced of the electors will take any interest in the result. Instead, therefore, of being pleased with an attempt at present in progress to regulate the election of Coroners upon the principles of the constituency of the Reform Bill, we should have considered it a subject well worthy of the attention of the legislature, to inquire whether the office of Coroner in its present form should not be abolished, and whether in its stead a properly qualified officer should not be appointed by some responsible authority for presiding over inquests. We trust the medical committee will take up this important subject, and point out to parliament the very unsatisfactory manner in which all medical investigations are conducted upon inquests, in consequence, as we contend, of the ignorance and incompetence of Coroners and their juries.

We understand, that by the laws of France information must be given to the police of every death that happens, and that an inspection and inquiry take place, which of course, if there be any suspicious circumstances, lead to a full investigation, resembling our inquests in its outward form, but in no other respects; for the one is as much characterised by patient inquiry and scientific research, as the other by slovenly ignorance.

Our laws have made no such jealous provision for the safety of life. The Coroner is called into action by a very ancient statute of the date of Edward I., which was passed with reference to the troubled state of society at that age, when the violence of hostile and armed men was no uncommon occurrence. The language of this statute will show the real nature of the evil, and the object of the institution.

"The Coroner, when certified, shall go to the place where any is *slain, suddenly dead*, or *wounded*, and command four, five, or six of the next towns to appear before him at a certain place, and, by their oaths, inquire if they know where the person was *slain*, whether in a house, field, bed, tavern, or company, who guilty, or who present, men or women, and of what age; whether slain in the field or wood, where found or brought thither, and how, on horse or cart, if known or a stranger, and where he lodged last." And if the guilty party be found, the Coroner is to "go to his house and inquire what goods or what lands he hath, and of what value, and when valued deliver them to the township, who shall answer for all;" for the property of the criminal was usually forfeited to the king. One peculiarity of the Coroner's jurisdiction deserves to be noticed, that the inquest must be held "upon the sight of the body," *super visum corporis;* so that if the body be not found the Coroner cannot sit.

In the preceding remarks, we have confined ourselves to the special duties of the Coroner at the present day, which we think might be transferred with advantage to other hands.

His remaining judicial duties,—of inquiry after shipwrecks and treasure trove, or persons likely to have found treasure—who, according to the statute, "live riotously and haunt taverns,"—are, we apprehend, not very troublesome nor serviceable.

We shall conclude our observations by a brief statement of the Act of Parliament concerning Coroners to which we have alluded. It has passed the House of Commons, and has been read a first time in the House of Lords. It has been much altered already in its progress, and is likely to undergo further modification before it becomes law; so that it were useless to print it at large in its present imperfect shape.

The Act provides that counties shall be divided into districts, to which the present Coroners are to be respectively assigned. And that upon the death or removal of the Coroner of a district, the parliamentary electors resident within the district shall elect a new Coroner for that district. Thus the election is placed upon the basis of the Reform Bill, and, by the division into districts, some portion of the expense and inconvenience occasioned by a county election is removed. The polling is to continue for two days only. Of course the candidates are to bear the expenses of the sheriff in providing for the election.

It is proposed to increase the fees of the Coroner upon inquisitions, in places chargeable with county rates, to thirty shillings instead of twenty shillings, and to one shilling and sixpence for every mile he has to travel in his district,—the fee at present is nine-pence. The following is the clause introduced by amendment into the act during its progress in the House of Commons for the remuneration of medical practitioners.

"And whereas at the taking of inquisitions on the bodies of persons lying dead, it is frequently necessary for the more satisfactory explanation of the cause of the death of such persons that a *post mortem* examination of such bodies, or of some parts thereof, should be made by some surgeon or other person of the medical profession, and his evidence given on such examination: and whereas there is at present no remuneration provided for such surgeon or other person, whereby great difficulty exists in procuring such *post mortem* examination to be made: be it therefore enacted, that in every case where the assistance of any such surgeon or other person for the purpose of such *post mortem* examination, and his evidence thereon, shall be thought necessary and required by the coroner and jury, the constable of the parish or place shall, on the direction of the coroner, pay to every such person, if he shall require it, a reasonable fee (*such fee in no case to exceed the sum of one pound*) before he shall be called upon to give his evidence. Provided always, that such remuneration shall not be given to any such person where he shall be called upon only to give evidence as the medical attendant of such deceased person during his lifetime, or at the time of his death."

We need scarcely call the attention of our readers to the paltry fee, the *greatest* a medical practitioner is entitled to when his skill and time are required to investigate the physical causes of a mysterious death. No respectable practitioner could of course afford, in justice to himself, to attend an inquiry of the kind. The busi-

ness must be left to be jobbed by some underling, unless, to the honour of the profession, there be no one found to accept the pitiful remuneration, and the legislature be compelled to devise some other means for securing a *post mortem* examination.

It is intended to declare the Coroner's Court an open court; and, in order to secure a better jury than usually assembles before him, the coroner is to be empowered to inflict a fine of forty shillings on such as are summoned and refuse to attend.

To the coroner, to the jury, to the medical remuneration, to the whole system, we have an insuperable objection.

PARLIAMENTARY COMMITTEE ON MEDICAL EDUCATION.

During the last few days deputies from the Scotch and Irish medical corporations have been examined by the Parliamentary Committee, and the worthy Chairman elicited a vast deal of information, highly beneficial to the great cause of medical reform. There can be little doubt but the laws relating to the medical profession will be entirely changed during the next session of Parliament. It is rumoured that there will be three new acts for England, Ireland, and Scotland, or one including the whole of the United Kingdom.

Foreign Hospital Reports.

HÔTEL DIEU.

Umbilical Hernia—Strangulation produced by Scirrhus—Contraction of the Small Intestine—Reduction—Continuance of Symptoms—Death.

Elizabeth Francoise, aged 52, of strong constitution, and sanguineo-lymphatic temperament, has been troubled for twenty years with an umbilical hernia, which has always been worse during the periods of parturition. The hernial tumour was about the size of a pullet's egg; she had never taken any care of it by bandaging, though many times she had suffered from symptoms of strangulation. These symptoms till this period (the 10th of May last), had always yielded to the ordinary treatment, viz. leeches, baths, cataplasms, and rest, &c.

On the 10th of May she made a false step, and in the effort to save herself from falling, she heard a cracking noise in the umbilical region, and immediately in this part felt acute pain; symptoms of strangulation supervened, such as a sense of weight in the precordial region, nausea, hiccup, and bilious vomiting. She was immediately received into the Hôtel Dieu, and the ordinary means adopted for its reduction. After being in the bath some time, the symptoms became alleviated, but only for a short time.

At 8 o'clock in the evening new symptoms ushered in; the patient evidently became much worse; her bowels had not been relieved since the commencement of the symptoms. A fœcal evacuation was obtained after repeated clysters, and she passed a tranquil night.

The remedies for reduction were continued, the tumour became inflamed and painful, and the colicky symptoms increased in intensity; the surface of the body was bedewed with a cold clammy sweat; the eyes became glassy, cheeks were flushed, and the countenance indicated the greatest distress; pulse feeble; abdomen tender, particularly around the umbilical region; great exhaustion. The tumour was elastic, its tegumentary covering remained unchanged. On attempting its reduction, a portion of the contents of the tumour re-entered its natural cavity, but immediately the pressure was removed, the tumour again enlarged.

On the third day reduction apparently had taken place, a small quantity of fœcal matter was discharged by the rectum, and all the symptoms decreased in urgency, and M. Dupuytren expressed a hope of the patient's doing well; but on the evening of the 4th all the symptoms again reappeared, and their intensity speedily carried off the patient.

Autopsy.—On examining the body, the parietes of the abdomen were first raised, so as to recognise, if possible, the nature of the strangulation. The portion of the small intestine which formed the hernia, was concealed by the thickness of fat in the abdominal parietes; it was of a brownish red colour for fully two inches in extent, but not in a gangrenous condition. M. Dupuytren at this

period of the autopsy, regretted that he had not performed the operation, when his dresser, M. Feissier, on examining the inferior part of this intestine, found its membranes scirrhus, much thickened, and sufficient to have given rise to all the symptoms that took place, and prevent the passage of alimentary matter to the large intestines.

EGYPTIAN SURGERY.

From a Report by CLOT BEY *of Cairo.*

High Operation for Stone.

The subject of this operation had several fistulæ in the perinæum, strictures of the urethra, and chronic cystitis. Lithotrity could not be resorted to, and the high operation was determined upon, although considered in itself dangerous. The peritoneum was not wounded, but the bladder was found to be contracted over the stone, and concealed in the pelvis; some difficulty was experienced in opening it, the stone was very friable, and was extracted by means of the curette. The patient died the following day of inflammation of the bladder.

Hydrocele treated by Incision—Tetanus—Cure by Bleeding and large doses of Opium.

A young Greek had hydrocele of the left side, with considerable enlargement of the testicle; incision was had recourse to, and lint was applied in the wound. Inflammatory symptoms; and on the 5th day tetanus supervened, attacking all the muscles of the anterior and posterior part of the limbs. Bloodletting, both general and local, with large doses of opium employed, and the patient recovered.

Tetanus is a very uncommon disease in Egypt, although it attacked the French soldiers very frequently during the expedition. This would lead one to suppose that strangers are more subject to it than the inhabitants of the country.

Empyema of both Sides of the Chest successively—Cure.

A young Arab had for some time complained of pains in the thorax, difficulty of respiration, sleeplessness, and a sense of suffocation. On examination, the left side of the chest was found to have acquired considerable development, the ribs were widely separated from each other, and the intercostal muscles stretched; fluctuation was ascertained; the tumour was punctured, and several pints of purulent serum, containing flocculi of coagulable lymph, discharged through the opening, which was kept free for several days, and perfect recovery ensued. A month after, the right side, which was healthy at the time of the first operation, presented exactly the same appearances, requiring the same operation, which was followed by a similar result.

British Hospital Reports.

ST. THOMAS'S HOSPITAL.

Hydrophobia.

DURING the present week, another case of this distressing disease was sent by Dr. Roots from the neighbourhood of the Foundling Hospital to this institution. It occurred in a woman, 72 years of age, who six weeks previously to her admission was bitten by a favourite cat. The animal had been unwell for three or four days, and the people to whom it belonged were about giving it some castor oil, which irritated it, and while enraged it darted at the old woman, and bit her in the left hand, about an inch above the wrist, and between the tendons of the extensor primi and secundi internodii pollicis muscles, an hour after which the animal was destroyed. Whether it had bitten any other individuals or not we have not been able to ascertain. The wound soon cicatrised, during which progress no particular pain was experienced, and the woman enjoyed perfect health, though previous to this she had suffered from rheumatism. On Sunday last, six weeks from the accident, she complained to her friends of experiencing acute pains, which commenced with a tingling sensation about the fingers, and extended up to the shoulder, quite different from the rheumatic, which she had so frequently experienced; this symptom continued the whole day. Early on Monday morning she complained of heaviness about the chest, with difficulty of respiration, which continued to increase, and soon was accompanied with slight spasmodic contraction of the gullet. The assistant of a medical man now saw her, and found her labouring under difficulty of respiration, and spasm of the throat. He prescribed some volatile spirit, but could not make up his mind as to the nature of the affection. The symptoms continued to increase, and it was not until the next evening, when Mr. Dalton, who saw the patient, heard anything to throw light upon the disease. They now related to him the circumstance about the cat: the symptoms were spasm of the respiratory muscles, copious spitting of

viscid mucus, spasm increased by even the slightest attempt to swallow liquids; and he believed it to be a case of feline rabies. About eleven o'clock at night he called upon Dr. Roots, whom he requested to visit the sufferer. Dr. R. immediately accompanied Mr. Dalton, to see her, and after taking into consideration the circumstance of the bite, together with the symptoms, agreed with the latter gentlemen as to the nature of the disease. She was at once, by the request of Dr. Roots, sent into this hospital, where she arrived about one o'clock in the morning. At the time of her admission there was wildness, accompanied with great anxiety of countenance, face pallid, eyes sunk in their sockets, pupils dilated; violent spasmodic contractions of the muscles of respiration, particularly of the diaphragm and œsophagus, which by even hearing of the sound or seeing liquids were much aggravated. All polished objects produced the same effect, and the attempt to swallow any fluid was unsuccessful; skin clammy and cold; pulse 84, intermitting and feeble. Complained of a burning heat about the head; was free from pain, and quite rational. Not much flow of saliva, but she made perpetual efforts to hawk up the small quantity secreted. The sound thus made was very peculiar from the great oppression she was labouring under in her efforts to excrete the viscid mucus; and has been said by many writers to resemble the yelping or barking of a dog. Tongue covered with a yellowish mucus: feels thirsty, and asked for some water, which when brought to her, she begged to have removed instantly. By the direction of Dr. Roots, 40 minims of the liquor plumbi subacetatis were administered on a lump of sugar, and were to be repeated every two hours, unless symptoms supervened to contraindicate their use.

The symptoms continued during the night; at times she talked incoherently, but upon being spoken to she always was rational. No alleviation appeared to be produced, and she complained several times of extreme pain in the head, and heat about the fauces and palate. Medicines continued.

Nine o'clock, A.M.—Spasms somewhat relieved; more tenacious mucus secreted; the constriction or choking sensation continues, immediately before which she endeavours to hawk up and spit out this vitiated secretion. Thirst excessive; asked for some tea, which she now drank without aggravation of the spasm; pulse 74, small and feeble; skin cold and clammy.

At eight o'clock, by her own request, some more tea was given, which she drank without aggravating the spasm. Appears much exhausted; great distress of countenance; eyes haggard and glassy, pupils in a state of fixed dilatation. Continues rational; still the same wild aspect of countenance; pulse 84.

Ten o'clock, A.M.—Spasms not aggravated by liquid; drank some cold water with apparent ease; with this exception all the symptoms remain the same.

Half past one, P.M.—Spasm now appears chiefly confined to the diaphragm; some rigidity of the muscles of the larynx; respiration 12 in a minute, each respiratory effort is combined with spasm; pulse not perceptible; cold and clamminess of the skin; hands and feet blue. Suddenly, whilst being raised, she was seized with a violent spasm, which checked, for a time, the respiratory efforts; gasping followed, and great prostration ensued. After remaining in this state for the space of ten minutes, the vital powers again appeared reinvigorated. During this death-like interval, no pulse could be felt at the wrist; wine was administered by teaspoonsful, which she swallowed without much aggravation of symptoms. From the exhausted condition of the patient, and the feebleness of the circulation, some wine and ten grains of the oxymuriate of potash every hour were prescribed.

The potash being dissolved in water, was administered by teaspoonsful; spasm not increased; pulse countless. One of her relations now stood at the bedside, but she did not recognise him, although about two hours previously she knew her niece who spoke to her. There has been from the commencement great rigidity of the recti muscles, from their contraction; urine since her admission passed involuntarily; bowels open once; alvine dejection extremely fœtid; excessive prostration.

Three o'clock, P.M.—Another dose of the potass has been given; respiration scarcely perceptible; spasm much decreased in violence, but increased in frequency; pulse languid, scarcely perceptible; eyes remain fixed. Without apparent violence of the spasm she suddenly expired.

During the whole of the 18th, the ward in which the unfortunate sufferer lay, was thronged by medical men and students, all of whom appeared perfectly convinced of the nature of the disease.

Autopsy twenty-four hours after death.—The brain and spinal marrow were first examined. There was slight venous congestion, and the arachnoid appeared more vascular than natural: no morbid appearance could be detected in the encephalic substance; spinal marrow healthy, except in one spot between about the 9th and 12th dorsal vertebræ, where it was softer than natural. The corpora striata were said to have been of a darker hue than usual, but if so, the difference indeed was very slight. The thoracic and abdominal cavities were attentively examined, also the œsophagus and larynx, but no morbid alteration could be detected.

There are but few cases on record, in which the disease has permitted the patient to swallow without difficulty, as in the preceding towards the close of the disease. This, however, though unfrequent in the human being, is by no means uncommon in rabid wolves, dogs, or other animals; in the latter species, instances have been recorded in which the animal has drank milk, and swam through a

piece of water *. Sauvages also says, "Constat repetitâ apud Gallo-provincialles experientiâ, canos luposque rabidos bibisse, manducasse, flumen transiose, ut olim Marologii, et bis Forolivii observatum, adeoque nec cibum nec potum aversari." As to the nature of the affection in the above case, not the slightest doubt can be entertained; we have no positive proof of the cat being in an actual state of rabies, in consequence of its being destroyed immediately after inflicting the wound. It appears pretty well established that this disease is dependent upon some specific virus, yet it must be recollected that most animals, when excited to a high degree of rage, inflict a wound of a much more irritable kind than when in a state of tranquillity; and there are numerous examples in which such wounds have been very difficult of cure, and not a few in which it has proved fatal; as though at all times under such a state of excitement, some peculiar acrimony was secreted with the saliva. In the Ephemera of Natural Curiosities, is an example of symptoms of hydrophobia, produced by the bite of a man worked up in a state of fury†, and in the Leipsic Acta Eruditorum is another instance of the same kind‡, though neither of them seems to have been fatal. Wolff and Zacutus Lusitanus have each an instance of such a bite terminating in death, yet without hydrophobia. Le Chat gives a case of death produced by the bite of an enraged duck; and in a German miscellany of deserved repute, we have another of the same kind§. We could here enumerate several other instances in which death has take place within a few days after the bite of the enraged animal, but enough has been said to caution our readers against leaving such wounds, however slight they may be, to take their chance, and we cannot too often impress upon them the urgent necessity of immediate incision or cauterisation of the inflicted wound.

* See James on Canine Madness.
† Ann. ix. x. App. p. 249.
‡ Ann. 1712, p. 147.
§ Samml. Med. Wahrnehm, b. ii. p. 98.

BOOKS.

A Practical Treatise on Medical Jurisprudence, with so much Anatomy, Physiology, and Pathology, and the Practice of Medicine and Surgery, as are essential to be known to Members of Parliament, Lawyers, Coroners, Magistrates, Officers in the Army and Navy, and Private Gentlemen; and all the Laws relating to Medical Practitioners. With Explanatory Plates. By J. Chitty, Esq., Barrister at Law. Part I. Royal 8vo. pp. 466. Twelve Plates. H. Butterworth.

This work is an elaborate treatise on the numerous subjects on which it treats, including all law points connected with them, and evinces the most laborious research, judicious compilation, and legal experience. We shall notice it fully in our next.

Popular Treatise on Chemistry. By Hugo Reid, Lecturer on Chemistry to the Glasgow Mechanics' Institution. 12mo. pp. 48. Plates. Glasgow: Rutherglen and Co.

CORRESPONDENTS.

M. Moscati.—We have received a pamphlet and another letter from M. Moscati, neither of which can, agreeably to our consistency, be further noticed by us. The writer has evidently mistaken the meaning of our reply in our last. He is not the only phrenologist in London.

Dr. Slade—We shall insert the article very shortly.

METEOROLOGICAL JOURNAL.

MONTH. June, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
19		68	72	56	29·82	29·86	70	66	S.S.W.	S.S.W.	Fine	Fine	Fine
20		65	73	65	29·75	29·69	65	62	S.S.W.	E.	——	——	——
21	○	75	84	64	29·56	29·58	60	60	E.S.E.	W.S.W.	——	——	Cloudy
22		67	72	60	29·61	29·81	59	59	W.S.W.	S.W.	——	——	Fine
23		65	70	57	29·95	29·95	59	59	E.	E.	——	——	——
24		61	67	58	29·99	30·02	61	61	S.W.	W.S.W.	——	——	——
25		65	71	63	30·05	30.05	60	61	S.S.W.	W.S.W.	——	——	Cloudy

50, *High Holborn*. William Harris and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

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LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London Session 1832—1833.

LECTURE XCVI., DELIVERED APRIL 26, 1833.

Gentlemen,—The term *hernia* is applied by surgeons to a protrusion of parts from any of the greater cavities of the body; thus there may be herniæ of the brain, lungs, or abdominal viscera. It is to the latter cases that I now request your attention. The expression *rupture*, employed synonymously with *hernia*, signifies, however, only the abdominal form of the disease, and came into use from an erroneous notion, that the parts, through which the protrusion happened, were actually burst or torn. When any of the viscera of the abdomen protrude from that cavity, they almost always push out along with them a portion of the peritoneum, which forms a kind of pouch, in which they are contained, and is called the *hernial sac*. Of this the narrow part is termed the neck, and the more expanded part the *body*.

But, gentlemen, hernia is attended with infinite variety, so that it will not always admit of being defined to be a protrusion of the viscera, included in a peritoneal sac, for the parts may not protrude at all; the displaced or entangled bowels may form no external swelling; they may be entangled in some unusual aperture in the mesentery, or compressed by adhesions formed within the abdomen, as you see has happened in the case from which the parts in this preparation were taken; or, if they do protrude, they may not be entirely covered by a peritoneal sac. The total or partial absence of a sac, however, is the peculiarity of but few cases, as when a hernia follows the cicatrisation of a penetrating wound of the abdomen, or when the sac is rendered imperfect by ulceration or absorption, or is torn by accidental violence directly applied to the tumour.

Gentlemen, it is also of importance for you to remember, that as the bladder and cœcum are not included in the peritoneum, when they form herniæ, they have not a complete hernial sac; they do not push out the peritoneum before them, but draw after them the portion of that membrane, with which they are naturally connected. Thus a kind of sac may follow them, without covering them, and into such sac other bowels may fall.

The situations in which herniæ most frequently occur, are the abdominal ring, the navel, and a limited point below Poupart's ligament, just at the inner side of the femoral vein. They are also met with at every point of the linea alba, and, in less common instances, at the foramen ovale, at the ischiatic notch, in the perinæum, or the vagina. You may likewise meet with hernial protrusions through the diaphragm into the chest, sometimes through a lacerated opening in that muscle, sometimes through a natural aperture in it, or one from congenital malformation. The contents of a hernia are mostly either intestine or omentum, or both together. The small intestine, being more moveable than the large, is more frequently protruded, especially that portion of it named the ileum, which lies very near the ring and the space below Poupart's ligament. Then you will meet with examples, in which the protrusion will comprise merely a part of the diameter of the intestine; and others, in which several inches or feet of it may be contained in the sac.

In rarer forms of hernia, you may meet with other parts, as portions of the stomach, or liver, the spleen, uterus, ovaries, or bladder. From the two circumstances of *situation* and *contents*, are derived nearly all the various names of herniæ. Thus, when the tumour contains intestine alone, it is called *enterocele*: when *omentum* alone, *epiplocele*; and, when its contents consist of both parts, *entero-epiplocele*. You hear also of *herniæ* of *stomach*, *bladder*, &c. With respect to names derived from situation, when the protrusion is at the abdominal ring, or even merely within the

inguinal canal, the case is termed a *bubonocele*, or an *inguinal hernia;* but if the parts come out of the same aperture, and descend further, so as to get into the *scrotum*, such form of the disease is termed *oscheocele*, or a *scrotal hernia*. Here is a preparation of scrotal hernia, showing how the sac descends along the spermatic cord, and how distinct its cavity is from that of the tunica vaginalis.

The protrusion, which happens below Poupart's ligament, just on the inner side of the femoral vein, receives the name of *crural* or *femoral hernia*. A protrusion at the navel is termed an *exomphalos*, or an *umbilical hernia;* and, at any other point of the front of the abdomen not yet specified, a *ventral hernia*.

Protrusions by the side of the vagina, at the foramen ovale, in the perinæum, through the diaphragm, or the ischiatic notch, are named accordingly, *herniæ of the vagina, foramen ovale*, &c. One kind of hernia, named from the circumstance of children being born with it, or having it very soon after birth, is called *congenital*, which is likewise singular in another respect, viz. that of having the tunica vaginalis for the hernial sac.

In the next place, gentlemen, I may observe, that when the protruded viscera create no disturbance, and readily admit of being put back into the abdomen, the hernia is said to be *reducible;* but when they cannot be put back, owing to adhesions, or their large size in relation to the opening, through which they would have to return, the hernia is called *irreducible*. If the parts be not only difficult of reduction, but subjected to such pressure, or constriction, as impedes, or deranges their functions, stopping the passage of the intestinal matter towards the anus, causing frequent sickness, with inflammation or worse consequences in the constricted parts, the case is well known among surgeons as a *strangulated* or *incarcerated hernia*.

The causes of hernia, gentlemen, are divisible into the *predisposing* and *exciting*. With respect to the first, I may remark that a natural deficiency of resistance in any part of the boundaries of the abdomen, and a loose very moveable state of certain viscera, must be regarded as the common predisposing causes.

According to the observations of Sir Astley Cooper, debility predisposes very much to the occurrence of hernia; by occasioning a relaxation of fibre, it seems to him to produce a dilatation of the apertures through which the spermatic vessels pass. If a person, debilitated by fever, returns to a habit of violent exertion before his strength is fully re-established, a hernial swelling will frequently take place. It is on the principle of general relaxation, that the same distinguished surgeon explains the remarkable frequency of the disease in old persons, especially those who work hard. Hot climates, by producing relaxation, and all circumstances which tend to bring on a sudden absorption of fat, are well-known to give a tendency to the formation of hernial swellings. There are also many facts in support of the doctrine that herniæ are sometimes particularly prevalent in certain families, so as to be called hereditary, and no doubt this depends upon a weaker conformation of the parts where the tumours form, than is exemplified in the generality of individuals. At least such is the belief of Sir Astley Cooper, and other eminent surgeons, who have investigated this subject with the greatest success.

Then, gentlemen, we may say of the *exciting causes*, that they may all be referred to the powerful action of the abdominal muscles and diaphragm on the viscera; and this is the reason of the great frequency of the disease in the labouring classes, in dancers, in the inhabitants of mountainous countries, in the cavalry, in persons who ride hard, &c.; persons who lift heavy weights, who suffer from asthma, or from long continued cough, or who habitually exert their lungs in any kind of manner, are principally subject to hernia. Costiveness likewise creates a risk of hernia, which usually comes on when the person is straining at stool. Strictures of the urethra also promote the formation of hernia, the abdominal muscles being required to act with unusual force in order to empty the bladder. Cases are recorded, in which several hernial tumours were thus occasioned in the same individual. The same causes, which first produced the complaint are constantly tending to promote its increase. The tumour becomes larger, in proportion as the pressure against the hernial sac is stronger and more frequent. Hence the great size which it often attains in persons following laborious occupations. Its increase will also be in proportion to the less considerable resistance of the parts in which it is situated; hence the magnitude of scrotal ruptures, and the generally small size of a femoral hernia. Sir Astley Cooper adverts to one condition conducive to hernia, through an altered state of the viscera, the abdominal muscles being nearly passive; this is when the viscera become, as it were, too large for the belly, from extreme obesity, the fat accumulating in extraordinary quantities in the omentum and mesentery. The enlargement of the uterus in pregnancy, as every surgeon knows, gives a great tendency to the occurrence of umbilical and ventral herniæ, by over distension of the abdominal parietes.

At the first moment of the occurrence of a *suddenly formed* hernia, I may observe, gentlemen, that the protruded peritoneum must be unconnected to the parts amongst which it lies, but in a very short time it becomes firmly bound to them by the adhesive inflammation, which then prevents the return of the sac into the abdomen on the viscera being reduced.

The great apparent increase in the thickness of the sac is mostly owing, not to such change in the peritoneal sac itself, but to that of the more external coverings of the tumour, as the fascia, cremaster, and cellular substance. However, there are exceptions in which the hernial

sac really is much thicker than the rest of the peritoneum: especially when the tumour, after having been long reduced, protrudes again, and is not kept up; when it has been repeatedly affected with inflammation; or there are extensive adhesions between the sac and its contents. In the preparation which I now show you of an inguinal hernia, you see the several layers of which the sac is composed; you see also that the omentum is adherent to the sac, and that the peritoneal part of the latter is really much thickened.

The *general symptoms of a reducible hernia* are an indolent tumour, situated at one of the points of the abdomen, which I have already specified as the places for hernia; sometimes originating gradually, sometimes suddenly, and subject to change of size, being smaller when the patient lies down on his back, and larger when he stands up or holds his breath. Frequently it diminishes when compressed, and grows large again when the pressure is removed. Its size and tension often increase after a meal, or when the patient is flatulent. In many cases, colic, constipation, and vomiting, occasionally take place, seemingly from the bowels being out of their natural situation, and less capable of their usual action on their contents; but, in others, the functions of the bowels go on very quietly and regularly.

When the sac contains only a piece of intestine, forming what is termed an *enterocele*, the tumour is characterised by elasticity and uniform smoothness. No pain attends the handling of it; and, on the patient's coughing, while the surgeon's hand is applied to the part, a forcible impulse is felt, as if air were blown into the swelling. The bowel generally returns into the abdomen with great facility, a guggling noise being frequently heard at the moment.

If the sac contain only omentum, constituting *epiplocele*, the tumour has a more flabby and unequal feel; is more inclined to be oblong than round; and if the quantity of protruded omentum be considerable, the disease is in some degree indicated by its weight, which is greater than that of an enterocele. Here, also, an impulse is felt in the tumour when the patient coughs. In very young subjects, gentlemen, you will mostly find the contents of a hernia to be intestine and seldom omentum.

With respect to the signs of an *entero-epiplocele*, or hernial tumour, containing both omentum and intestine, if a part of the contents slip up suddenly and with a guggling noise, leaving behind something which is less easily reduced, you may infer that the disease is an entero-epiplocele.

The *general treatment of a reducible hernia* is perfectly obvious. You should advise the patient to let the protruded viscera be returned into the cavity of the belly, and to procure a truss for the purpose of preventing their descent again. The manual proceedings by which the contents of a hernia are reduced, without the use of the knife, are termed the operation of the *taxis*, the manner of performing which varies according to the situation of the tumour, as I shall hereafter explain.

If no means be employed for reducing the parts, and keeping them reduced, there will be a constant risk of the hernia becoming strangulated by an additional protrusion of more bowel or omentum into the sac. But, besides this danger, and the loss of all chances of a radical cure, when a reducible hernia is neglected, other considerations should be pressed upon the patient, to make him understand the necessity of regularly keeping up the parts with a truss. Gentlemen, you should represent to him, that if he neglect this precaution the hernia will increase in size, so as not only to prevent all active exertion, but, if a bubonocele, to impair the genital function by involving the integuments of the penis, and sometimes also, by the pressure, causing a wasting of the testicle. In particular, as the early period of life is that in which the opening has the greatest disposition to close, infants and children should never be suffered to be without a proper truss; and it is now well ascertained that they can wear trusses with steel springs just as well as adult subjects.

Gentlemen, though such are the doctrines which I have to offer in relation to the general treatment of reducible hernia, you ought to be apprised, that cases sometimes present themselves, in which the contents of the hernia are so bulky, that, though reducible, they cause, after their return into the belly, so much pain and indisposition, that it becomes necessary to let them continue in the sac, which should then be supported with a suspensory bandage.

Of *irreducible herniæ free from inflammation, and troublesome or dangerous symptoms.*—The usual causes preventive of reduction in such cases, are, first, the bulk of the protruded parts, in relation to the opening, through which they would have to return; secondly, alterations in their form and texture; thirdly, adhesions to one another, or to the inside of the sac. The preparation, No. 728, which I now pass to you for examination, shows a general adhesion of the intestines to one another, and the inside of the sac. Fourthly, transverse membranous bands within the sac, or the neck of it. Fifthly, some herniæ are rendered irreducible, because the viscera are bound down by their natural cellular connexions, though in a state of displacement. The bladder is generally incapable of being completely returned; and the hernial sac, where the cœcum protrudes, is deficient behind and at the outer side of the tumour, where the bowel has only its usual cellular attachment.

The course of the intestinal matter is always more or less obstructed in that portion of the bowels which is included in the hernia; and hence patients with irreducible enterocele are frequently subject to complaints of the digestive organs, colic pains, or even a total stop-

page of evacuations per anum; not the result of any constriction of the protruded bowel, but of the difficulty with which its contents pass through it.

Persons with irreducible ruptures should avoid rough exercise, support the tumour with a bandage, and keep it out of the way of all harm from pressure or bruises. They should also be careful to avoid costiveness, and all irregularity of diet.

An irreducible omental hernia, free from constriction and inflammation, may not be the cause of much present inconvenience, but, when affected with inflammation from any accidental cause, or when a portion of bowel slips into the sac with it, severe and fatal consequences may ensue.

General symptoms of a strangulated hernia.—The first symptoms are a tumour in the situation of the hernial protrusion, attended with pain, not only in the part, but about the diaphragm, followed by continual eructations, sickness, inclination to vomit, suppression of stools, and some acceleration of the pulse. Now, it is a curious circumstance, that the suppression of stools is often as complete and as irremoveable by purgative medicines, when only a small portion of the diameter of the bowel is strangulated, in the manner exemplified in the preparation before us, as when an entire fold of it is pinched. The action of a clyster on the bowels below the stricture often produces a stool after strangulation has taken place; but when they have once been emptied, the most irritating clysters have no effect. If the reduction be delayed, the vomiting and eructations become more frequent—all the contents of the stomach, and afterwards those of the bowels down to the stricture, being rejected. There is great anxiety and restlessness, with a small, quick, hard pulse, and generally cold extremities.

After a time, hiccough comes on, the pulse sinks, and the whole body becomes covered with a cold clammy perspiration. Mortification now takes place, beginning in the protruded viscera and extending to the containing and neighbouring parts.

The patient may now experience a sudden feeling of relief, but this is only temporary. The tumour becomes emphysematous, a sure sign of the gangrenous mischief within it. In this state, the gut either goes up spontaneously or is returned with the smallest degree of pressure; but the hiccough and cold sweats continuing, the pulse becomes more and more rapid and irregular, and death soon follows.

When the body is examined, the whole surface of the peritoneum is found inflamed, the intestines participating in the disorder, particularly those above the stricture, which are considerably distended with air. From the strangulated part downwards, the intestine is generally smaller than usual, and sometimes not inflamed. All these circumstances are illustrated in the preparation, No. 713, and two coloured waxen models on the table. The preparation exhibits a femoral hernia, with the intestine mortified, as evinced by its colour. The distended inflamed portion within the abdomen is the upper part of the canal. The strangulation which was in the neck of the sac implicated a mere knuckle of intestine, without any further protrusion. The convolutions are also frequently connected together by recently formed adhesions; a turbid puriform fluid is effused in the abdomen; and not unfrequently spots of gangrene are seen on the intestines, as is well delineated in the casts before us.

The symptoms of a strangulated epiplocele are less severe and rapid, and stools may generally be procured by purgatives and clysters; but this is sometimes attended with great difficulty, and the sickness and vomiting are, for the most part, truly distressing. Here, gentlemen, you see a preparation exhibiting the production of a permanent stricture of the inner coat of a portion of bowel that had suffered strangulation in a hernia; an exceedingly rare occurrence.

General treatment of strangulated hernia.—Gentlemen, I deem it very important that you should always remember the necessity of not losing too much time in the trial of means not to be depended upon for procuring the reduction of the parts; for the rapidity with which gangrenous mischief sometimes takes place in the hernia, attended by a dangerous and fatal degree of inflammation within the abdomen, is very remarkable. Now, we know that the greater number of patients, who die after operations for strangulated herniæ, do not die of those operations abstractedly considered, but rather of the effects of the disease; and that if the knife were used more promptly, life would more frequently be saved. I fully coincide in the opinion entertained by many surgeons, that we should save many more lives by operating on strangulated hernia much sooner than is generally done. I would recommend you to try fairly and promptly those means which are the most likely to promote the reduction of the hernia, and if they fail, not to waste time in the useless repetition of them, or the employment of others, known to be less efficient.

The *taxis*, or an attempt to reduce the parts with the hand, is, of course, the first proceeding for adoption. For this purpose, the abdominal muscles and femoral fascia should be relaxed by inclining the chest forwards, and bending the thigh and rotating it inwards. In the external inguinal hernia, the pressure should be directed upwards and outwards, along the course of the spermatic cord; but, as the femoral hernia passes first downwards and then forwards, the pressure in this case must be directed first backwards and then upwards. In umbilical and ventral herniæ, it is to be made directly backwards.

No violence ought to be used, as it can be of no service, and must increase the inflammation of the bowels. The intestine may even be

burst by too much force, or the sac forced into the abdomen, with viscera strangulated by its neck. If the first trial of the taxis should fail, you may put the patient into a warm-bath, if it can be prepared without too much loss of time; and while he is in it, take blood from his arm. If the warm-bath should require much time for its preparation, I would advise you to dispense with it, and bleed from the arm.

The object of the warm-bath and bleeding is to render the patient weak and faint, to bring on a kind of general collapse, during which the taxis may often be practised with success. If the patient should fall into this state, therefore, the opportunity of trying the taxis again is to be taken.

Supposing, however, you were not yet able to succeed, what ought to be done? You should next try the united effect of cold or ice applications to the swelling, and of an infusion of tobacco thrown up the rectum. ℥j. of tobacco is to be infused for ten minutes in a pint of boiling water poured upon it; the liquor is then to be strained, and one half of it injected first, and, if this produce not too violent effects, the other half is to be thrown up afterwards. When the patient is under the influence of the tobacco, and the tumour has been subjected to the cold applications some little time, the taxis is to be tried for the last time, and if it now fail, and the symptoms are urgent, I think the operation ought to be done without further delay.

I have little faith in purgatives and opium, except in cases of strangulated epiplocele, or where you have reason to believe that a part of the contents of the tumour has been reduced.

You will sometimes be called to cases, in which so much time has been lost, that you will only just have an opportunity of trying the effect of tobacco and cold, or even not of them.

As the operations and various matters relative to herniæ, would be unintelligible without an anatomical description of the parts concerned, I next enter upon this important part of the subject.

Anatomy of Inguinal Hernia, or *Bubonocele.*—It will be impossible for you, to understand the subject of inguinal hernia, unless you have made yourselves acquainted with the anatomy of the passage through which the spermatic cord naturally proceeds, in order to reach the scrotum, and through which the most common form of inguinal hernia takes place. You must also understand the coverings of the spermatic cord, because they are also the coverings of inguinal hernia; and, in addition to these matters, you should have a clear idea of the situation of this hernia, in relation both to the spermatic vessels and the epigastric artery.

Now the *abdominal ring*, or triangular opening in the tendon of the external oblique muscle, the base of which corresponds to the crista of the os pubis, is the external termination or outlet of the canal, through which the spermatic cord passes. The upper, inner, and weaker pillar of this opening is inserted into the symphysis of the os pubis, and its lower, outer, and stronger pillar into the angle and crista of that bone. In the living subject, it is not an unclosed aperture; for, besides being occupied by the cord, it has the *intercolumnar fascia* extended over it.

Gentlemen, I may next remind you, that the inner opening or commencement of the passage, designed for the spermatic cord,—the very place, in fact, where the viscera first protrude in the most common kind of inguinal hernia,—is not situated directly behind the *abdominal ring*, but about an inch and a half from it, in the directions towards the anterior superior spinous process of the ilium. Or, I may say, in other words that the *inguinal canal*, as it is generally named, is about an inch and a half in length; the *internal ring* being situated very nearly midway between the symphysis of the pubes and the anterior superior spinous process of the ilium.

This description will, of course, lead you to know, that the direction of the inguinal canal must be oblique, extending downwards, inwards, and forwards.

But, you will naturally ask, what parts form the inguinal canal? In order to understand this part of the subject, you should remember, that a thin fascia, termed the *fascia transversalis*, first accurately described by Sir Astley Cooper, is extended from the inner margin of Poupart's ligament, over the posterior surface of the transverse muscle, thus forming a kind of partition between the abdominal ring and the peritoneum, and also forming, with a portion of the united fibres of the transverse and internal oblique muscles near the crista of the os pubis, the posterior boundary of the inguinal canal, the anterior side of which is formed, to the extent of its first third from the inner ring, by the transversalis and internal oblique muscles, and, in the remainder of its continuation, by the aponeurosis of the external oblique.

I wish you likewise to understand, that the precise point, at which the most common forms of inguinal hernia begin, corresponds, in the adult, to the passage of the spermatic cord under the edge of the transverse muscle. In the sound state, this part of the peritoneum has a small funnel-shaped depression in it; and it is this small digital kind of pouch, whose progressive enlargement constitutes the hernial sac; the hernia in its course always following the course of the spermatic cord, in front of the vessels of which it is situated. Here, gentlemen, is a preparation exhibiting inguinal hernia in the first stage of its formation; and in this other preparation you may observe the hernial sac in its incipient state, not larger than the end of the finger of a glove. The tumour protrudes over the cord, and the intestine is pressed into the little pouch.

In point of fact, the opening which constitutes the internal ring, or commencement of the inguinal canal, is the aperture in the fascia transversalis, designed for the passage of the spermatic cord into that canal. Now the cord, in passing through this opening, carries along with it a covering derived from the margin of such aperture in the fascia transversalis, which covering is termed the *funnel-shaped process* of the fascia transversalis. It is the least important of the investments of the hernia; for, after it has descended a little way, it is lost in the cellular tissue, between the peritoneal hernial sac and the cremaster.

The spermatic cord, invested by the *funnel-shaped process*, then passes under the lower edge of the transverse and internal oblique muscles, and here it receives its second covering from the *cremaster muscle*.

The abdominal ring, you know, is closed by the *intercolumnar fascia*, and from this the cord also derives a third investment, termed the *spermatic*, or *intercolumnar fascia*; and, in addition to these several coverings, namely,—the *funnel-shaped process* of the fascia transversalis, the *expansion of the cremaster*, and the *spermatic* or *intercolumnar fascia*; the cord is also covered by the *superficial fascia*, placed immediately under the integuments.

Now these investments of the cord are also the coverings of the common bubonocele, or inguinal hernia, which descends through the inguinal canal. The hernial sac has between its external surface and the inner surface of the cremaster the *funnel-shaped process*, or investment derived from the margin of the aperture in the fascia transversalis. On the outside of the cremaster, the sac has the *spermatic fascia*, derived from the intercolumnar, and, external to the spermatic fascia, the *fascia superficialis*, which is immediately under the common integuments.

Gentlemen,—there is one circumstance which I must not omit to mention, namely,—that Sir Astley Cooper believes the inguinal canal to be endowed with muscular contraction, which, under the action of the abdominal muscles, serves to close it, and lessen the propensity to hernia. He observes, that the lower edge of the transverse muscle begins to be attached to Poupart's ligament almost immediately below the commencement of the internal ring, and that it continues to be inserted behind the spermatic cord with Poupart's ligament as far as the attachment of the rectus. Sometimes, he has found a portion of muscle descending from the tendon of the transversalis, in the course of the linea semilunaris, to be inserted into the fascia transversalis, behind the cord, and into Poupart's ligament, and a preparation exhibiting this conformation he was so obliging as to show me a few months ago. Sir Astley believes that this encircling of the internal ring and upper part of the inguinal canal by muscular fibres, may be a cause of strangulation in the external bubonocele. However, the anatomical facts on which this doctrine is founded, are, I suspect, only deviations from what may be regarded as the normal or most usual conformation of the parts. Although we may not be disposed to explain the supposed spasmodic nature of some kinds of strangulation by the cause referred to by Sir Astley Cooper, we ought to feel obliged to him for his original explanation of the internal ring being occasionally surrounded by muscular fibres derived from the transversalis. His greatest discoveries on the subject of this hernia, however, appear to me to be those relating to the first correct description of the internal ring, and of the fascia transversalis.

Next, gentlemen, let us consider the situation and course of the spermatic vessels and epigastric artery, in relation to inguinal hernia.

As the epigastric artery naturally runs first behind the spermatic cord, and then about a quarter of an inch from the pubic margin of the internal ring, and as the viscera protrude through this aperture, and follow the course of the cord, they must be situated on the outer side of that artery, which passes first behind the neck of the sac, and then at its inner side, in its way to the inner surface of the rectus muscle. Hence, the inner margin of the neck of the sac is encircled, as it were, by the track of the vessel, as you may observe in this dried preparation of half the pelvis, with the arteries and veins injected, and the hernial sac preserved. Here, also, is another preparation of scrotal hernia, with the hernial sac dried and varnished, the vas deferens filled with quicksilver, and the epigastric artery injected, a large branch of which is seen running down the sac.

In recent bubonoceles, the internal and external opening of the ring are at some distance from each other, the first being situated obliquely upwards and outwards in relation to the former; but the pressure of the protruded viscera gradually forces the internal opening more towards the pubes, and nearer to the abdominal ring, so as to render the posterior side of the neck of the hernial sac and of the inguinal canal very short. Thus in external inguinal hernia of long standing, the opening into the abdomen is almost direct, and the epigastric artery becomes situated nearer the pubes than in the natural state.

But, gentlemen, though in the most frequent form of bubonocele the protrusion begins at the point which I have described, and follows the course of the spermatic cord, passing all through the inguinal canal, and having the epigastric artery behind and at the inner margin of the neck of the sac, circumstances are very different in another less common variety of bubonocele, where the viscera, instead of beginning to protrude at the internal and upper opening of the inguinal canal, and descending through that canal by following the course of the spermatic cord, are thrust out at the point directly behind the abdominal ring, together with the portion of the

fascia transversalis, forming, with the conjoined fibres of the internal oblique and transverse muscles, the posterior boundary of the inguinal canal, immediately behind the abdominal ring, out of which the viscera then protrude in a direct manner. Here the hernial sac instead of passing over the spermatic cord, as in the most frequent form of bubonocele, lies on its inner or pubic side; and the epigastric artery now pursues its course in front of the neck of the sac, at the usual distance from the upper and outer angle of the abdominal ring.

Now, as in the most common examples of inguinal hernia, the protrusion is on the outside of the epigastric artery, which winds under and round the inner margin of the neck of the sac, the case is termed the *external bubonocele*, while the less frequent one, in which the protrusion takes place immediately behind the abdominal ring, out of which the viscera pass without having descended through the rest of the inguinal canal, is named the *internal bubonocele;* a case, most particularly claiming recollection, as the protrusion *is at the inner or pubic side of the epigastric artery.* One case is also sometimes called the *oblique* inguinal hernia; and the other the *direct*, or *ventro inguinal.*

In this internal direct inguinal hernia, the sac pushes out with it the fascia transversalis, situated immediately behind the ring, and must either lacerate or displace the united fibres of the internal oblique and transverse muscles at this point. As the hernia does not follow the spermatic cord through the inguinal canal, the cremaster only covers it near the abdominal ring. With this exception the coverings of the hernia are the same as in the external bubonocele.

Here, gentlemen is a preparation of the os innominatum and abdominal muscles, exhibiting the sac of an *internal inguinal hernia*, or, as it is often termed, *direct inguinal* or *ventro-inguinal* hernia. Within you may observe the origin of the epigastric artery. To the inner side of this vessel, you may notice the neck of the sac, and not to the outer side of it, as in the external, or oblique inguinal hernia.

Now, gentlemen, after having explained to you the very different situation of the epigastric artery, in relation to the neck of the sac of an internal bubonocele, from what prevails in the external one, you will immediately see how important it is to distinguish one case from the other in practice. In fact, if you were to divide the stricture in the same way in each case, you would often wound the epigastric artery. The discrimination of one case from the other is also important with reference to the manner of performing the taxis, and the kind of truss, which should be selected.

In scrotal herniæ of large size, the spermatic vessels, instead of forming a chord, may be disjoined by the pressure of the swelling, the vas deferens being situated on one side of the sac, and the spermatic artery and veins on the other. In general, towards the upper part and neck of the sac, the cord is not much unravelled, but, as its component vessels proceed downwards, they diverge more and more, and spread themselves over the sides, or even over the front of the sac.

I have already mentioned the close adhesions which a hernial sac soon contracts to the cellular substance on the outside of it, and consequently the rarity of its reduction. Such an event, however, sometimes happens, especially in the femoral and internal bubonocele, for in the external one, the manner, in which the sac becomes connected to the spermatic cord, makes it much less likely to take place.

Bubonoceles are most common in the male sex; but are occasionally met with in women, and then the round ligament of the uterus bears the same relation to the tumour as the spermatic cord does in males. Of course in such a case, the hernia has not the covering which, in the male subject, it derives from the cremaster. You may also meet with rare examples in which the internal bubonocele occurs in women. Some months ago I operated upon a Mrs. Smith for a strangulated hernia of this description, a tailor's wife, in Cumberland-street, Middlesex Hospital. As she had had no stools for three or four days when I went to her, and the symptoms were urgent, I performed the operation at once, without trying any previous means but the taxis, and in about a week she was perfectly well.

Gentlemen, let me next call your attention to some of the principal points of difference in the symptoms of *oblique and direct inguinal herniæ*. In the oblique inguinal hernia there is an *oblong swelling*, extending obliquely inwards and downwards; in the direct hernia, the parts pass from behind straightforwards, and form, on the outside of the abdominal ring, a circular globular swelling, suddenly formed by some violent effort. If any obliquity occur in the direct inguinal hernia, it is in a course towards the linea alba, and not towards the anterior superior spinous process of the ilium. Then, in the oblique inguinal hernia, the spermatic cord is situated behind or under the sac; but in the direct bubonocele it lies to the outer side, or upon the external half of the front of the neck of the hernial sac. In the direct inguinal hernia, where the sac adheres to the cord, the testicle is not situated exactly under the fundus of the sac, as in the oblique inguinal hernia, but either at the forepart or on the outer side of it.

In the internal bubonocele, the epigastric artery always ascends obliquely inwards at the outer side of the neck of the hernial sac, though Hesselbach found an exception to this in one rare case, where that artery proceeded from the obturatrix. Sometimes this hernia consists of two protrusions, divided from each other by strong tendinous fibres in the centre of the fascia.

In some other instances, the fascia transversalis is lacerated, not dilated; and occasionally a direct inguinal hernia is accompanied by an oblique one.

Gentlemen, you will now understand why, in the oblique hernia, the pad of a truss should always press, not merely upon the abdominal ring, but upon the track of the inguinal canal; and why, in the direct hernia, the pad should only act upon the abdominal ring. In the taxis, the direction of the pressure should be different; for, in the external bubonocele, the viscera should be pushed upwards, backwards, and outwards; in the internal, upwards and backwards. Then, in the operation on strangulated cases, a still more important thing to be remembered, is the different directions which should be given to the incision for the division of the stricture: in the oblique case, you may cut upwards and outwards, with perfect safety, to the epigastric artery; but not inwards or towards the linea alba; whereas, in the direct hernia, the cut must not be made outwards but inwards, the epigastric not being displaced from its natural situation. In order to avoid doing mischief by mistaking one sort of hernia for another, Sir Astley Cooper is right in advising the incision always to be made directly upwards.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XXVI.

Treatment of Encephalitis in the Adult—General and Local Bleeding—Employment of Cold—Abercrombie's method—Blisters—Mercury—Danger of Emetics—Opium—Employment of Coercion—Violent Counter-irritation in the advanced stages—Treatment of Partial Encephalitis—Inflammatory softening.

Gentlemen,—We have now to enter upon the treatment of inflammation of the brain; and you will find, that a knowledge of the general principles of the treatment of cerebral inflammation will be quite sufficient to guide you, even in the management of cases which present apparent exceptions to the ordinary symptoms. The truth is, that the principles which should regulate the treatment of inflammation of the brain are nearly the same in all cases.

I shall commence with the treatment of the acute form in the adult. Acute phrenitis in the adult is an exceedingly severe disease, characterised in its first period by an high exaltation of the functions of the brain, and in its second by a corresponding depression. In this form of disease we have generally high fever, a strong bounding pulse, throbbing of the carotids, intense pain of the head, great brilliancy of the eye, with intolerance of light, vivid redness of the face, a ferocious countenance, and furious delirium. Under such circumstances there is no time to be lost; the brain is a delicate organ, and cannot bear much disease, and its powers of recovering from idiopathic disorganisation seem much less than those of the lungs or abdominal viscera. Indeed, we must believe that, notwithstanding the assertions of Lallemand, it remains to be proved that recovery can take place after the stage of softening has set in, in idiopathic encephalitis. The brain differs from the lungs or digestive organs in having no excretory duct for the products of inflammation, and hence one cause of the greater danger of its idiopathic inflammations than its traumatic, where an opening is formed in the skull. In such a case, you have to apprehend two pathological lesions, the inflammatory softening of the substance of the brain, and the inflammation of its serous membranes, with effusion into their cavities. The patient, too, may die from congestion, or even an apoplectic effusion may occur, illustrative of the proposition of Broussais, that all encephalic irritations may produce an apoplexy. I have seen this termination, even in the infant under a year old; in such a case I once saw an apoplectic effusion which had supervened in the course of an arachno-cerebritis, and which amounted to several ounces of blood. Every moment is precious, and no consideration should induce you to put off even for an hour the adoption of the most rigorous measures. In the first place, you must bleed; and here let me remark, that blood-letting should be performed, so as to make a decided impression on the symptoms. It will often happen, that, from the state of uncontrollable fury which the patient is in, it is dangerous and almost impossible to bleed him. Here you must endeavour to moderate the delirium, and there is no way by which you can accomplish your purpose so fully as by cold dashing. Where there is high delirium, I believe you will always find it the best plan to precede venesection by throwing a few basins of cold water over your patient's head. This will procure an interval of comparative tranquillity, during which you can open either a vein or an artery with convenience and safety. Of course, if any thing like collapse ensues (which is possible), you will not bleed immediately. The object of the cold pouring, under these circumstances, is to obtain such a diminution of the fury, as will allow of your bleeding the patient with safety as to the operation. If you cannot reduce the cerebral excitement by this means, it will then be necessary to put on the strait waistcoat, *pro tempore*. There is a difference of opinion among medical men with respect to the mode of abstracting blood; some prefer taking it from the arm, some from the jugular vein, and some from the temporal artery. Now, I am inclined to think that it is better to open a vein in the arm, and that venesection performed in this way will be found to answer every purpose. It is said, that if you take blood from the temporal artery or jugular vein, you

deplete the brain more directly than you would by opening one of the brachial veins. This may be true, though I think it still remains to be proved that the drawing of a smaller quantity of blood from these vessels will have a more powerful effect on the system than from the arm. If you open the temporal artery, there are two disagreeable circumstances which you should be prepared to meet. In the first place, the patient is in a state of furious delirium, you dont know how long this may last, and it may happen, that in one of his paroxysms he will tear off the bandage, and, if not watched, bleed to death. A case of this kind occurred not long since, in the person of a gentleman of this city, who had the temporal artery opened. He tore off the bandage, and a terrible hæmorrhage ensued; assistance was procured, and the bandage re-adjusted; he tore it off a second time, and died shortly after, his death being evidently accelerated if not actually caused by the quantity of blood lost. Again, it is possible that an aneurism may be formed as a consequence of the operation, which may excite a determination to the head, and tend to keep the patient in a state of excitement. Thirdly, you must employ a bandage to secure the artery, and to this there is a strong objection, in consequence of the pressure which it makes on the external vessels of the head. I am therefore strongly opposed to opening the temporal artery in cases of acute inflammation of the brain, accompanied by high mental or muscular excitement. Now, with respect to the jugular vein, you are aware that to command this vessel pressure is also required. How this pressure can be made without interfering with respiration and compressing the veins of the neck, so as to add to the existing congestion of the head, I am at a loss to know. I would advise you, therefore, when you bleed in phrenitis, to prefer opening a vein in the arm; by making a free incision you can draw blood in such a way as to make an impression on the system, fully equal to that produced by either of the foregoing modes; and without subjecting your patient to the same degree of inconvenience or risk. The quantity of blood to be taken away must be regulated by the age, strength, and constitution of the patient, as also by the intensity of the disease. Where you have to deal with a young man of robust constitution, your first bleeding may amount to thirty ounces. You will often find it difficult to produce fainting in this disease, for the excited condition of the brain keeps up a constant determination to that organ and prevents syncope. The same difficulty is met with in cases of hypertrophy of the left ventricle, which causes a great determination to the head.

Your next step is to have the head shaved. Never omit this. The very circumstance of freeing the head from the covering of hair, and permitting the free contact of air with the scalp is of advantage; and if you wish to employ cold applications, you cannot do so properly without premising this operation. After you have done this, you should apply a large number of leeches to the scalp, or if you cannot readily procure leeches, employ instead of them light scarifications to the temples and nape of the neck, and keep on the cupping-glasses until you have obtained a sufficient quantity of blood. By acting in this way with promptness and decision, you arrest the violent symptoms, and gain time.

In treating a case of this kind it is a very common practice to use cold applications. They are for the most part applied in shape of a cold lotion to the head, but I need not tell you that this is a very imperfect mode of using them, and indeed I have seen but very few persons who were acquainted with the proper mode. Persons are in the habit of supposing that the mixing of a certain quantity of saline ingredients, with water, should produce a very cold lotion, and so it does indeed while the salts are dissolving; but as soon as this is accomplished, the mixture rapidly acquires the temperature of the surrounding air. The solution is generally prepared by the apothecary (and sent in a bottle, as if they could cork up the cold), but the cold is quickly lost, and, in a few moments after the lotion has been applied, you will find it quite tepid, and passing into a state of vapour. Now if you wish to derive any benefit from the use of cold applications, you must stand by yourself, and see the thing properly done. The object is to have the scalp kept constantly cold, and this can be done only by the repeated application of cold lotions. If you prefer saline lotions, you should have them made by the bedside, and applied *while in the act of solution*, or you should put a quantity of ice into your lotion, for while a single piece of the ice remains undissolved, the temperature of the lotion will be very little above the freezing point. A very good way, is to have a jar of cold water, with a quantity of ice in it and to apply cloths dipped in it every minute, taking care not to immerse the hot cloth into the iced water, until it has been wrung out in another vessel of water. You may also use the ice cap, though this is a painful remedy. But the mode of using ice to the head which I prefer in all cases, and particularly in that of the child, is to take a piece of smooth ice, about the size of a dollar, and half an inch thick, this is to be placed in the hollow of a fine cup sponge, and steadily moved over the whole shaved scalp. By this mode you prevent the pain which the iced cap produces, and the sponge absorbs the water produced by melting, and the application may be continued for an indefinite length of time. But one of the best modes of applying cold to the head, is that recommended by Dr. Abercrombie, and, as far as my experience goes, I can safely affirm that there is scarcely any remedy of such unequivocal value in acute inflammation of the

brain or its membranes. Dr. Abercrombie's mode is this—the scalp being first shaved, you direct the patient's head to be held over a basin, and then taking a jug of cold water, pour its contents over the head from some height in a small continuous stream. This measure, simple as it may appear, is one of extraordinary efficacy. In fact so great and instantaneous is the depression of the vital power produced by this mode, that it must be used with caution. There are numerous cases of persons in the highest state of maniacal excitement, reduced in a few moments to a low and weak state by this powerful remedy. There are also instances of its rapidly depressing effect in the early stages of acute hydrocephalus. I have used it more in the phrenitis of adults, than in the hydrocephalus of children; but in the latter disease I know many instances of its value, and believe it to be only secondary to the application of leeches. In acute inflammation this form of cold effusion should be employed every hour or half hour, according to circumstances, and if you wish to increase its efficacy, you can do it by placing the patient's feet in warm water at the time of its application. Here then, gentlemen, is the first set of remedies you should employ in a case of acute phrenitis; a full bleeding from the arm, premising it, if there be great maniacal excitement, by dashing a basin of water over the patient's head; shaving the head, and applying a large number of leeches, or if these are not within reach, the use of cupping; and, lastly, the constant application of cold lotions, or the use of the cold effusion after the manner employed by Dr. Abercrombie. These are the great measures which should be boldly and promptly put in practice, in order to counteract the first violence of a case of acute inflammation of the brain.

You will next act upon the bowels by purgatives. This is a matter of the deepest importance, for there is hardly a disease in which the judicious administration of purgatives has been followed by more decidedly beneficial effects, than in inflammation of the brain, where the digestive tube has been in a healthy condition. Purgatives are also found to be of great benefit in the simple hydrocephalus of children, and in several cases it has been observed that the disease did not yield even after active bleeding, until purgation had been employed. Dr. Abercrombie speaks in the highest terms of the value of purgatives, even after coma has set in. The purgatives which are generally used are those of the drastic kind, and they may be given by the mouth or in the form of enemata.

Such are the rules for the treatment of the ordinary form of acute encephalitis. I shall now make a few observations with respect to the local applications. It may not be necessary to repeat the venesection, particularly if the means which I have recommended be put in practice in a regular and proper manner, but it will in most cases be requisite to repeat the leeching. *Even in the advanced stage of the disease, and after coma has made its appearance, Dr. Abercrombie lays great stress on the benefits derived from the application of leeches;* and I think I have myself saved some lives by the employment of leeches, even after the supervention of coma. In all violent cases I would recommend strongly to you the using relays of leeches, from the first, to keep up a continual detraction of blood. In addition to this, the patient must be kept perfectly quiet, all loud sounds, and the stimulus of light avoided; the room should be kept cool and well-aired, the bed-covering light, the attendants few, and the nurse should be a person of cool temper and steady disposition.

These are the principal measures to be employed in the treatment of acute inflammation of the brain in the adult; there are certain cases, however, in which you may add to these measures others of a different kind, particularly in cases where the disease has occurred as a consequence of the metastasis of inflammation from other parts. Suppose you have a case of rheumatism, or of some suppressed evacuation in which there is a metastasis to the brain. Under such circumstances, while you employ the means I have mentioned for the purpose of subduing cerebral inflammation, you will also put in practice the best measures for restoring the original disease. Here, however, you should bear in mind, *that your attempts to bring back the original disease are always to be looked upon as secondary to those for the direct removal of the existing irritation of the brain.* Some practitioners, in such cases, content themselves with endeavouring to restore the original affection, but this is playing a dangerous game. An organ of vast importance to life is affected, and you cannot calculate how far the inflammation may proceed. You should never neglect taking proper steps at first to reduce inflammation, while at the same time you need not neglect the means calculated to bring back the former disease. If the encephalitis be caused by the suppression of bleeding piles, or a sudden checking of the menstrual flux, leeches to the anus or vulva are found useful along with the direct treatment. If the disease be produced by the repression of an exanthematous eruption, the same principles apply. You should never omit employing the means for bringing back the original affection, but you should always recollect that they are to be secondary to the measures adopted to directly relieve the cerebral excitement.

With respect to the use of blisters, the same rules apply here as in other cases of disease treated of during the course. They are never to be used in the early stage of the disease, and while active inflammation is present; and, as a general rule, I believe it is better to apply them to the nape of the neck, or the inside of the legs, than directly to the head. There is only one case in which you can

apply them with advantage to the head itself, and this is, where there is coma, with a cool skin. Here the stimulus of a blister is frequently found to be highly useful.

As to the use of mercury in cases of acute cerebral inflammation, I think we have not as yet a sufficient number of facts on which to form any decided opinion. If we look to hydrocephalus, we shall find that there are many cases in which the symptoms did not yield to the ordinary measures until mercury was employed; this, however, we do not find to be so much the case in the acute inflammation of the brain in the adult.—I shall return to this subject on a future occasion.

I have little doubt that emetics are very dangerous in this disease, from the determination to the head which they produce.

Any of you, gentlemen, who has vomited, cannot forget the violent sense of tension about the head, with which the act is accompanied; and, if the brain be in a state of acute inflammation, you can readily conceive how injurious such an effect must be. The use of emetics in this disease has been adopted in consequence of a misconception of the opinions of Dessault. He attributed extraordinary efficacy to the use of tartar emetic, in cases of injuries of the head. But you must be aware that Dessault did not give tartar emetic so much with the view of exciting emesis, *as of producing a degree of nausea calculated to keep down inflammatory action.* Morel, who was a pupil of his for five years, makes a statement to this effect, and says that so far from proving beneficial when it vomited, the tartar emetic was always attended with unfavourable results. When it acted on the skin, or by stool, he says the effects were favourable; but when it vomited, the symptoms of cerebral excitement were always increased. Under these circumstances, I think you should be cautious in having recourse to the use even of tartar emetic, after the manner of Dessault; for even in this way you run the risk of vomiting. On this point we have eight very instructive cases given by Lallemand. In the first two cases, where emetics were used, the head had been merely threatened. The emetics were followed by profuse vomiting, and this by symptoms of *violent cerebral excitement and rapid death.* The third case was that of a patient who had apoplexy: the emetic was followed by symptoms of inflammation of the brain and death. On dissection there were marks of inflammation discovered round the clot. Now it has been observed in several instances, that where the substance of the brain round an apoplectic clot became inflamed, that, in addition to the phenomena of apoplexy, symptoms of a spasmodic affection of the muscular system supervened. Here we see that, after the use of an emetic, these symptoms appeared, and their nature was verified by dissection. In the remaining five cases, where emetics were employed, the cerebral affection was rather increased than diminished; and, in some of them, disease of the digestive tube was superadded. Weighing these circumstances calmly, I think the use of emetics in acute inflammation of the brain may be considered dangerous.

With respect to opium, I must say, that I am strongly opposed to its employment, at least in the early stage of encephalitis. I have seen many cases of hydrocephalus in children, in which opium seemed to be decidedly injurious; and I believe that in all cases where there is congestion of the brain, its employment will be attended by bad effects. But when all the symptoms of active inflammation have passed away, and when there remains a peculiar nervous condition of the brain, characterised by symptoms of mental excitement and persistent watchfulness, somewhat resembling delirium tremens, here, I believe, that you may have recourse to opium with much benefit. In many cases, where the antiphlogistic treatment had been properly employed at the commencement, there frequently remains a neurotic condition of the brain, accompanied by great irritation and absence of sleep; and in such cases I have seen much good resulting from the use of opiates. When I speak of fever I shall return to this subject.

In the treatment of this disease, I am anxious that you should always bear this principle in mind,—that you cannot be too cautious in adopting means of coercion. Coercion has always a bad effect: it should never be resorted to, except in cases of extreme necessity; and you should never suffer the patient's attendants to employ it without your express permission. It is a common practice in hospitals, where the attendants always wish to save trouble, to put on the strait waistcoat as soon as the patient exhibits symptoms of delirium. What is generally the result of this treatment?—The poor sufferer becomes irritated by confinement, and uses the most violent efforts to liberate himself; his struggles increase the excitement of the brain, and prevent the measures you employ from taking effect. I have known many melancholy cases, illustrative of the abuse of the strait waistcoat. I shall give you one:—A female, of delicate habit, was attacked with fever and some delirium. She was supposed to labour under disease of the brain. They put a strait waistcoat on her, and tied her down to the bed, where she remained for several days in a most deplorable state. A medical man, who was called in to see her at this time, found her in the situation described, with her head shaved and blistered, and her strength sinking. It struck him that there was something peculiar in the case, and he asked her several questions with the view of testing her sanity; and, finding that she answered rationally, he immediately directed

that the strait waistcoat should be taken off. She then told him that, during the whole course of her illness, she had laboured under pain of the right side. He examined her side, *and found a large tumour in the situation of the liver*. There was also an eschar on the back. She died shortly afterwards; and, on dissection, the liver was found to be in a state of extensive suppurative disease; the brain perfectly healthy. It is unnecessary for me to make any comment on this case.

While, however, I deprecate coercion as a common mode of proceeding, I fully admit that cases will occur that demand it for the safety of the patient. The dreadful tendency to suicide is one of the characters of this disease, and must never be forgotten in any case. All that I wish to impress upon you is, that coercion must be used with great caution, and only so long as it is absolutely necessary. When we come to treat of the nervous symptoms in fever, I shall recur to this subject.

In all cases of cerebral disease you should never omit inquiring into the state of the bladder, for there is often retention of urine. This is to be obviated by drawing off the urine with a catheter, two or three times a-day.

You will meet with cases of cerebral inflammation in the last stage, with profound coma, general paralysis, an imperceptible pulse, and tracheal rattle. It is a melancholy thing to be called to a case of this description, where the ordinary means furnished by medicine are so inadequate to the removal, or even the alleviation, of symptoms; and yet it is a fact, that, even under these circumstances, cases have been cured by the adoption of an extraordinary measure. This consists in the employment of enormous and sudden counter-irritation, by pouring boiling water over the lower extremities, while, at the same time, ice is applied to the head. This is certainly an extraordinary and barbarous method; but it has succeeded in rescuing the patient, as it were, from the jaws of death. One of the most singular cases of this kind is recorded by Lallemand—that of a man upwards of sixty, who, in consequence of a fall on the head, was attacked with encephalitis, which was mistaken for an essential fever until the tenth day. At this time he was first seen by Lallemand, who found him labouring under severe and long-continued syncope; the right extremities flexed; the hand firmly closed; the surface on this side insensible; the eyelids closed; the eyes turned up, squinting, and insensible to light; complete loss of hearing and intelligence. The body was covered with a cold viscid sweat; the respiration frequent and stertorous, and the pulse absent. Lallemand proposed pouring boiling water on the ankles, and, at the same time, applying ice to the head, an advice which was consented to with great reluctance by the other medical attendants. At the moment the boiling water was applied, there was a sudden motion of the whole body: the left arm was agitated, the eyes opened, and the pulse could be felt at the wrist. In half an hour the boiling water was applied to the thighs with still greater effect; colour returned to the face, and the pulse became fuller. From this time improvement went on. Deep suppurating wounds were produced by the boiling water, which took more than six weeks to cicatrise. The patient's recovery was perfect.

In Dr. Mackintosh's work, you will find this practice recommended. It is, indeed, an extreme remedy, and one which, for many reasons, practitioners would have repugnance to use; but it is well to be acquainted with such a powerful remedy, and to know that it has succeeded under the most desperate circumstances.

With respect to partial encephalitis, the principles of treatment are the same. In this form of disease, you will often have to contend with the prejudices of the patient, and sometimes of practitioners who do not recognise its existence. Its symptoms, you will remember, may at first appear slight or insidious, and to the superficial observer less referable to the head than elsewhere; yet the disease is full of danger, slight though it appear. The recent researches on this subject have shown, too, that it is commonly a comparatively acute disease. Andral gives a table, showing the periods in one hundred and five cases: in eighty-nine of them death occurred within a month. The liability, too, of secondary complication, with general congestion, arachnitis, or apoplexy, must be always borne in mind.

When the symptoms of a local encephalitis are decided, I think you should always commence by bleeding from the arm, and then apply relays of leeches and cold lotions to the opposite side of the head. You will also find the application of tartar emetic ointment, so as to bring out an eruption as soon as possible, of great value in cases of this kind. Above all things, take care to relieve the symptoms by prompt and decided measures before the stage of paralysis comes on, for when this arrives, I believe you can do very little in the way of cure. I have seen three cases in which, after the usual depletions, the symptoms were relieved by bringing the patients rapidly under the use of mercury; and I think local inflammation of the brain may be treated by mercury as well as localised inflammation of other parts. My late lamented friend, Dr. Leahy, communicated to me the particulars of two cases in which pain, spasms, and other symptoms of a local encephalitis were present, and in which complete relief was obtained as soon as mercurial action was brought on. I recollect an old lady who got pain in the right side of the head, with contraction of the fingers of the left hand, and alternate flexions and contractions of the fore-arm, accompanied by slight lesion of the intellectual functions. She was

leeched three or four times, blistered, and purged, without any decided relief. I then determined to try the effect of calomel, and was gratified to find that, according as her mouth became affected, the pain and contraction of the fingers, as well as the motions of the fore-arm, diminished considerably, and as soon as full ptyalism was established all her symptoms disappeared. This case is particularly interesting, inasmuch as it shows that the ordinary treatment by leeching, counter-irritation, and purging, failed in giving relief, so that we are justified in attributing some value to the use of mercury. In the advanced stages of this disease, it seems right to employ a seton in the back of the neck; and I would advise all who have been attacked to continue the use of this remedy for a great length of time.

The term *ramollissement*, or softening of the brain, is one which is very extensively used, and I fear often without any precise idea of its meaning. In ninety-nine cases out of a hundred this ramollissement will be found to depend upon local inflammation of the brain; of this I do not entertain the slightest doubt. I think we may very safely consider it as analogous to the softening of the lungs, liver, or spleen, or from inflammation of their texture. There is a peculiar softening of the brain in old persons, which we cannot connect with actual inflammation, but in all cases in the child, and in almost every case in the adult, ramollissement of the brain will be found to depend on inflammation. I do not mean to infer from this that it is in our power to cure every case of softening of the brain, for when it once sets in, the great probability is that the texture of the affected part is destroyed; but we can cure many cases by subduing the inflammation from which it derives its origin. Of course we cannot expect to accomplish this in the case of old persons, where the symptoms come on without any inflammatory phenomena, as in that peculiar softening of the brain, which forms the subject of Rostan's work, and occurs in persons beyond the age of seventy. This appears to be a species of senile gangrene. That form of ramollissement, which occurs in adults and children, is, however, very different from this, being, in the vast majority of cases, the result of inflammation. You will hardly ever dissect a case of partial encephalitis in the adult, or of hydrocephalus in the child, without finding more or less of this inflammatory softening.

CLINICAL LECTURES ON SURGERY,

DELIVERED AT

THE HOTEL DIEU, PARIS,

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

Corrected by himself.

(*Continued from page* 624.)

Hypogastric Operation—Dangerous effects of—Increased danger from a Perinæal Incision—Different opinions on—Introduction of a Catheter—Injurious effects of closing the Wound—Importance of Position—Case for the Operation—Symptoms of—Enormous Calculus weighing two pounds and a half—Cure—Lateral Operation—Bilateral Operation—Improvement of Instruments, &c., &c.

GENTLEMEN,—In my last lecture I gave you an anatomical description of the parts concerned in the different operations for cystotomy, and endeavoured to impress upon your minds the great importance of a correct knowledge of these parts.

I shall now direct your attention to the hypogastric operation. This must not be indiscriminately employed in all cases or without exception of age, sex, and constitution, or without considering the size of the calculus, &c., &c. We ought only to have recourse to it in cases in which the tuberosities of the ischium approach each other, in the presence of tumours at the inferior strait of the pelvis, or from the great volume of the calculus, in which the perinæal operation is difficult, or even impracticable. In support of my opinion I will mention the fact that Côme in operating on eighty-four individuals above the pubes, in whom age, sex, situation, and health were different, stated that more than one of four of the patients, thus operated on, perished. This result is much less favourable, than by performing the subpubic operation indiscriminately, as in the cases of Côme among infants, women, adults, and old people.

As to the instruments and to the proceedings practised in this operation, all I believe have their real advantages, but I am far from thinking that they tend to lessen the danger of this operation. Also in my theses in 1812 for the chair of surgery, vacant by the death of Sabatier, I have stated, that incisions made in the perinæum, and neck of the bladder, add to the danger of the hypogastric operation; and more recently I have discovered that a sound placed in the bladder, either through the medium of the perinæum or urethra, increased the inconveniences and dangers of this operation, unless from well-marked symptoms, it was indicated to produce the re-union of the divided parts.

These two opinions have for some time been the subject of dispute among surgeons; one

party sustaining that a small incision made in the perinæum, instead of increasing the danger of the operation, facilitates the manœuvre of the *sonde à dard*, which they contend is indispensably necessary in the operation above the pubes; they pretend that this incision, by bordering the most inclined part of the bladder, presents an easy passage for the discharge of urine, and thus detracts it from the opening made in the lower part of the abdomen.

Amongst these objections, those who persist in saying that an incision in the perinæum and neck of the bladder does not render the operation more dangerous, must fall by the results obtained from the lateral operation, which, considering age, season, and other circumstances, is death to about one individual out of five or six. Now what is the opening made in the perinæum in the hypogastric operation, if it is not the lateral incision made in lithotomy? It might be vainly said that the incision, from being less extensive, was less dangerous; but from experience we well know that it is not from the extent of incision, that danger is to be apprehended.

The objection drawn from the facility acquired by the incision, in introducing and making the manœuvres with the catheter, is a little more plausible. In fact, we cannot deny, in admitting that the *sonde à dard* is indispensable, that it is not facilitated by making an incision in the perinæum. But we can make use of the *sonde à dard*, by introducing it into the urethra, and thus I frequently have made use of it on the living. For this purpose it is necessary to form a greater curvature with the sound, and after its introduction into the bladder, to bear downwards its extremity, which is easily allowed from the flexibility of the urethra; besides, the *sonde à dard* is indispensable in this operation.

As to the facility afforded from incision in perinæo to the discharge of urine, I consider that the introduction of a catheter by the urethra would be much more advantageous and less dangerous. But the opinion entertained, that either a catheter, or an incision in the perinæum, prevents the urine from flowing through the wound made above the pubis, is merely supposition, and is daily contradicted by experience. In fact, whatever may be the extent or length of the wound made in the perinæum, or whatever may be the calibre of the catheter introduced into the urethra, we never find the urine completely abstracted from the hypogastric incision, but is discharged in part through both these apertures, which fact is well known to all practical surgeons. It appears, that whenever the bladder is incised near the extremity of its body, towards this point all the contractions of the organ are directed, and the urine in consequence is expelled through it. I have also for a long time regarded as useless all the precautions taken to prevent the flow of urine through this new incised orifice. I may go still further; I believe all attempts to retard the flow of urine through this passage, such as drawing the edges of the wound together, compression, and other analogous means are dangerous. I believe them likely to cause urinal infiltrations, and thus produce peritoneal inflammation, or inflammation of the cellular tissue in the pelvic cavity, the two most dangerous symptoms that can arise from cystotomy. The best method we can adopt, then, after performing the operation, is to keep the edges separated by means of lint, a band on the wound, and allow by position the parts to be in a state of relaxation. The following case will demonstrate to you the method of proceeding in the operation, and will furnish to you the application of the general considerations of which I have been speaking.

Case II.—M. R., sixty years of age, an architect, of middle stature, sanguineous temperament, and good constitution, had been accustomed to tedious occupation, lived well, and partook of generous wines; had been troubled for a long time with frequent desires to pass his urine; great difficulty in making water, and when this was effected, he suffered from vivid pains. These symptoms had been accompanied with hæmaturia for ten years, especially after walking or riding in a carriage a long distance, from excess of professional occupation, or luxuriant living.

For two years all the symptoms had become aggravated; the discharge of urine was almost continual, and involuntary, and he had constantly suffered from pain in the hypogastric region, and in the perinæum. A surgeon sounded him at this period, but found no stone; a year afterwards, another surgeon announced the existence of a catarrhal affection of the bladder, and prescribed a treatment improper for the former affection.

The health of the patient, however, daily grew worse. The discharge of urine took place only by drops, in spite of the greatest efforts and the most excruciating pains. Wearied by such excessive and continual suffering, he was confined to his bed; a slow fever supervened, and rapid emaciation ensued. His urine at this time imparted a strong ammoniacal odour, and appeared to be formed by a mixture of blood, pus, and morbid mucosities. In the year 1824 I was called to see him at Chantilly, and such was his condition when I visited him. I immediately conjectured that the symptoms arose from calculus in the bladder, and that the stone was either voluminous or engaged in this organ. Upon sounding the patient, before the point of the instrument had entered the bladder it struck against a calculus. I endeavoured to make the instrument penetrate further in the cavity of this organ, but succeeded only slightly, and that with difficulty. The sound, placed between the foreign body and the wall of the bladder, appeared pressed, as if with a vice; I withdrew it, and introduced my finger into the rectum, and found the

lower fundus of the bladder filled, dilated, and hardened, from the presence of a foreign body. I then flexed the trunk, examined the hypogastrium, and recognised behind the pubis, below the linea alba, a hard, voluminous, resistant body; by placing my indicator finger in the rectum, and by applying my other hand on the hypogastrium, I could raise and depress alternately this foreign body, and feel it with each hand at the same moment. From the immense volume of the stone, I at once determined to perform the hypogastric operation.

I immediately communicated to the patient the existence of a stone in the bladder, and told him that all the symptoms he had so long been tormented with originated from its existence. The patient immediately implored me to operate, and free him from such an enemy. I prescribed a bath for him, and a gentle purgative; and, the following afternoon, I went to perform the operation, and was accompanied by my colleagues, MM. Sanson, Lemaire, Marc, and by M. Louge, who assisted me in the operation.

The pubes were shaved, the patient placed on a bed, and an examination, both by the rectum and hypogastrium, was again made. The result of this examination confirmed the opinion I had made the previous evening. I then placed myself to the right side of the patient, and introduced a common silver catheter, which was arrested, as in my previous examination, by the stone being placed opposite to the neck of the bladder. An injection was used through the catheter, in the hope of dilating the neck of this organ, so as to enter into its cavity and distend it, but the injected fluid immediately returned. I then substituted the *sonde à dard*, but without effecting my object. Finding I could neither distend the bladder by injection, nor pass the sound between the stone and strongly contracted walls of the bladder, I at once proceeded to perform the operation.

The legs of the patient were flexed upon the thighs, and the latter upon the abdomen. M. Sanson introduced his finger into the rectum, and raised the stone, so as to project it as much as possible above the symphysis pubis. I then made an incision, in the direction of the median line towards the umbilicus, about four inches in extent, cutting through the skin, cellular tissue, and a deep bed of fat, which is always found in this region. The aponeuroses of the abdominal muscles were now exposed, which I next incised. The pyramidal muscles are separated by the recti; but from the power of their contraction, one pressing against the other, I divided the fibres of each to the extent of a few lines in a transverse direction. I was able by passing my finger between them to feel the stone, which was much facilitated by M. Sanson pushing it forward with his finger. I next placed the ulnar side of the cubital finger of my left hand on the symphysis pubis, glided the point of a sharp bistoury over the angle of this finger with my right hand, and plunged it into the anterior part of the body of the bladder, directly behind the symphysis pubis. Some thick, white, inodorous pus escaped from the wound immediately. This at first I believed to come from an abscess situated either in the neighbouring cellular tissue of the bladder, or in its parietes; but, the point of the bistoury coming in contact with the stone, I was sure that it had entered the bladder. I then increased the opening from below upwards to the extent of five or six lines; my finger, which directed the instrument, followed its point, and penetrated the bladder with it. I now found that the walls of this organ were half an inch in thickness, and that its cavity was filled by an enormous calculus; and not without satisfaction I found there existed an interval of full two inches between the most raised point of the incision and the superior part of the bladder, and that the peritoneum did not extend so far down as ordinary. I then increased my incision upwards with a blunt pointed bistoury.

I now was able to proceed with the extraction of the calculus, which appeared from its mass, form, and from the contractions of the bladder, to be fixed in the centre of the pelvis. Taking a pair of forceps, and separating the branches, I passed one on each side of the stone, again reunited them, and thus caused the foreign body to move from right to left, and from below upwards, and by degrees effected its extraction. The form of the calculus exactly corresponded to that of the bladder, the cavity of which it had entirely filled; large and wide at the inferior part, and presented three lobes, two of which were situated on the sides, and the third on the posterior part of the fundus of this organ; along the sides of the stone were two grooves, divided by a prominent ridge, produced by the passage of urine passing from the ureters to the urethra; above, the stone terminated in a blunt cone, answering to the summit of the bladder. Its length was three inches and a half; its width three inches, and its thickness two inches and a half.

The stone was immediately weighed by M. Lemaire, and found to be two pounds six ounces and a half, composed of the ammoniaco-magnesian phosphate.

After the extraction of the stone, I passed an emollient injection into the bladder; this immediately escaped through the wound.

My after treatment was very simple. I allowed the patient to lie upon his back, kept his legs in a slight state of flexion, by means of a bolster placed under the hams, introduced lint between the divided edges of the wound, and applied over the incised part linen besmeared with cerate, and over this dressing some pieces of lint. I did not introduce into the urethra or through the wound a catheter, neither had I recourse to any means to pro-

mote adhesion. His stomach was covered with flannels imbibed in an emollient decoction, and I prescribed for him a simple decoction from the root of couch grass (chiendent) with some gummy syrup.

The patient was now relieved from pain, which for some years he had suffered from, and soon after the operation fell asleep.

In the evening the abdomen became painful; shiverings succeeded by heat, and fever supervened, without hiccup or vomiting. He was bled copiously from the arm, and the urine passed freely from the wound.

The next morning the patient was much better, still the pulse continued strong and full, and there remained slight pain about the abdomen. Another bleeding was had recourse to; the dressings were frequently replenished.

Suppuration of an abundant and healthy nature commenced on the fourth and fifth days; the dressings night and morning were changed; the urine continued to flow through the wound.

The urine now passed partly through the wound and partly through the urethra, the extent of the incision diminished, and the suppuration decreased in quantity. Every day his appetite improved, his strength and spirits returned, and in about a month he was completely cured.

From this time the patient enjoyed perfect health, but occasionally was troubled with a slight catarrhal affection of the bladder, which immediately subsided by the administration of emollients.

This case points out to you the manœuvres necessary for this operation, and it remains only necessary for me to describe the process I use when about to perform the operation. 1st. If I think the hypogastric operation required, I perform it at once, without considering it the most unsuccessful. 2nd. When performing it, I condemn altogether the incision in the perinæum, or the introduction of the catheter immediately afterwards; but should I, during the progress of cure, think the latter required, I have recourse to it. In some cases I have found the introduction of an elastic gum catheter beneficial.

Lateral operation.—In my last lecture I mentioned to you the particulars of this operation, and the success generally attending it, from which you will perceive that the danger is not much less than in the preceding. The numerous works that have been written on this subject by men of the highest merit, in order to replace it by other proceedings, is a sufficient proof of the inconvenience presented by this operation.

From my own experience I felt convinced that the operation would be advantageously modified, by incising the neck of the bladder, in the direction of the symphysis pubis. In the year 1816 for the first time I performed the operation in this way, using the same instruments as in the lateral operation, with the addition of the blunt pointed bistoury.

The patient was bound and placed in the ordinary position for lithotomy. A catheter, grooved on its posterior surface, was passed into the bladder, and retained by an assistant, who at the same time carefully raised the scrotum so as to keep the catheter in a perpendicular direction. With a common bistoury an incision of about eighteen lines in length was made in the direction of the raphe of the perinæum, the commencement of the incision being about two inches and a half from the anus, and its termination nearly an inch from this opening. By the next incision, which was made parallel to the first, the bulbo-cavernous muscles, and the cellular tissue filling the space between the bulb and the urethra before, and the rectum behind, were divided: the membranous portion of the urethra was now exposed. The third incision divided the whole extent of this portion of the urethra, from the bulb before to the verumontanum posteriorly. The *lithotome* being introduced along the groove in the catheter, the latter was withdrawn, and the cutting edge of the former directed upwards and forwards towards the symphysis pubis; the handle of the instrument was now passed downwards, and withdrawn in this direction, thus dividing by this first incision the neck and inferior anterior part of the body of the bladder, and carrying the incision to the extent required. By this means, you observe, you are enabled to make any length of incision you may think necessary.

From this operation there results a triangular wound, the apex of which corresponds to the anterior and inferior part of the body of the bladder, and the base to the surface of the perinæum or external part of the incision. The anterior side extends obliquely from the anterior angle of the first incision, or from the external incision to the anterior or inferior part of the bladder, in traversing the space which separates this latter organ from the symphysis pubis, and passing between the anterior ligaments of the first.

We have, then, in the course indicated, proceeding from below upwards, the skin, bulbo-cavernous muscles, bulb of the urethra, subpubic ligament, symphysis pubis, and anterior ligaments of the bladder, and, corresponding to these different parts, cellular and vascular tissue. The posterior side extends from the space comprised between the posterior angle and external incision and the anterior and inferior part of the bladder. The anatomical parts to be noticed from one of these points to the other, are, if we proceed again from below upwards, skin, cellular tissue, muscular plane, resulting from the union and interlacement of the external sphincter, bulbo-cavernous, and transverse muscles; inferior part of the prostate gland, and prostatic portion of the urethra, posterior part of the meatus urinarius, superior portion of the neck of the bladder, of the prostate, and inferior and anterior part of this organ; all parts cut through

in lithotomy, with the exception of the inferior part of the prostate gland and the wall of the urethra which corresponds to it. Very near the centre of the wound is seen the membranous portion of the urethra, the superior and anterior walls of which are at the same time divided. The calculus, when being extracted, has to pass the first opening, the direction of which is nearly vertical, and corresponds to the neck and anterior and inferior part of the body of the bladder: the second, which is slightly oblique upwards and backwards, like the membranous portion of the urethra to which it belongs, and the third horizontal, corresponding to the skin of the perinæum. Then, after making the incision as I have pointed out to you, it remains only, if the stone be of small size, to grasp and extract it in the ordinary way.

Such, gentlemen, is the proceeding that I have substituted in the lateral operation of lithotomy. I first attempted this operation in 1816, on a patient eighteen years of age, in the house of M. Cartier; it was followed by the most speedy and happy success. Nevertheless, in 1824, I thought it better to substitute simple lithotomy for the operation called double. In this new proceeding, the incision made by this instrument is directed to the right and to the left: also transversely. This operation was performed at the Hôtel Dieu on the 24th of April, 1824.

Case III.—Alexander Patrix, an infant, five years and a half old, of good constitution, had been for three years affected with stone. The operation that I have just described was performed with the greatest facility, and the stone extracted was nearly of the form and size of a small almond; scarcely any hæmorrhage occurred. For the first few days after the operation the patient complained of slight pains in the hypogastric region, which subsided to leeches, baths, and emollient fomentations. The pains, however, again re-appeared, and existed particularly in the abdomen; his tongue was slightly red at the edges. I had some mercurial ointment spread on linen and applied to the abdominal region. Two baths were administered: also injections composed of decoction of poppy heads were given. The pains continuing obstinate, twelve leeches were applied to the hypogastric region, after which no traces of intestinal irritation remained. On the third day succeeding the operation the urine was discharged by drops through the wound; by the fifth, the prepuce became slightly œdematous; and by the tenth, the œdema had extended to the scrotum; resolutives were applied on these parts; the infiltration continued till the eighteenth day, when it suddenly disappeared, and the urine took its natural passage. On the 19th of May, twenty days after the operation, the infant left the hospital perfectly cured.

Foreign Medicine.

Note of the Post Mortem Examination of a Female who committed Suicide almost immediately after Coitus.

BY H. BOND, M.D., OF PHILADELPHIA.

[We insert an accurate report of this case, as it was garbled by a contemporary, and pirated without acknowledgment. So far as it goes it is valuable but the conditions of the vagina, os uteri, and orifices of the uterine tubes are omitted, and leave the narrative unsatisfactory.—Eds.]

In May, 1827, I was invited by Dr. Samuel Tucker to examine, post mortem, the body of a female who had destroyed herself with laudanum. She was apparently between eighteen and twenty years of age, well formed, and in good health. She passed a night, or the most of it, *in coitu* with a young man, and before morning swallowed a large quantity of laudanum. Dr. Tucker was called to her in the course of the morning, but so late that all his efforts to restore her were ineffectual. The body was opened the next morning in the presence of Drs. Tucker and Meigs. Neither the head nor chest were opened. The viscera of the abdomen, as far as they were examined, exhibited no mark of disease, but the odour of laudanum was very strong in the stomach. I removed the internal organs of generation, and took them home for examination.

The uterus was larger than I had ever before seen it when healthy and unimpregnated, and its colour indicated more vascularity. The ovaries were large, extremely vascular, and situated nearer the uterus than usual. Instead of hanging loose at the distance of an inch or more, they appeared to be drawn so close to the sides of the uterus, that there was scarcely the space of a quarter of an inch between them. The Fallopian tubes were very vascular, so much so as to give them a firmer and more fleshy appearance than usual, and instead of ending in loose, floating fimbriæ, appeared to terminate by a union with the ovaries, and to be very tortuous on account of the short distance between the ovaries and the origin of the tubes. On the surface of the ovaries were seen a few small vesicles of the size of shot, projecting little or none beyond the surface of the gland, and

containing a slightly turbid fluid. From the ovaries and the fimbriæ several small vesicles were seen hanging by extremely delicate pedicles, from one-fourth to seven-eighths of an inch in length. They looked like pyriform drops of mucus, a little larger than the seeds of grapes, covered with an extremely delicate pellicle, which appeared to constitute the fibrils by which they were suspended. Upon cutting open the uterus, it was found to be thickly coated with a substance having the appearance and the strong peculiar odour of semen. Some of this substance was in the neck of the uterus. The Fallopian tubes (at least the one which was laid open) contained apparently the same matter, but whether it possessed the seminal odour was not ascertained. Upon wiping this matter from the lining membrane of the uterus, it was found to be of a vivid red, as red as the conjunctiva in acute ophthalmia, or as if it had been injected with vermilion.—*American Journal of the Medical Sciences.*

Hydrocyanic Æther.

At the sitting of the Academie des Sciences on the 26th of May last, M. Pelouge made a few remarks on this æther, which he had discovered by the action of heat on a mixture of the sulfovinate of baryta, and the cyanuret of potassium. This substance is colourless, inflammable, and boils at 82°, under atmospheric pressure of a density equal to 0·787 at the temperature of 15°, slightly soluble in water, and mixes with alcohol and sulphuric æther in all proportions. It does not precipitate nitrate of silver, in this respect resembling the hydrochloric æther, which decomposes this salt, after having been previously destroyed by the action of heat.

M. Pelouge considers the hydrocyanic æther is formed of equal parts of olefiant gas and Prussic acid vapour.

Case of Fatal Hæmorrhage, occasioned by rupture of a Varicose Vein during Parturition.

BY M. STENDEL, ESSLINGTON.

A woman, about 30 years of age, mother of two children, remarked, towards the latter period of her third pregnancy, a soft tumour projecting from the vagina, which the midwife who attended her stated to be a large purpureal varicose tumour (*kidsader*) and for which she recommended blood-letting. This plan of treatment was adopted, and the tumour diminished, but did not disappear; soon after it again increased in volume. The woman's health continued good; and, though I was attending one of her children, she mentioned not a word of it to me. The labour proceeded naturally; but, as soon as the head reached the cavity of the pelvis, the tumour became ruptured, and discharged, as well as I could judge, about seven or eight pounds of blood. The patient became weak, extremities cold, and she was insensible. I was immediately sent for, and arrived with an accoucheur. All our attempts to return life were useless. The varicose sac was sufficiently large to admit the fist, and hung from the vagina. The infant was extracted from the mother, but was dead.

Her friends would not permit a post mortem examination. Had the varicose tumour its origin in the uterus or vagina?—The latter appears most probable, or else rupture would have sooner taken place from the contraction of the uterus.

What ought the practice to be in a similar case before delivery? Would it be necessary to open a tumour of this size, and secure it by ligature before parturition? This could be practised only when the tumour originated from the vagina. Or should we endeavour to diminish it by the application of leeches and cold? Which method should be adopted, I shall leave practitioners to decide.

[We have lately treated a case of this kind in a lady of full habit, whose veins were varicose; a tumour of the enlarged veins, attended with violent pain, was on the outer surface of the leg, between the heads of the tibia and fibula. The patient, who was in the seventh month of pregnancy, was ordered to remain in the horizontal posture, so as to take off the pressure of the gravid uterus from the pelvic and abdominal veins, and facilitate the return of the blood through the inferior extremities: a piece of lint, moistened with camphorated oil and laudanum, was loosely applied over the tumour, and in a few days a bandage. By these means the tumour was removed, and the patient is now in the eighth month of pregnancy.—Eds.]

Reviews.

A Practical Treatise on Medical Jurisprudence, with so much of Anatomy, Physiology, Pathology, and the Practice of Medicine and Surgery, as are essential to be known by Members of Parliament, Lawyers, Coroners, Magistrates, Officers in the Army and Navy, and Private Gentlemen; and all the Laws relating to Medical Practitioners. With Explanatory Plates. By J. Chitty, Esq., Barrister at Law.

The author of this work is well known to the legal profession as a laborious and useful writer, and now comes before the public in a new capacity, as a compiler of medical sciences, and of all the laws relating to the practice of the medical profession. The object of the author is to present lawyers and all others concerned with the administration of justice, with a condensed practical view of anatomy, physiology, pathology, surgery, chemistry, medicine, medical jurisprudence and police; and to medical men so much of the law connected with their departments as ought to be intimately known by them, and especially all the laws relating to their own rights, privileges, conduct, duties, and liabilities. He very properly remarks—

"A general knowledge of these subjects is essential to the perfect education of all officers in the army and navy, and of every gentleman, and especially so to legislators, judges, coroners, magistrates, barristers, and indeed to every member of the legal profession, and to all persons who may become jurors or witnesses; so as to enable legislators more scientifically and practically to determine upon the expediency of improving the existing laws relating to public health, and the protection of the persons of individuals, and all to give due effect to the existing regulations. By a knowledge of these subjects, the present laws will be better understood and applied, and preferable enactments with regard to the preservation of health and police and punishments may be introduced. That science is of primary importance which most conduces to the perfect and permanent happiness of mankind; theology and moral philosopy, as calculated to insure future as well as present mental happiness, stand pre-eminent; but the next in substantial and universal importance, are physiology, pathology, and surgery, since these tend to improve or secure health and happiness, or to restore them when afflicted by corporeal or mental disorder."

We fully agree with the author in these sentiments, and have in our work on medical jurisprudence expressed them; and we were highly gratified at the appointment of Mr. Warburton's committee on medical education, as the publication of the voluminous evidence given before that body cannot fail to interest many legislators, and raise the importance of medical science in their estimation. The bane of our profession has been the mystery in which it has been kept, and the utter ignorance of the public about it. The work before us is also well calculated to afford lawyers, judges, jurors, witnesses, officers of the army and navy, an outline of the medical sciences and practice. Our readers will, no doubt, be very much surprised at the following extract, which gives an outline of the division and arrangement adopted by Mr. Chitty, a gentleman who, so far as we know, is not a member of our profession.

"The first part of the work, after explaining technical terms, and referring to the sources of information, proceeds to describe the structure of man in the healthy state, and which comprises anatomy and physiology. At the same time are in general noticed the principal diseases affecting each organ or function. The component parts, whether fluid or solid, and the divisions into organs and functions, and certain general properties are first considered. Then is taken an anatomical and physiological view of every organ and of each function in particular. The bones, joints, ligaments, muscles, tendons, arteries, capillaries, veins, absorbent and secernent vessels, and nerves, and all other parts, are separately examined. Then are described all the functions, whether of motion, respiration, circulation, digestion, absorption, or secretion. The brain and its parts, the nerves, the entire nervous system, and the organs of the external senses, are fully considered. An attempt has been made concisely to examine the temper, passions, and emotions, and the intellectual faculties, and to show that the latter are capable of enlargement and improvement, even hereditarily, by due mental exercise and attention; and it has been shown that certain mental

diseases and injuries are capable of medical or philosophical relief beyond our present experience; and that injuries to the mental faculties ought to be the direct objects of legal regulation, though at present many are only subject to censure.

"Then follows a description of the function of generation, and of the principal distinguishing peculiarities between the sexes, and the progress of the fœtus, and all circumstances that may tend to explain the too numerous offences connected with miscarriage, abortion, premature birth, infanticide, and concealment of birth, and to show the inexpediency of some parts of the existing law.

"Then are considered the integuments or external covering of the whole frame, including the three skins, and the hair and nails, with an account of the principal diseases and injuries to which they are subject.

"Then is taken a medical and legal view of the different ages, with their physical and legal differences, incidents, and consequences. Lastly is given an outline of the circumstances to be observed medically, as well as legally, to secure health and happiness, whether bodily or mental."

The descriptive part is illustrated by numerous plates, front and back views of the skeleton, action of the biceps muscle, trachea and lungs, heart and large vessels, entire and opened, the viscera of the chest and abdomen, phrenological organs, base of the brain, eye, ear, and pelvis.

The greater portion of the part before us is purely medical, and is compiled from the best of our national works on anatomy, physiology, &c., with copious references. We cannot help thinking that several physicians and surgeons must have associated to arrange and condense the information on the medical sciences; for we feel convinced that a barrister could not have executed the work, however learned he might be. There is one serious defect throughout the work, and that is, that most of the recent opinions of continental medical writers are entirely omitted, and many erroneous and obsolete notions left uncorrected. This accusation can be amply attested by the article on the generative organs and functions, which is extremely superficial, and on many points antiquated. We shall prove the justice of this stricture before we have done. We are ready to admit that the work is of great value to lawyers and those for whom it is intended; but it will not be referred to by medical students or practitioners, who must be acquainted with the principles described in it. The greatest part of the medical works quoted are text books in the hands of students, and consequently their contents cannot present any features of novelty. There is another defect in this treatise, the omission of reference to the majority of the latest continental works.

The second part of the work is to be devoted to the consideration of pathology and surgery, including an account of all medical and surgical disorders and diseases, and their remedies.

The third part will contain the laws relating to public health, police, to injuries, to crimes and punishments, with a comprehensive view of medical jurisprudence, police, and evidence, and laws on insurances for lives and properties.

The fourth part is to embrace the laws relating to the members of the medical profession, their rights, privileges, duties, and liabilities; to dentists, cuppers, accoucheurs (obstetricians), midwives, nurses, chemists, druggists, and herbalists, sale of medicines, &c.

The fifth part is to be on medical evidence.

It appears to us that the author proposes to occupy five volumes, royal octavo, and if each be published at a guinea, the circulation must be very limited. The work will be the most comprehensive in our language, and will be one of reference and authority. It must be interesting to barristers, coroners, magistrates, jurors, witnesses, military and naval officers, private gentlemen, and, so far as the legal part is concerned, to the medical profession. Had the author committed this part to the management of physicians and surgeons, and followed the example of Dr. Paris and Mr. Fonblanque, he would have produced the best work on the subject of which he treats. We consider it as impolitic in a barrister to attempt to instruct medical practitioners, as in a physician or surgeon to undertake the duty of writing a treatise on law. Few are so competent to expound the law as Mr. Chitty, and in this particular he has exceeded all his predecessors so far as he has gone. His account of the law on mental alienation is admirable. His account of the laws on idiotcy, lunacy, insanity, and weakness of intellect, are luminous, and perhaps unparalleled. These occupy several pages, and are, in our opinion, the best executed portion of the work. We shall place

them before our readers in a future notice. The succeeding section is on the functions of generation and the laws relating to them; and here we must assume the unpleasant office of critics.

In p. 381, it is stated that the sexual ability exists only between the ages of 14 and 65 in the male, though it is well known that men of 70 have married and had children. There are recent instances afforded by two eminent members of our profession. Pliny informs us, that Cornelia, one of the family of the Scipios, gave birth to Valerius Saturninus at the age of 62. Valescus of Tarentum attended a woman in labour at the age of 67. Haller mentions the case of a woman who was delivered at the age of 63, and another at the age of 70. In all these cases the women menstruated regularly, and were not liable to greater inconveniences than during the ordinary age of fecundity. Now, this is a point of great importance, as it influences judges in disposing of property. A case was tried in the Court of Chancery in May, 1833; a large property was in dispute, and the question to be determined was, could a woman of 60 years of age be a mother. Sir William Horne, then Attorney-General, argued that there was no such case on record, and that if credible evidence could be produced in proof of it, he would give up the cause of his client. As no such evidence was produced he succeeded.

It is not correct to limit the period of fecundity in man to the age of 65, as there are many cases which prove the contrary. The case of Thomas Parr is generally known. He remarried at the age of 102, and performed his conjugal duties so well at the age of 140 as to make him forget his old age. The case of De Longville, who had ten wives, and married at the age of 99, is in point. Many might be quoted from the sacred volume; so that there is by no means sufficient proof for limiting the fecundity of either sex to 54 or 65.

There are other faults in the article on generation. The account of the development of the embryo is antiquated, and no allusion is made to the researches and observations of MM. Velpeau and Breschet, though published last year, and the best on the subject.

The obsolete and erroneous notion of animate and inanimate fœtuses is also entertained, and the laws relating to abortion or stay of execution, based on it, are, as might be expected, very graphically described. We believe, however, that no physiologist exists, who is not convinced that the ovule or embryo is a living being from the moment of conception; and, of course, before the time of quickening, which is generally about the fourth month of utero-gestation. The spark of ∴ is communicated at the moment of impregnation; for it would be unscientific and absurd to maintain that the fœtus is not a living being until the time of quickening; and it would be, we apprehend, impossible to comprehend how life could be communicated at the fourth month, when dissection has enabled us to observe the embryo perfectly formed at two months and a half, supplied by blood from the parent, and its heart in action. If these are not better proofs of its vitality than the vague opinion that the fœtus becomes a living being at the time of quickening, we are at a loss to know what are. If these be true, it is as great a crime to destroy a fœtus or a pregnant woman before the period of quickening as after it, and, therefore, the law should be changed. Had Mr. Chitty been aware of these facts, we feel convinced he would have commented on the defective state of the law, and lead to its revision.

The next point, as to the evidence of an infant's having been born alive, is imperfectly considered. The author does not mention those cases in which infants were supposed to be born dead, and resuscitated after two hours, or the case in which the infant was laid aside as dead, the undertaker sent for, and life apparent at the expiration of twenty-four hours afterwards.

In pointing out these defects and omissions we are actuated by impartial criticism only; as we by no means wish to cavil about trifles, or to find fault with the whole volume. On the contrary, we consider the medical part of this work extremely well executed — most astonishingly so, if by a barrister, and one of great value to lawyers, judges, magistrates, coroners, private gentlemen, officers of the army and navy, and those who act as jurors or witnesses. The work deserves a place in every legal library, and is one from which the general reader will derive a vast fund of interesting and valuable information.

(*To be continued.*)

An Inquiry into the Nature of Sleep and Death, with a view to ascertain the more immediate Causes of Death, and the better Regulation of the Means of obviating them. By A. P. W. Philip, M.D., F.R.S., &c. London: Renshaw. 1834.

The contents of this volume are the results of experimental inquiries made by the author into the laws of the vital functions, a subject to which he has paid great attention for several years. The principal object the celebrated author had in view in making these experiments was, to determine the nature of sleep and death, and, by discovering the more immediate causes of the latter, to contribute to the better regulation of the means of preventing them. For as the functions of life depend on the powers of the nervous and muscular systems, and the relations these bear to each other, all rational systems of medicine must be founded upon them.

The knowledge we obtain of particular functions is acquired very slowly, and can only be the result of many minute and laborious investigations; and as particular laws can only be properly understood from an investigation of general ones, the author first applied himself to the consideration of the latter.

The fundamental error of physiologists who have considered this subject, has been their not taking the general laws of the animal frame into consideration; and, however valuable the particular facts ascertained by them may be, they are still defective on account of this neglect. Thus we have been taught that the heart and blood-vessels are placed beyond the immediate control of the nervous system, an error which has probably had more influence on the practice of medicine than any other into which we have been led by physiologists; and that the powers of the ganglionic system are independent of the brain and spinal marrow, together with other theories equally as erroneous; but to enter into the consideration of which would be at present foreign to our subject.

The author commences by observations on the general functions of the nervous system, and the relation which they bear to the other vital functions; and continues these observations on the effects of dividing the nerves of the lungs, and subjecting them to the influence of voltaic electricity; the functions of digestion; the sources and nature of the powers of circulation; the relation subsisting between the nervous and muscular systems in the more perfect animals, and the nature of the influence by which it is maintained; and in this manner brings the reader to the more immediate subject of the work, namely, "The Nature of Sleep and Death."

There is probably no question relative to the living animal which involves a more general view of its phenomena than sleep, and none on the nature of which our opinions are more vague and unsatisfactory. We can discern no final cause of the alteration of watchfulness and sleep, but what has its source in the imperfection of our nature. Why certain organs are capable of constantly maintaining their functions, whilst others require intervals of repose, is perhaps what we shall never be able fully to ascertain; but there is no difficulty in perceiving the necessity of the former part of the arrangement, for the permanent functions are those on which the life of the animal immediately depends, the intervals of repose appertaining to those alone which are the means of intercourse with the world which surrounds him, and which, consequently, have no direct tendency to destroy life. The only change which takes place in the action of the muscles of respiration during sleep is, that in proportion as the sensibility is impaired they are excited less readily, and respiration is thus rendered less frequent, a more powerful application of the cause being required; the consequence of which is, that when they are excited the air is drawn in with greater force, and from this reason, as well as from the relaxation which is apt to take place during sleep in the neighbouring parts about the fauces, more particularly in an advanced state of life, arises the cause of snoring. The other changes which take place during sleep in the vital system are evidently the result of a diminution of the frequency of respiration. This necessarily produces a proportional decrease in the frequency of the pulse; the properties of the blood being less frequently renovated in the lungs, it less readily excites the heart and vessels, and the diminished force of circulation is necessarily attended with a diminished formation of secreted fluids. The state of the vital system influences, in its turn, the sensitive system, and in this manner sleep is

rendered more profound. During health no change takes place in the vital powers to prevent the perfect restoration of those functions by which the animal is again fitted for intercourse with the external world, for these powers are never impaired in sleep, but only less readily excited.

The states which precede the last act of dying, and sleep, the author observes, depend on a failure of function in the same organs. And the only evident difference of these two states is, that the one is a temporary, the other a final, failure; and it will appear that in the only death which can be strictly called natural, the state of the sensitive system, which immediately precedes death, differs from its state in sleep in no respect but in degree. We shall here quote the author's own words, in order that the reader may form an idea of the general style of the work.

"The natural death of the animal is the death of old age; and as this is the simplest form of death, it is that which I shall first consider. We shall find that the state which immediately precedes this death, and must consequently be considered as its cause, must, in the nature of things, differ from sleep in no other respect than the less vigorous state of the functions of both systems, and consequently that these states are identical; the greater or less general vigour making no difference in their nature.

"Now, as the death of old age arises from the gradual failure of those functions, it must necessarily take place at the time at which their vigour is most impaired. If the vital powers are still capable of restoring the sensitive system under the disadvantage of a diminished frequency of respiration, it is evident that, if their decay be gradual, nothing occurring suddenly to accelerate it, they cannot fail to maintain the functions of that system during the short time which intervenes before the recurrence of sleep again exposes them to the same difficulty. Their failure necessarily takes place at the time when their functions are most difficult. The death of old age, therefore, is literally the last sleep, uncharacterised by any peculiarity. The general languor of the functions in the last waking interval is attended with no peculiar suffering, and the last sleep commences with the usual grateful feelings of repose, the last feelings experienced; for with what takes place after them, the feelings, being suspended, have no concern.

"The only difference between the last, and the sleep of former times, is, that the exhaustion of the sensitive system, which is at first, as in the latter case, only partial, (for in the beginning of that sleep the sleeper may be roused by more powerful stimulants than those which preceded it,) becomes in its continuance, in consequence of the failure of those powers which formerly restored the sensitive system, complete."

Dr. Philip's work is one of great interest, and will necessarily be a source of entertainment to all who peruse it.

SELF-SUPPORTING DISPENSARIES.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—Your leader of last week contains an extract from the Report of the Poor Law Commissioners, "embodying the result of their inquiries into the medical treatment of parish paupers." Some observations respecting this subject I shall reserve for another opportunity, my present object having reference to that part of the extract laudatory of Mr. Smith and *his* self-supporting dispensaries, and to your paragraph thereon, in which you promise "some observations on the dispensing system," including, I suppose, that of self-supporting dispensaries, "to certain attempts at establishing which your attention has been lately called."

Now, gentlemen, believing, as I do, that the *principle* of self-supporting dispensaries, if *properly* carried into effect, is capable of producing the most beneficial results, both to the public and to our profession, I should be sorry to see you fall into any error in consequence of an imperfect knowledge of the subject, particularly as I sincerely admire your straight-forward, manly defence of the honour and dignity of our body, and your unflinching assertion of our just rights. In accordance with the principles you profess, you cannot do better, as I think, than open your pages to a full and fair exposition of the various bearings of this interesting but complicated question. Hitherto, the public have been supplied with little more to form conclusions upon than garbled and one-sided

statements, in which failures have been carefully suppressed, and success greatly exaggerated, the parties making them having been more anxious to advance their own peculiar views, than to furnish correct and impartial information, of the necessity for obtaining which you will form some idea from the following observations.

I have now lying before me, a pamphlet, published in 1831, by a "Society for promoting the Objects of *the* Self-Supporting Dispensaries, established March 22, 1830," and which, from the distinguished names attached to it, seems entitled to more credit than, upon strict examination, proves to be the case. After many excellent remarks upon *some* of the causes of pauperism, and an exposition of the objects of self-supporting dispensaries, I find at page 11 of this publication the following passage:—"In order to show the progress which has already been made in effecting the objects contemplated by Mr. Smith's plan, the most satisfactory course will be to make extracts from the Reports of the Committees of Dispensaries already formed on it, and from other sources of evidence, not only at Southam, where the first dispensary was established, and is superintended by Mr. Smith, but at Atherstone, Coton, and Birmingham." Had this promise been *fairly* fulfilled, and the reports and *regulations* of the institutions then in existence given to the public, I should not probably have found it necessary to trouble you with this communication. But how has the society done this? —Why, they have given the *first* year's report of the Atherstone Dispensary of Jan. 1829, *excepting the financial* statement, and then merely informed us that the second year's report was *equally favourable*. I say nothing of the unusual course of giving the first year's report of an institution to prove its success when the second was in existence, but call upon the authors of the pamphlet to reconcile their account with the fact, that the surgeons received in the first year 80*l*. 11*s*. 3½*d*. for attending 765 patients, while in the second they had *less* by 11*l*. for upwards of 1200.

After an extract from a letter published in the Coventry Herald, by the chairman of the Atherstone Dispensary, in recommendation of such institutions, follows a certificate, dated 1827, from the visitor of the poor at Southam; but although the Dispensary at that place must then have been in existence upwards of five years, we have *no report*, no account of the number of surgeons, or of the number and class of patients, and no treasurer's statement, all of which are necessary to the formation of a correct opinion. In page 17 I find some observations, said to have been made by the conductors of a dispensary at Coton, in a communication to Mr. Smith, in which, however, no information is given beyond the mere fact that "600 individuals have become free members;" but what those persons have paid, or what has been received by the surgeons, deponent sayeth not.

But the most extraordinary part of this pamphlet is yet to come, as the following extract and my comment thereon will show. "The first dispensary formed on *this plan* at Birmingham, was found to proceed so well, that two more have been subsequently established." In this passage it is evidently intended that the public should believe that *all* the institutions mentioned were founded upon Mr. Smith's plan, and that *all* have been equally successful. Magna est veritas et prævalebit. The *first* self-supporting dispensary formed in Birmingham was in 1828, and, as Mr. Smith well knows, was *not* formed upon *his plan*, but upon a very different one, proposed by my friend Mr. Sanders. This institution is still in existence, but Mr. Sanders having been over-ruled in his efforts to place it upon a sufficiently liberal footing, he left it in 1830, and established another, now flourishing beyond precedent. Another, also upon Mr. Sanders's plan, was formed in Deritend and Bordesley (two hamlets adjoining to Birmingham, and now contained within the limits of the borough) in 1830, and was in 1833 incorporated with the former, under the title of the "Birmingham and Deritend General Self-supporting Dispensary."

The only one founded upon Mr. Smith's plan was established in 1830, principally by the exertions of the indefatigable chairman of the Atherstone institution, who had then removed to this town, and the laws of which, with the slightest possible difference, are precisely those of the Atherstone Dispensary, as they appear in the pamphlet. This institution, which was called the "Duddeston, Nechells, and Aston Self-supporting Cha-

ritable and Parochial Dispensary," has totally failed; a bazaar was got up last year to raise money to pay off its debts, and it is now, *de facto*, defunct. Yet Mr. Smith, enacting the part of the unnatural mother in the judgment of Solomon, has, in a letter lately published in the Birmingham Journal, stoutly denied his paternity to the bantling now no more, while, in the before quoted paragraph, the living ones are claimed, by implication at least, as his own children!

In the latter part of the pamphlet it is further stated, that dispensaries have been established at Wellsbourne and Barford, at Rugby, Derby, and Burton-upon-Trent, but upon what plan we are not informed, neither is any part of their reports given.

I am anxious not to occupy too great a space in your valuable publication, and shall therefore conclude (for the present) by calling upon the author of the pamphlet, who ought to be in possession of the necessary documents, for a full and honest account of all institutions established under the name of Self-supporting Dispensaries. When this has been done, or failing its being done, I shall be prepared to resume the subject. In the meantime,

I remain, Gentlemen,
Your obedient servant,
J. Aaron,
One of the Surgeons of the Birmingham and Deritend General Self-supporting Dispensary.

Birmingham, June 18th, 1834.

P.S.—If compatible with your arrangements, I should be glad if you would cause the foregoing statements to be laid before the Medical Reform Committee.

NEW LITHOTRITIC INSTRUMENT.

A new calculo-fractor has been invented by Mr. L'Estrange of Dublin, a plate and description of which will be found in our valued contemporary, the Dublin Journal of Medical and Chemical Science for July. The medal of the Royal Dublin Society was awarded for this instrument. Mr. Crampton, the surgeon-general, operated with it (June 4th) in the presence of surgeons Adams, Hargrave, and Smyly, with complete success. The celebrated operator exemplified the peculiar advantages of the instrument, and was the first surgeon in Ireland who performed lithotrity, as recorded by us some months since.

THE
London Medical & Surgical Journal
Saturday, July 5, 1834.

SIR GILBERT BLANE.

On Friday last, June 27, Sir Gilbert Blane, Bart., expired at the advanced age of 85.

Of this eminent physician and admirable man it may be said with truth—

> " Posteritati narratus et traditus,
> Superstes erit."

We regret we are unable at present to do justice to the memory of our deceased friend, by detailing the full extent of his public services for half a century. Their beneficial effects will be felt as long as the British navy shall float. We know of no example where a higher reputation has been achieved by the mere exercise of practical wisdom and sound good sense.

The following extract from a recent work by the most eloquent philosopher of our days*, relieves us from the necessity of attempting to explain, in our own words, the nature of these services.

" It is to such observation, reflected upon, however, and matured into a rational and scientific form by a mind deeply imbued with the best principles of sound philosophy, that we owe the practice of vaccination; a practice which has effectually subdued, in every country where it has been introduced, one of the most frightful scourges of the human race, and in some extirpated it altogether. Happily for us we know only by tradition the ravages of the small-pox, as it existed among us hardly more than a century ago, and as it would in a few years infallibly exist again, were the

* Discourse on the Study of Natural Philosophy. By Sir John Herschell, &c.

barriers which this practice, and that of inoculation, oppose to its progress abandoned. Hardly inferior to this terrible scourge on land, was, within the last seventy or eighty years, the scurvy at sea. The sufferings and destruction produced by this horrid disorder on board our ships when, as a matter of course, it broke out after a few months' voyage, seem now almost incredible. Deaths to the amount of eight or ten a-day in a moderate ship's company; bodies sewn up in hammocks and washing about the decks for want of strength and spirits on the part of the miserable survivors to cast them overboard; and every form of loathsome and excruciating misery of which the human frame is susceptible:—such are the pictures which the narratives of nautical adventure in those days continually offer*. At present the scurvy is almost completely eradicated in the navy, partly, no doubt, from increased and increasing attention to general cleanliness, comfort, and diet; but mainly from the constant use of a simple and palatable preventive, the acid of the lemon, served out in daily rations. If the gratitude of mankind be allowed on all hands to be the just meed of the philosophic physician, to whose discernment in seizing, and perseverance in forcing it on public notice we owe the great safeguard of infant life, it ought not to be denied to those * whose skill and discrimination have thus strengthened the sinews of our most powerful arm, and obliterated one of the darkest features in the most glorious of all professions."

" * Journal of a Voyage to the South Seas, &c. &c., under the command of Commodore George Anson in 1740–44, by Pascoe Thomas, Lond. 1745. So tremendous were the ravages of scurvy, that, in the year 1726, Admiral Hosier sailed with seven ships of the line to the West Indies, and buried his ships' companies twice, and died himself in consequence of a broken heart. Dr. Johnson, in the year 1778, could describe a sea life in such terms as these:—' As to the sailor, when you look down from the quarter deck to the space below, you see the utmost extremity of human misery, —such crowding, such filth, such stench!' ' A ship is a prison with the chance of being drowned; it is worse—worse in every respect —worse room, worse air, worse food, worse company!' Smollet, who had personal experience of the horrors of a seafaring life in those days, gives a lively picture of them in his Roderick Random."

" * Lemon juice was known to be a remedy for scurvy far superior to all others 200 years ago, as appears by the writings of Woodall. His work is entitled " The Surgeon's Mate, or Military and Domestic Medicine. By John Woodall, Master in Surgery, London, 1636," pp. 165. In 1600, Commodore Lancaster sailed from England, with three other ships, for the Cape of Good Hope, on the 2nd of April, and arrived in Saldanha Bay on the 1st of August, the Commodore's own ship being in perfect health, from the administration of three tablespoonfuls of lemon juice every morning to each of his men, whereas the other ships were so sickly as to be unmanageable for want of hands, and the commander was obliged to send men on board to take in their sails and hoist out their boats. (Purchas's Pilgrim, vol. i. p. 149.) A Fellow of the College, and an eminent practitioner, in 1753 published a tract on sea scurvy, in which he adverts to the superior virtue of this medicine; and Mr. A. Baird, surgeon of the Hector sloop of war, states, that from what he had seen of its effects on board of that ship, he ' thinks he shall not be accused of presumption, in pronouncing it, if properly administered, a *most infallible remedy*, both in the cure and prevention of scurvy.' (Vide Trotter's Medicina Nautica.) The precautions adopted by Captain Cook in his celebrated voyages, had fully demonstrated by their complete success the practicability of keeping scurvy under in the longest voyages, but a uniform system of prevention throughout the service was still deficient.

" It is to the representations of Dr. Blair and Sir Gilbert Blane, in their capacity of commissioners of the board for sick and wounded seamen in 1795, we believe, that its *systematic introduction into nautical diet*, by a general order of the Admiralty, is owing. The effect of this wise measure, (taken, of course, in conjunction with the general causes of improved health, may be estimated from the following facts:—In 1780, the number of

We have to add to the facts contained in this extract, all of which are to be found in an interesting pamphlet published by Sir Gilbert in 1830, that, so early as the year 1780, the first year of Sir Gilbert Blane's service as physician to the fleet on the windward station, he presented a memorial to the Admiralty, in which he stated the causes of disease to consist in—

1st. The neglect of cleanliness, ventilation, and dryness in the interior economy of ships.

2nd. The want of lemon or lime juice.

3rd. The abuse of spirituous liquors, as the habitual beverage of seamen.

4th. The want of adequate nourishment and comfort for the use of the sick and convalescent on board of their own ships.

5th. The want of proper bedding and of soap.

6th. The want of a gratuitous supply of medicines, as well as necessaries, to the surgeons, in order to enable them to cure as many as possible without sending them to hospitals.

7th. The defective regulation of hospitals.

We have given this long catalogue in order to show at what an early period the neglected condition of the navy attracted Sir Gilbert Blane's attention, and how vast an improvement was wrought under his auspices.

In consequence of the high opinion the government entertained of Sir Gilbert Blane's judgment, he was consulted on various public occasions connected with his profession, and, among the rest, was despatched to visit the troops during the fatal Walcheren expedition. On his return, the Prince of Wales conferred upon him the title of baronet. In the fifth volume of the Medical and Surgical Journal, of which this Journal is a continuation, we have given some further particulars of his public life.

Sir Gilbert Blane was a Licentiate of the College of Physicians. From his rank in the profession, and sterling upright character, he was once happily called—"The President of the Licentiates," a designation in which we have reason to know he gloried. The *honour* of a Fellowship he would not cringe for, and refused to accept, as a favour, to the great abasement of a rival President.

In his public life we know of but one circumstance that caused him a moment's pain. Sir Gilbert Blane was attached to the household of the Duke of Clarence. Upon his Majesty's accession to the throne, an attempt was made—need we say in vain—to exclude the Licentiate from the Royal favour. Under his Majesty's express command, the Marshaller of the Royal Physicians was ordered to place Sir Gilbert Blane's name (which had been omitted) first on the list; but, by some trick of etiquette (for we presume this is the justification), Sir Henry Halford's occupies that post. Sir Gilbert Blane *longo proximus intervallo* to Sir Henry Halford!

Sir Gilbert Blane, in addition to his medical attainments, was a man of extensive and varied erudition: he was fond of observing and tracing—to use his own elegant paraphrase of Cicero*—"that subsidiary influence and mutual dependence by which all the arts, sciences, and professions have a reciprocal bearing on

cases of scurvy received into Haslar hospital was 1457; in 1806 *one* only, and in 1807 *one*. There are now many surgeons in the navy who have never seen the disease."

* "Etenim omnes artes quæ ad humanitatem pertinent habent quoddam commune vinculum et quasi cognatione quâdam inter se continentur.

each other, conspiring to bring about the greatest sum of human enjoyment, and affording a field of contemplation, in which cultivated, benevolent, patriotic, and pious minds delight to expatiate." He lived among great and powerful men, and preserved his simplicity; he won their esteem and commanded their interests for his benevolent purposes, without subserviency or sycophancy. He has left behind him an unsullied reputation.

Foreign Hospital Reports.

HÔTEL DIEU, AT MONTPELIER.

Fungus Hæmatodes — Amputation at the Shoulder-Joint—Instantaneous Death from the admission of Air into the Veins.

COMMUNICATED BY M. H. JOFFRE.

A MAN, about 30 years of age, came to the hospital for fungus hæmatodes, which occupied nearly the whole extent of the arm and fore-arm. The skin covering the tumour was very thin, and ruptured in some parts, hæmorrhage supervened, and the disease made rapid progress. Amputation at the shoulder-joint was proposed as the only means of saving the life of the patient. The operation was undertaken; and scarcely had the arm been detached from the body, when the patient suddenly expired; lightning could not have produced death more speedily. The vessels, as we usually find them in this disease, were enormously increased in calibre; nevertheless, not much hæmorrhage took place during the operation.

The surgeon, surprised at such an unexpected and unforeseen occurrence, had the body placed in water, in which he examined it before a number of spectators. On cutting into the heart, a gush of air escaped, which at once revealed to him the cause of death.

Strangulated Hernia successfully treated with the Extract of Belladonna.

BY M. FRANKEL.

A labourer, of good constitution, aged 42, was struck in the right hypochondrium with the pole of a carriage, which knocked him down. When brought to the hospital, his countenance was pale, extremities cold, pulse small. He had nausea and vomiting; the ejected matter was mixed with mucus; acute pains in the region of the liver. In his right groin was an hernial tumour, caused by the blow he had received. I had him bled, ordered leeches and lotions to the affected part, and prescribed laxative injections. The pain in the right hypochondrium ceased, but the hernia offered to reduction an insurmountable resistance. The hypogastrium became swollen, stercoraceous vomiting supervened, constipation continued, and the patient became very irritable. I proposed the operation, which he obstinately refused. The cold applications were continued; and I had two ounces of the extract of belladonna, mixed with some marsh mallow ointment, rubbed on the hernial tumour and hypogastrium. The result of this application was extremely favourable, and the intensity of the symptoms soon diminished; the hernial tumour became softer and smaller, the vomitings ceased, and some fœtid alvine dejections were passed. The hernia returned, and the patient soon recovered.

Since the above, I have treated six cases with the belladonna, all of which have terminated equally successfully.

HÔPITAL BEAUJON.

Scirrhous Hypertrophy of the Neck of the Uterus — Excision — Utero-Peritonitis — Cure.—Clinical remarks by MM. Marjolin and Blandin.

A woman, 30 years of age, a mantua-maker, of middle size, and sanguineo-lymphatic temperament, who had constantly enjoyed perfect health, was admitted into the above hospital, February 3rd, 1834, for an affection of the uterus. Catamenia regular, and in natural quantity; mother of three children.

For two years she has observed small warts, which came spontaneously about the genital organs; their appearance was not that of syphilis, and they speedily yielded to emollients. States that she has never had the venereal disease.

Her complaint appears from her statement to have originated fourteen months since, as at that time she first felt a sensation of heat and weight about the hypogastric region. These symptoms became so slight that she con-

sidered them of no consequence. In a few months, however, the heat returned, the sensation of weight became more intense; leuchorrœa, which she had suffered from childhood, was now much decreased in quantity; no bloody discharge; menstruation natural. The patient complains of itching, and internal pricking sensations, heat in passing her water, and frequent desire to evacuate her urine and fæces; pains in the loins and kidneys, which she finds extend to the internal part of the thighs, much increased when in the erect position or in walking, and are greatly relieved by repose in the recumbent position. Coition gives her much pain. The patient believed that she had a tumour growing from the uterus, and requested M. Blandin to extirpate it.

M. Blandin, determined to ascertain the state of the uterus and its appendages, first made an examination per vaginam, afterwards with the speculum. The parts surrounding the external organs appeared perfectly natural. The neck of the uterus was found low down in the vagina; this examination caused but little pain. There was a slight descent of the uterus, without a deviation of the body of this organ. The lips of the uterus were regular, hard, and resistant; the anterior more developed than the posterior; the neck of this organ appeared voluminous, and its texture firm; the orifice was transversely oval, and lined by some albuminous mucosities. The body of the uterus appeared of its natural volume.

The speculum verified the above state of the uterus. The constitution of the patient was good, but at times she experienced twitching pains about the stomach and bowels. All symptoms sufficiently proved the existence of a scirrhous hypertrophied condition of the neck of the uterus, and the operation for excision of this part was proposed, and performed on the 8th of February.

There is nothing particular in this operation; it was performed in the ordinary way. The patient was placed and kept in the same situation as in the operation for lithotomy. A speculum was introduced, and Museux pincers were applied to the neck of the uterus, which was drawn downwards as much as possible. The speculum was then withdrawn, and another pair of Museux forceps were introduced in a manner opposite to the first; the external labia were widely separated, and the neck extended towards them. The operator was situated in front of the vulva, conducted along the palmar face of the left indicator finger, a convex bistoury, with which the neck was excised, without excavating entirely that portion of the neck which was embraced by the upper portion of the vagina, though sometimes this latter is necessary in consequence of the extent of lesion.

The patient manifested during the operation but slight pain, only a few drops of blood escaped, and said afterwards her suffering was very slight. She was put to bed; no unpleasant symptom occurred. Gummy julep, with the syrup of diacodium (poppy) was ordered, and fomentations were applied to the lower part of the abdomen.

Examination of the extirpated Neck.—Its texture was whitish; of a close fibrous texture; hard and resistant, having the exact appearance of scirrhus with hypertrophy.

10th. Since the operation the patient has been going on well; a very slight sanguineous discharge has been observed from the vagina; pulse rather accelerated; skin moist, of a natural temperature.

11th. Disturbed sleep; impatience; pulse 108, feeble; frequent desires to pass urine. Catheterism was employed, which gave exit to a few drops of water. Complains of colicky pains about the abdomen. Twenty leeches were ordered to be applied to the epigastrium; cataplasms and emollient injections were prescribed; gum water, &c., &c.

13th. Pains diminished; skin hot and dry; tongue natural. Medicines continued.

15th. Yesterday pains about the lower part of the abdomen increased; somnolency; pulse 104, tolerably powerful; tensity of the abdomen, for which a copious blood-letting was effected; other medicines continued. To day she complains of dragging pains of the uterus; slight shivering; thirst; vomiting came on about 12 o'clock at night; great agitation; countenance pale; tongue red at the point; pain on pressure about the abdomen; pulse small, 116; skin natural. Fifteen leeches to be repeated on the abdomen; emollient fomentations; injections the same. Bath prepared

with decoction of linseed, in which she is to remain for two hours.

16th. Better; all the symptoms ameliorated.

The symptoms continued some days increasing, others diminishing; sometimes accompanied with vomiting, at others with acute cephalalgia; pains about the region of the uterus, bladder, and vagina; all of which symptoms were alleviated by the ordinary remedies. Mercurial frictions were applied on the abdomen, salivation was produced; after which remedy the symptoms lessened in frequency, and by the 31st of March, not quite two months from the operation, she felt so well, that she requested to be discharged, which was permitted her, on condition that she would for some time remain quiet, and abstain from all imprudences.

A conical cul-de-sac was felt in the vagina, also a smooth regular surface without induration, leaving a small central aperture. All discharge had ceased.

This case presents an example of severe utero-peritonitis supervening simple excision of the uterine neck.

All authors coincide that this is the most frequent and dangerous inflammation to be dreaded after this operation. In fact the nervous system is rarely if ever affected, and the operation scarcely ever proves fatal from nervous excitability. As to the occurrence of hæmorrhage, in spite of what has been written, and what may still be persisted in by some, it is not in general a formidable complication; and its fatal effects are rarely to be met with, though occasionally, from small and frequent repetitions, great debility and even death is produced.

British Hospital Reports.

ST. THOMAS'S HOSPITAL.

Efficacy of Iodine on Secondary Syphilis.

This affection, which, up to the present day, has excited so much medical speculation, and in the cure of which so many different opinions have been advanced, appears at last, by numerous experiments that have been made in the above hospital, and of which the following cases will be a proof, capable, at least in some of its stages, of being perfectly eradicated. The forms of the disease have been so frequently alluded to by men of the first talent, its progress so accurately examined, and its effects so frequently observed, that it will be useless for us here to enter into a lengthy description. The period, however, at which secondary syphylis makes its appearance after the primary symptoms, has been, especially by the army surgeons of this country, limited to a certain period, the fallacy of which must have been observed by every practical surgeon or physician. Facts are every day to be witnessed in these hospitals, in which periods of a greater or less extent have elapsed since the incubation of this virus into the circulating system—weeks, months, and even years—as will be seen by the following observations.

The parts affected by this poison, after the virulence of its first absorption, are so generally the same, and so frequently observed, that the subjoined cases will be sufficient to illustrate the different surfaces attacked. Whether or not it is owing to the modification of the virus by the changes it is liable to undergo from the alteration of the system by treatment, or from the peculiar idiosyncrasy of the constitution attacked, upon its ultimate characters, at present remains in great obscurity. However, it is a well-known fact, that if the disease be left to a spontaneous cure in its primary stage, its secondary effects are much more virulent, and the cure of the former much protracted; at once showing the importance of subduing, as early as possible, the effects of the virus.

We will here enter into a short description of the secondary or constitutional symptoms, to which the proper local signs of syphilis are sure to lead, if not checked in their progress; as the cases will merely illustrate the state of disease at the time under treatment. The symptoms are (but of course liable to vary) soreness and ulceration of the tonsils, and neighbouring parts of the pharynx; the ulcers are of a distinctive character, foul, and rugged, excavated in the centre with a whitish-brown slough, and surrounded by an elevated, red, erythematous outline. The conjunctiva of the eye is generally the next to suffer, becomes inflamed, and ulcerations may be observed on the eyelids and angles of the eye. An eruption appears on the skin, which desquamates in scurf, afterwards in scales, and at a still more advanced period in scabs, leaving a foul ulcer, which by degrees becomes more excavated, and discharges a fluid of an offensive nature.

At a more advanced period, irregular pains shoot about the limbs, which from heat, become aggravated. The periosteum and bones at length become affected, nodes supervene, which are followed by caries of the bone; it thus continues to spread, till it destroys the patient.

It is more particularly this latter stage of the disease that has baffled all attempts of treatment to overcome it, and to the ravages of

which so many human beings have fallen victims.

Case I.—Ellen de Ling, aged 30, was admitted into Anne's ward of this hospital, with severe pains in her legs, from which she had suffered for three months; so severe were they when admitted, that she could scarcely walk; her constitution, which had been generally good, was much impaired; countenance sallow; complained of great debility, and was emaciated. Dr. Williams, under whose care she was admitted, prescribed eight grains of the hydriodate of potass out of camphor mixture, to be given three times a-day. After taking this medicine for three days, the pains became much alleviated; the periosteum, which covered the inner surfaces of the tibiæ, and were rugged, became less painful and smoother; in the course of a fortnight all the symptoms had disappeared, her countenance became more blooming, and from her own statement, which also was evident to all who visited her, she got fat while under the influence of the medicine, and on the 19th of June, three weeks from the time of her admission, she was discharged perfectly cured.

Case II.—Jane Parish, a mantua-maker, aged 22, of scrofulous diathesis, came in the same ward, under Dr. Williams, with ulceration of the pharynx and rupia, the scabs on the nose and several parts of the body had formed into deep ulcers, the most severe situated especially on the right arm, the size of which were as large as a crown piece. She also suffered from severe pains in her limbs, which deprived her from all rest; countenance pallid; bowels regular. States that three months previously she had the venereal disease, for which her mouth was made very sore, and the chancres readily healed. Great debility of constitution when admitted. Dr. Williams prescribed in this case, as the disease appeared particularly to attack the mucous, and cutaneous surfaces, decoction of sarsaparilla with wine and sago; and ordered the ung. hydr. nit. to be applied to the ulcers. She has now been in the hospital under this treatment about three week, all the sores have kindly healed, her general health has become much improved. All pains have left her, and she is now in nearly a fit state to be discharged from the hospital.

Case III.—Louisa Wilmott, a married woman, aged 34, who states that six years ago, when first married, her husband gave her the disease, which, after submitting to a mercurial course, subsided; and not until five months ago she experienced any secondary symptoms. About that period she received a blow from her husband on the nose, pain supervened, fistula lachrymalis ensued, for which she was then admitted into the hospital under Mr. Green, who relieved her by performing the operation. After this her nose continued to trouble her; felt heat and pain about the internal parts of it; and at different times small pieces of bone were discharged from the nostrils. She also suffered from severe pains in her limbs, increased when in bed; these were soon succeeded by hard lumps or nodes forming on the inner surfaces of the tibiæ, which became so tender that the least pressure caused excessive pain. On the 29th of May she came into Ann's Ward, under Dr. Williams's observation; the symptoms then continued as above, and Dr. W. prescribed the hydriodate of potass in camphor mixture. This she has continued to take up to the present time; in the course of a week after its use the pains subsided, and the osseous deposition has been gradually disappearing. Since she has been taking the medicine her nose has felt much easier, and no bone has within this time been discharged.

(*To be continued.*)

GUY'S HOSPITAL.

Hernia.

A. B., a labouring man, ætat. 40, came into the hospital on June 18th. He had been afflicted with femoral hernia during the last four years; the intestine slipped down several times, but he had always been able to return it without difficulty. On the day of his admission, after eating a hearty dinner, the hernia suddenly came down, and resisted all his endeavours at reduction. When he was brought into the hospital he was placed in a warm-bath, and the taxis resorted to with success. An enema was then given. A few hours after the operation the patient complained very much of pain in the abdomen, and several urgent symptoms set in. He was ordered to be bled to sixteen ounces, and to take calomel and opium. These symptoms excited some surprise, as there was no unnecessary force used in returning the intestine; the patient was bled a second time, and purgatives administered. These measures succeeded in affording relief, and the patient is now going on very favourably. Mr. B. Cooper, in his observations on this case, took occasion to caution the pupils against making use of too much violence in returning a hernia; such bad treatment was succeeded by symptoms as took place on this occasion. He was, however, convinced that no unnecessary force was resorted to in this instance.

Lithotomy.

On Tuesday a very fine child, about five years of age, was brought into the operating theatre, in order to undergo the operation for stone in the bladder, which he has been labouring under for a long time. Mr. Aston Key performed the operation in the usual manner, and extracted a stone about the size of a large pea. The operation was performed in about ten seconds.

Extraction of a Ball from the Arm.

A very robust and well-looking young man was next brought in. He had been serving in Don Pedro's army, during the late Portuguese war, when he received a ball in the arm, which had not been extracted. On reaching London he came to this hospital in order to be relieved; several small shot were also lodged in his arm, and his person when stripped presented various wounds, proving that he had not fought with impunity. Mr. Key made two incisions in the arm, a few inches below the head of the humerus, and after a short search felt the ball, which he extracted with a forceps. The hæmorrhage was trifling and no arteries were tied; the ball was as large as a walnut.

BOOKS.

The Edinburgh Medical and Surgical Journal, exhibiting a concise view of the latest and most important discoveries in Medicine, Surgery, and Pharmacy. No. CXX. July. Edinburgh: A. Black.

The Dublin Journal of Medical and Chemical Science, including the latest discoveries in Medicine, Surgery, Chemistry, and the Collateral Sciences. No. XV. July. Dublin: Hodges and Smith.

The American Journal of the Medical Sciences. No. XXVII. May. Philadelphia: Carey and Co.

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The Liverpool Medical Journal. Published Monthly, under the Superintendence of an Association of Physicians and Surgeons, chiefly attached to the Medical Charities of Liverpool. No. III. July. Grapel, Liverpool: Renshaw, London.

CORRESPONDENTS.

Mr. Tutham's paper will appear at our earliest convenience.

Mr. Langley's communication is under consideration.

M. Moscati. — It is not characteristic of Englishmen to refuse "redress or justice to a *fallen* and persecuted *foreigner* in this land of civilisation and liberty;" nor is it our practice to attack either native or foreigner in this journal, without giving an opportunity of a moderate reply. But if we receive a reply totally foreign from our remarks, and one that is intemperate and grossly offensive to a third party, which we have already refused to insert, and which our contemporaries had previously refused to publish, we do not consider the writer entitled to complain of want of redress or justice at our hands. When controversialists descend to designate each other "liars," we consider their effusions unworthy of a place in our pages. But had we the bad taste to insert one communication, we should most certainly have admitted the other. We refused to notice either, nor shall we be induced to alter our determination.

METEOROLOGICAL JOURNAL.

MONTH. June, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
26		68	73	61	29·91	29·81	63	65	S.W.	W.S.W.	Fine	Fine	Cloudy
27		67	67	54	29·79	29·95	64	63	W.N.W.	N.	Cloudy	——	——
28		62	68	59	29·95	29·84	63	62	N.	S.S.E.	——	——	Fine
29	☾	63	67	53	29·87	30·04	59	59	E.	N.E.	Fine	——	——
30		64	74	53	30·10	30.08	59	60	N.E.	E.N.E.	——	——	——
July													Cloudy
1		63	66	57	29·97	29·86	60	66	N.E.	N.E.	Cloudy	——	——
2		62	71	57	29·75	29·76	68	66	N.N.E.	N.E.	——	——	——

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THE

London Medical and Surgical Journal.

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LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE XCVII., DELIVERED APRIL 29, 1833.

Gentlemen,—I will now describe to you the manner of operating upon the external or oblique inguinal hernia. The hair having been removed from the parts which will be in the track of the knife, and the bladder emptied, the first incision should commence an inch above the external angle of the abdominal ring, and it should extend obliquely downwards, and inwards over the middle of the tumour to its lower part, except when the hernia is very large. This incision divides the skin, cellular substance, and the external pudic artery, as it crosses the sac near the abdominal ring. It is generally admitted, gentlemen, that, by directing the incision obliquely downwards and inwards, you lessen the chance of injuring the spermatic vessels, should they happen to be situated towards the front of the sac. From the remarks on the surgical anatomy of bubonocele, already delivered, you will be apprised, that the division of the integuments brings into view the fascia superficialis. This is to be laid open, by which you will expose the fascia of the cord, or fascia spermatica, as it is termed, derived from the intercolumnar fascia, at the abdominal ring, and generally forming one of the thickest coverings of the hernia. In order to accomplish this purpose, you should first make a small opening through the exposed fascia, which may be safely done by taking hold of a small portion of it with a pair of forceps, and then dividing it cautiously close to the point of the forceps with the edge of the knife turned horizontally.

Then having made an opening, you may introduce a probe, or a director, and with a common scalpel, or a curved bistoury, divide the fascia upwards and downwards as far as the external incision reaches.

Thus you will bring into view the next covering of the hernial sac, namely, the expansion formed by the cremaster, which must be opened and divided in the same manner as the fascia. Having done this, you come to the funnel-shaped process, or the continuation of the fascia transversalis between the upper portion of the cremaster and the hernial sac, but which is so slight and so soon lost in the cellular tissue between the sac and the cremaster, that it is not recognised by some of the best writers on hernia.

Now the cellular substance on the outside of the sac will be brought into view, and, after having carefully divided it, you come to the hernial sac itself; a little piece of the anterior and lower portion of which is to be lifted up between the thumb and fore-finger, and carefully examined, to learn whether the fold thus raised includes any portion of bowel. If it does not, you then take hold of it with a pair of forceps, and cautiously open it, with the edge of the knife directed horizontally. Surgeons choose to open the hernial sac at its anterior and lower part, because if there be any fluid in it, it will gravitate to this part, and be a kind of protection to the intestine from the edge of the knife.

Sometimes, gentlemen, much perplexity is evinced in distinguishing the sac itself from the intestine. However, the circular arrangement of the vessels of a piece of intestine, and its smooth polished surface, sufficiently characterise it from the hernial sac, which has a rough cellular surface and is closely connected to the surrounding parts.

Having made an opening into the hernial sac, you are to introduce a director, and with a probe-pointed bistoury lay it open to the extent of the other incisions. The next thing, gentlemen, is to divide the stricture.

Now the stricture may be situated either at the abdominal ring, and be formed by the margins of this opening, or else, what is more frequent, within the inguinal canal, where it is produced by the lower edge of the internal oblique and transverse muscles, or lastly, at

the internal ring itself, about an inch and a half from the external ring, in the direction towards the anterior superior spinous process of the ilium.

If the case require it, you may now introduce a director into the neck of the sac, within the abdominal ring, and with a probe-pointed bistoury, cut the stricture *upwards and outwards*, or, if you please, *directly upwards*, the recommendation of which last plan, suggested as a general one by Sir Astley Cooper, is, that you will not endanger the epigastric artery by it, whether the case be an external or an internal bubonocele. Were you completely sure, however, that the case were an *internal* bubonocele, you might safely divide the stricture upwards and inwards, the epigastric artery lying on the outer side of the neck of the sac, the very reverse of what happens in the external or most common form of bubonocele.

When the stricture is at the upper opening of the inguinal canal, the abdominal ring itself should not be cut, unless it prevent the operator from reaching the more deeply seated strangulation.

The next business, gentlemen, is to return the protruded parts, if sound, and free from adhesions; and this will be considerably facilitated by bending the thigh. Sometimes, it is true, you will have a good deal of difficulty in separating adhesions, which may even be such as to prevent the reduction of the protruded parts altogether; but this is unusual. In such a dilemma, by dividing the stricture, you render as much service as surgery can accomplish; and the patient will not always be lost, though you may be obliged to leave some of the bowels protruding. The intestine, if possible, should always be reduced, unless it be found in a state of actual mortification. The appearance of dark brown chocolate discolourations are no objection, and they should be discriminated from the *black* or *purple spots*, which indicate mortification.

With respect to *adhesions*, the intestines are not often firmly adherent to one another. In general, the strongest adhesions are those between the omentum and the inside of the sac. Slight adhesions of the intestine to the inside of the sac may be gently broken with the fingers. If such connexion should require the use of the knife, the safest plan is not to cut too near the bowel, but to remove the adherent parts of the sac, and return them with the intestine into the abdomen. But, gentlemen, if the adhesions should be within the neck of the sac, the inguinal canal should be more freely laid open, so as to bring them into view.

One important rule, after the reduction, is gently to introduce the finger, and be sure that the parts are all fairly and freely returned, and not suffering any degree of constriction, either by the margin of the internal oblique and transverse muscles, or the inner opening of the inguinal canal, or other causes, and to be confined by any adhesive bands formed across the mouth of the hernial sac, as displayed in the preparation which I now hand to you for your inspection.

Treatment of Omentum —In entero-epiplocele, the omentum, if healthy, is to be reduced after the intestine. If much enlarged, and indurated, or gangrenous, diseased, or mortified, the unsound portion is to be cut off, and the arteries taken up with a tenaculum, and secured with fine thread or silk. Then what remains is to be reduced, with the threads left in the external wound.

Treatment of Mortified Intestine.—In most cases, gentlemen, when the intestine mortifies in a hernial sac, the latter part, its coverings, and the integuments, also become gangrenous. If the patient continue to live, the intestine bursts, and the fæces at length find an outlet, either through the wound made by the surgeon, or an opening formed by the separation of the sloughs. Of course, before the bowel mortifies, the neighbouring inflamed part of it becomes adherent to the neck of the sac. After this the final result may be of three kinds: either the death of the patient; his recovery, with the loathsome annoyance of an artificial anus; or the gradual diversion of the fæces from the wound to their natural course again, the cicatrisation of the part, and a complete cure.

The principal thing, on which the re-establishment of the continuous state of the intestinal canal depends, is the adhesion which the living portion of bowel, adjoining the mortified part, contracts with the peritoneum all round. In this manner, the escape of the contents of the bowel into the cavity of the abdomen is in general completely prevented. The two ends of the sound portion, after the sloughs have been thrown off, become connected together through the medium of a membranous cavity, which previously constituted a portion of the peritoneal sac. The gradual contraction of the wound closes the membranous cavity externally, and thus the continuity of the canal is restored. The two ends, however, are not joined, so as to form an uninterrupted cylindrical tube, like that of the natural gut; but they are united at an angle more or less acute; and the matter, which goes from one to the other, describes a half circle in the membranous cavity, while the two ends of the bowel always lie in a more or less parallel manner by the side of each other; the upper with its orifice directed towards the external wound by the fæces, as long as they take that direction, while the lower is less capacious.

This account will enable you to understand, that there must be a considerable projection, or jutting angle, between the orifices of the bowel, directly opposite the communication between the cavity of the intestine and that of the *semi-circular funnel-shaped membrane*, as I think, it is termed by Professor Scarpa. Now, it is this projecting ridge, or angle, that

forms a material obstacle to the direct passage of the fæces from the upper into the lower portion of the intestinal tube. It constitutes one of the chief hinderances to the cure of an *artificial anus;* and it is by destroying it by the pressure of a pair of forceps constructed for the purpose, that Baron Dupuytren, and other surgeons, have often succeeded in curing that loathsome affliction.

Here, I may also observe to you, gentlemen, that much of the danger of an *artificial anus* will depend upon its degree of nearness to the stomach. Thus, if the opening be in the jejunum, there will be so small an extent of surface for the absorption of chyle, that the patient will die of inanition.

If you first detect mortification of the bowel on opening the sac, and there should be only one or two spots, you are to divide the stricture; and if the gut be not adherent, it is to be reduced.

When the chief part or the whole diameter of the bowel is mortified, the indication is to make an outlet for the intestinal matter, by a free incision through the sloughs, and by cutting the stricture if it should still exist. Here, of course, all idea of reduction of the parts is out of the question.

Gentlemen, in *operating upon very large hernia* of long standing, I wish you to remember, that the proper plan is to divide the stricture, without laying open the hernial sac, or attempting to reduce the parts. The free exposure of the cavity of a bulky hernia is itself a frequent source of fatal mischief.

In operating upon *herniæ within the inguinal canal*, but not protruding through the ring, you should make the incisions in the direction of the spermatic cord. In such a case, the stricture will be found at the internal ring.

With respect to the *treatment after the operation*, I may observe, that the wound is to be closed with a suture or two, and lightly dressed. Evacuations from the bowels are to be promoted by means of small doses of sulphate of magnesia, dissolved in peppermint water, and aided by clysters, if requisite. The patient must not, however, be allowed to sit upon the night-stool, as doing so would be likely to bring on a protrusion of the bowels again. It is safer to put a bed-pan under him. If tenderness and tension of the belly, with costiveness and febrile symptoms, should come on again, in the course of a day or two, you should have recourse to local and general bleeding, poppy head fomentations, and the exhibition of castor oil. If the stomach should be much disturbed after the operation, the sulphate of magnesia may be given in the effervescing saline draught, with or without a few minims of the tincture of opium, or hyoscyamus.

Before the patient leaves his bed, a truss is to be applied.

When the bowel has been much discoloured, it will sometimes give way two or three days after the patient has appeared to be going on well; and the patient is destroyed by peritonitis resulting from effusion of the contents of the bowels into the cavity of the peritoneum.

In the *Operation for the relief of a Strangulated Direct Inguinal Hernia*, remember, gentlemen, that the coverings of the sac are the skin and superficial fascia, the spermatic fascia, the tendinous fibres of the internal oblique and transverse muscles, if not torn, or burst, and the fascia transversalis. It is only in the vicinity of the abdominal ring, that this hernia has any fibres of the cremaster spread over it. The several investments here specified are to be divided, much in the same way as those of the external bubonocele, and the stricture cut, either upwards and inwards, or directly upwards, as preferred by Sir Astley Cooper, for a reason already explained to you.

The *Femoral* or *Crural Hernia* is so called, when the hernial sac and its contents protrude under Poupart's ligament at the inner side of the femoral vein, so as to be situated in the bend of the groin, upon the pectinalis muscle, between the gracilis and sartorius. The protrusion takes place, in fact, through the *crural* or *femoral* ring, or the opening destined for the passage of the femoral absorbent vessels. When once the sac has descended beyond this opening, the hernia has more room to extend itself forwards, and to each side, and the integuments now become raised into an oval swelling, the greatest diameter of which is nearly transverse.

The femoral hernia is frequent in women, who have had children; but is rare in young girls. In men, a hernia more readily forms through the inguinal canal, by following the course of the spermatic vessels, than under Poupart's ligament; but the latter case is far from being so uncommon in them as sometimes represented.

The tumour produced by a femoral hernia, is apt to be mistaken for an enlarged gland. A gland can only become enlarged by the gradual effects of inflammation; the swelling of a femoral hernia comes on suddenly; and, when strangulated, occasions the train of symptoms which I have already described, which symptoms an enlarged gland could never occasion.

When the expanded part of a femoral hernia lies over Pouparts's ligament, it may be mistaken for a bubonocele; but, gentlemen, you may always make out the true nature of the case by observing, that the neck of a femoral hernia has Poupart's ligament above it. In the bubonocele, the spine of the pubes is below and behind the neck of the sac; but, in the femoral hernia, it is on the same horizontal level, and a little on the inside of it.

When a femoral hernia expands in the bend of the thigh, its shape is oval, and its greatest diameter is placed transversely; but, whatever may be the size of a common inguinal hernia, it has an oblong pyramidal shape, with its fundus not inclined towards the

ilium, but in the direction of the spermatic cord towards the scrotum.

Besides the symptoms common to all hernial swellings, the femoral hernia, when of a certain size, has some which are peculiar to it, as stupor, and sense of weight in the thigh, and sometimes œdema of the leg and foot; circumstances accounted for by the pressure of the hernia on the blood vessels, lymphatics, and nerves, which pass out of the pelvis in its vicinity.

Now, gentlemen, with respect to the *surgical anatomy of femoral hernia*, I will take this opportunity of reminding you of a few circumstances, which, no doubt, you have already had a masterly description of, from my distinguished friends, the professor and demonstrator of anatomy at this school.

The *crural arch* is a term applied to the lower margin of Poupart's ligament, the space intervening between which and the ilium and os pubis, is in a great measure closed on the side towards the abdominal cavity by the union of the *iliac* and *transverse fasciæ* at Poupart's ligament, which fasciæ, in fact, shut up all that space, which is between the anterior superior spinous process of the ilium and the femoral vessels. Hence, gentlemen, it is manifest, no hernial protrusion can ever happen in the space below the crural arch to the outside of the femoral artery and vein. The occurrence is prevented not only by the junction of the iliac and transverse fasciæ within, but also by the *fascia lata* without, which, in this situation, is strong and closely attached to the subjacent parts. Now the femoral hernia takes place through the *crural ring*, which is situated under the crural arch, more towards the pubes, in fact, between the thin posterior border of the *crural arch*, termed *Gimbernat's ligament*, and the femoral vein.

As the protrusion does not take place through a simple aperture, but follows a course of some length, the expression *crural canal*, employed by Scarpa and Cloquet, is perhaps more correct than that of *crural ring*. It is at all events the superior or posterior aperture of the *crural canal* which you are to understand as being implied by the *crural ring*, the canal itself extending obliquely downwards and forwards for a half or three-quarters of an inch, and terminating below at the oval depression, for the vena saphena major.

The viscera descend at first nearly in a perpendicular direction, and come into the hollow in front of the pectinalis, but the hernia then turns forwards, and directs itself rather towards the ilium, the fundus of the sac being sometimes actually tilted up, as the expression is, over the crural arch.

Then, gentlemen, it is worth your while to remember, that as the protrusion descends over the pectineal line, or close attachment of the pectinalis muscle to the pubes, it must be situated over the pubic portion of the fascia lata. *Gimbernat's ligament*, which is a part of so much importance in the anatomy of femoral hernia, I think, will be best understood by considering it, as a prolongation or extension of Poupart's ligament, which, when it approaches the os pubis, becomes suddenly broader, and is attached by this broad portion along the whole length of the angle and crista of that bone.

The posterior edge of Gimbernat's ligament is concave, thin, and sharp, and the ligament itself about three quarters of an inch in breadth.

Now the *crural ring*, through which the femoral vessels descend, is formed by this posterior edge, or, as it is sometimes termed, the base, of Gimbernat's ligament, directed towards the crural vein—externally by the femoral vein—or rather by a production of fascia, or a kind of septum placed between that vessel and the great lymphatics of the thigh; anteriorly by the under edge of the crural arch, or by Poupart's ligament; and posteriorly by the os pubis.

But into the crural ring productions both of the fascia transversalis and fascia iliaca always descend, so as to form at once a *tubular sheath for the femoral vessels*, and a lining for the crural canal, the front half being formed by the fascia transversalis—the back by the fascia iliaca; and, as Sir Astley Cooper has clearly explained, it is through the inner side of the sheath next to the pubes that the femoral absorbent vessels pass into the abdomen, the opening for which gives a cribriform appearance to this portion of the tubular sheath. The crural canal is wider above than below: its external side, which is straight, being closely applied to the femoral artery, while its inner margin extends downwards and outwards from Gimbernat's ligament to the femoral vein, just on the inner side of which vessel is an oval aperture merely occupied by a lymphatic gland, and some absorbents and cellular substance, through which opening the hernia, in the continuation of its descent, passes towards the point of the fascia lata, at which the vena saphena major gets to the femoral vein, which point is included within what is called the *falciform process*.

The very lucid and original explanations of the anatomy of femoral hernia by Sir Astley Cooper reflect the highest honour on himself, on his profession, and, I would also say, on his country. We knew little about various points in the minute anatomy of femoral hernia until he demonstrated them, and published a clear description of them in the great work which is upon the table. If you turn to this source of information, or, what is better, if you dissect and open the tubular sheath, you will find that it contains two membranous partitions, one passing between the artery and vein, and another between the vein and the absorbents. The artery and vein completely fill up the spaces in the sheath allotted to them; but the absorbents being but loosely connected by cellular tissue, do not always afford sufficient resistance to prevent the descent of the viscera

in this situation, and the formation of a crural hernia. It is this opening, then, in the inner part of the sheath which is really the aperture by which the bowels descend, and which is situated, as already stated, between the thin crescentic edge of the base of Gimbernat's ligament and the femoral vein, or rather the septum. Or, I may say, that the hernia protrudes through the division of the tubular sheath designed for the transmission of the principal trunks of the absorbents from the lower extremity, scrotum, and superficial parts of the hypogastric region into the pelvis.

The *falciform process* is easily comprehended, when you remember that the fascia lata has two origins, one from the lower border of Poupart's ligament, all the way from the anterior superior spinous process of the ilium, to the tuberosity of the os pubis. This, which is the thickest and strongest, is called the *iliac portion*, and it covers the sartorius and rectus muscles, the femoral artery and vein, and the anterior crural nerve, its breadth in the adult subject being from four to five inches.

Then, gentlemen, with regard to the *inner* or *pubic portion* of the fascia lata, it arises from the pubes, in front of the origin of the pectinalis muscle, which muscle it covers, together with the adductor muscle, and afterwards unites with the iliac portion of the fascia lata, under the great saphena vein. Of course, it lies behind or under the femoral vessels, while the iliac portion is in front of them; and you know, that above it is continuous with the iliac fascia. From this description, gentlemen, it is manifest, that where the pubic portion of the fascia lata joins the iliac portion under the vena saphena major, there must be an aperture left for the passage of that vessel. This opening is termed the *saphenous opening*, the concave external margin of which consists of part of the *falciform process*, first correctly described by Mr. Allan Burns.

Scarpa represents the iliac portion of the fascia lata as connected with Gimbernat's ligament; and Mr. Lawrence describes the upper end of the falciform process, not merely as passing in front of the femoral vessels just as they emerge from behind the crural arch, but as bending under Poupart's ligament, so as to unite with the thin border of the arch called Gimbernat's ligament.

The great saphena vein passes over the inferior sharp edge or lower horn of the falciform process, and there joins the femoral vein. Then, between the parts just described and the skin you have the *fascia superficialis*, quite distinct from the fascia lata, and consisting of two layers, between which lie some adipose matter and the superficial inguinal glands.

In femoral hernia the viscera descend through the crural ring, pushing before them the peritoneum. They then pass into the tubular sheath of the femoral vessels, and afterwards turn forwards, and even upwards, through the saphenous opening in the fascia lata, so as to lie over the iliac portion of the fascia lata.

The coverings of the femoral hernia, gentlemen, are the *integuments*, the *fascia superficialis*, and the *fascia propria*, or tubular sheath of the femoral vessels, besides the peritoneal hernial sac. The epigastric artery passes obliquely upwards and inwards about half an inch from the external side of the neck of the sac. When the obturatrix artery arises from the epigastric, it may go either near the outer or inner side of the neck of the sac to the obturator foramen. When the common trunk of these vessels, so originating, is long, and the place where the obturatrix goes off from it is high up, the latter vessel may descend near the upper and inner border of the crural ring. But, when it arises from the epigastric lower down, it will then pursue its course downwards near the external margin of the neck of the sac. The spermatic cord, or, in women, the round ligament, passes directly over the superior part of the hernia. All these are essential things to be considered in operating on a femoral hernia; a subject, with which I shall begin the next lecture.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XXVII.

Analysis of Symptoms of Cerebritis—Inconstancy of Pain—Intermittent Pain—Phenomena of the Eye—State of the Pupils—Researches of Parent and Martinet—Relief by Convulsions—Dangerous Effects of Opium--Delirium--Phenomena of Organic Life--Sympathies of the Digestive and Respiratory Systems—Treatment of Hydrocephalus—Mercurial Gangrene of the Mouth—Mode of Treatment.

GENTLEMEN,—Before we leave the subject of inflammation of the brain, I shall draw your attention to a brief analysis of some of the more prominent symptoms of this disease; and here I am anxious to impress upon you, that the true mode of studying this subject is not by reading the descriptions given by this or that systematic writer, but by the careful perusal of *monographs*, in which the details of a great number of cases, occurring under different circumstances, are accurately reported. You would be mistaken, indeed, if you were to conclude that you had acquired a thorough knowledge of the symptoms of phrenitis or arachnitis by reading the description of Cullen, Thomas, or Mason Good. The only mode of studying the subject properly is, to take accurate notes of every case which you meet with,

and to study with care those monographs in which a number of cases, attended by different symptoms, are detailed with impartiality.

I would not occupy your attention further with this subject, but that there is much error prevailing with respect to inflammation of the brain and its membranes. Persons are in the habit of supposing that these symptoms are always constant and well marked, but, the truth is, they are subject to very great varieties. The first symptom to which I shall call your attention is *pain*. This, you will recollect, is a prominent symptom of most visceral inflammations where the disease is situated on, or close to, the surface of the organ, but when it is deep-seated this symptom becomes more or less obscure. Now, in a case of arachnitis, we have a double source of pain, one depending upon the affections of the serous membrane, the other arising from the circumstance of disease being situated on the surface; and hence it is, that, in the great majority of cases of arachnitis, pain is a constant and prominent symptom. Still, if you were to conclude that pain is *always* present in arachnitis, you would be wrong, for there are many cases on record in which it was either partially observed or completely absent. You will be greatly assisted in your pathological studies by attending to the different results of inflammation of analogous structures, for we find that in some of the inflammatory affections of serous membranes there is little or no pain. We may, for instance, have pleuritis, pericarditis, and even peritoneal inflammation latent, so far as pain is concerned; nay, many persons have gone so far as to say, that it is only where the muscular tissues of the belly are engaged that we have pain in peritonitis. I have seen pericarditis run through all its stages without any pain being complained of by the patient. Now, if this absence of pain be a matter of no unusual occurrence in some inflammatory affections of the pleura, pericardium, and peritoneum, there is no reason why it may not occur in some cases of arachnitis. Still, it must be acknowledged, that pain is one of the most remarkable and constant symptoms of arachnitis, and that, of all the serous membranes, the arachnoid seems to be endowed with the greatest sensibility.

We might inquire here, whether the pain of cerebral inflammation be significant of any particular lesion of the brain. I believe that upon this point the state of our knowledge is very unsatisfactory. Pain, as a symptom of cerebral inflammation, occurs in very different cases. We may have it in connection with disease of the superior, lateral, or inferior parts of the brain; we may have it in cases where the result of the disease is a serous, hæmorrhagic, or purulent effusion. The rule, then, to be borne in mind is this:—first, that it is present in the great majority of cases of arachnitis; next, that it may accompany many different lesions; thirdly, that it may be absent; and lastly, that with the same lesions we may have pain in one case, and absence of it in the other.

The next subject for inquiry is, does the seat of pain generally point out the seat of inflammation? Andral distinctly affirms that it does not. In some cases, pain of the frontal region has been found to accompany disease of the ventricles, and pain in *one side* of the head, an affection of the arachnoid covering of both hemispheres. We see the same thing occurring in the case of other serous membranes. Thus, in the pleuritic inflammation of phthisis, pain is very seldom felt in the situation of the disease, but generally lower down, and I have seen some cases in which pain has been complained of only in the sound side. I recollect a case of very extensive pneumonia, in which the patient complained only of some pain in the region of the kidney and small of the back.

The pain which accompanies arachnitis generally sets in at an early period of the disease, and is characterised by great intensity, two circumstances in which it resembles the pain of pleuritis. In most cases, it is found that any thing that impedes or oppresses the circulation of the brain, increases this pain, and hence it is that some practitioners are led to think, that if pain of the head be relieved by pressure, it cannot be inflammatory. Now, I wish to call your attention to this point, because, in some cases where evident marks of arachnitis were found after death, it was observed that during life the pain of the head was relieved by pressure. The patients have been found with a bandage tied firmly round the head, from which they experienced decided relief, and yet a post mortem examination gave unequivocal proof of the existence of arachnitis. So far, then, as these cases go, it appears that the mere fact of pain being relieved by pressure does not prove that it is unconnected with an inflammatory cause. The pain, too, of an arachnitis may be intermittent, and continue to exhibit this character even for a considerable length of time I have seen many instances of this in children, where the little patient was seized with acute pain of the head at a particular time of the day, which, after a few hours' duration, subsided, and then returned again the next day at precisely the same hour, and continued in this way for several weeks, until at length his friends were surprised by the unexpected supervention of coma, convulsions, or blindness. I knew two cases of this kind in which the intermittent character of the pain was so prominent as to engross the practitioner's whole attention, so that the real nature of the affection was overlooked, and bark prescribed. I have now witnessed three or four of these regular quotidian attacks of pain in children, which after continuing for days and even weeks were suddenly followed by perfect blindness, in some cases with, and in others without coma.

You might here ask, whether pain is to be considered as a diagnostic of arachnitis?—I cannot say it is. We constantly meet with severe pain of the head without arachnitis, and every one knows that the headach of fever is by no means an indication of inflammation of the brain. In many cases of hysteria, the headach and determination of blood to the head are violent, and yet unconnected with inflammatory action. I know a young lady who is frequently attacked with most agonising headach, accompanied by violent throbbing of the carotids and great heat of the face and scalp. Yet in this case it is plain that the pain cannot be inflammatory, for she has been subject to these attacks once or twice a week for the last six years, and yet continues otherwise in a state of good health. If her disease were to be measured by the violence of the pain and determination of blood to the head, it would be natural to expect that death would have long ago put a period to her sufferings. This is another proof of the truth of the opinion, that there is no single pathognomic symptom of disease. Bear this in mind. I might go farther, and say, that whether we looked to symptoms or to signs the rule was the same. The man who merely looks to a single sign or symptom will frequently err; it is only from the whole group of signs and symptoms presented by a disease that we can arrive at any accurate diagnosis.

The state of the eye, in cases of arachnitis particularly, has attracted much attention. On this subject much valuable information has been obtained by the laborious investigations of Andral, of which I shall give an abstract. He states that the phenomena of the eye, in cases of cerebral inflammation, may be reduced to three classes; its motions, the various conditions of the pupil, and the state of vision. With respect to the first of these, it may be observed that in some cases we find the eyeball in constant motion, in others it is quite fixed, while in others the balance of muscular power is lost, and there is a constant tendency to strabismus of one eye or both. Of all these varieties in the state of motion, the last appears to be the most valuable so far as the diagnosis of arachnitis is concerned. By many persons this strabismus is looked upon as a sign that *effusion* has taken place, and that the disease has reached its incurable stage; a position which I am inclined to doubt, from having seen cases recover in which this symptom was present. However, Andral looks upon strabismus as a very valuable sign, and thinks that of all the lesions of motion of the eye it is the most important with respect to the diagnosis of *arachnitis of the ventricles*. With respect to the condition of the pupil, it is stated in books that in the early stage you have a contracted, and in the advanced a dilated pupil, and that the latter condition signifies that effusion into the brain has taken place. Now the truth is, that this statement must be received with great caution, and as admitting of numerous exceptions, for it has been established that the same lesions of the brain are sometimes accompanied by very different conditions of the pupil, and *vice versâ*. Parent and Martinet, who have investigated the subject carefully, are the best authorities on this point, and I shall give a brief abstract of their experience. In cases where *both pupil's were dilated*, they observed that in some there was effusion into one of the ventricles, in others into both. In cases where there was no dilatation they observed that in some there was serous or purulent effusion under the arachnoid, while in others, in which there was no effusion whatever, the pupil was dilated. Lastly, it was found that in some cases, where only one pupil was dilated, there was effusions *into both sides of the brain*. You might here ask, whether effusion into the substance or on the surface of one side of the brain is connected with a dilated condition of pupil? In reply to this, it may be stated, that effusion into the substance not of one but of both hemispheres has been known to be accompanied by a contracted state of the pupil to the last. You may also have one pupil contracted and the other dilated; nay, you may have *an alteration of these conditions*, the right being dilated to-day, the left to-morrow. The mere circumstance, then, of dilatation or contraction of the pupil is no sign, when taken by itself, as to the seat or even the existence of effusion, for you may have either condition with or without effusion, and you may have dilatation of the pupil of one eye with an effusion into both sides of the brain. As a general rule, however, it seems to be made out, that in most cases of cerebral inflammation terminating in effusion, there is often, towards the advanced period of the disease, some dilatation of pupil, and that this condition generally marks the occurrence of effusion.

With respect to the affections of the function of vision, there are great varieties. Some patients have double vision; others see sparks of fire, or muscæ volitantes. There are many other phenomena of the kind, causing a great variety in the symptoms, and this variety is found to depend more on the susceptibility of the brain to irritation, rather than on the mere existence of irritation of the serous membrane investing it. The same rule applies to all cases of serous inflammation, the phenomena of inflammation varying according to the susceptibility of the organ which the inflamed membrane covers. Thus, for instance, one patient will have pericarditis with palpitations of the heart, another without them; their occurrence or non-occurrence merely showing that the heart is more or less susceptible to irritation. So it is with respect to the brain, and the symptoms of deranged vision are connected with the greater or less susceptibility of the organ, which we know varies very con-

siderably in different persons. This remark applies to all the forms, and, I believe, all the phenomena of meningitis.

In acute disease of the brain and its membranes, we often have convulsions and paralysis, and in these symptoms also we find great variations. In some we have convulsions of one side, in some of both, in others we have paralysis, but scarcely any convulsions. The same remark also applies to these symptoms as to some already mentioned, namely that we cannot from them alone form an accurate estimate of the situation or amount of disease. You may have convulsions and paralysis of various kinds with the same kind of lesion, and you may have a variety of lesions with the same paralysis and convulsions. The only thing that appears to be pretty well established is this, that generally speaking, in cases where the right side of the brain is engaged, you have convulsions and paralysis of the left side of the body, and *vice versâ*.

Before I proceed to speak of delirium, I think it necessary to say a few words more with respect to convulsions, as I find Andral has not touched on a point to which I beg to call your attention. The occurrence of convulsions in a child, labouring under symptoms of inflammation of the brain, is always looked upon as formidable, and indeed it is natural that convulsions, to persons unacquainted with pathology, should seem to point out a great intensity of disease. I have, however, been long of opinion that convulsions occurring during the existence of hydrocephalus in children, or of meningitis in adults, are not so dangerous as persons generally think. I will even go so far as to say, that the worst cases I have seen, in which a cure was effected, were those in which there were the greatest and most violent convulsions; and that in most of the cases which appeared to go on without any benefit from medicine, there were scarcely any. I am of opinion that convulsions are often of benefit by giving relief to the brain. This statement must appear somewhat paradoxical, but I trust I shall be able to prove to you that it has some foundation in truth. Broussais has taught that there appear to be two great modes of reaction in the economy, to obviate the effects of anormal stimulation applied to important viscera, fever and convulsions. The irritations which attack the crebro-spinal system may be relieved by convulsions; those which attack the viscera may be relieved by fever and secretion. This doctrine, I think, might be expressed otherwise. The irritations of organs are often relieved by an increase, with or without alteration, *of their secretions*. But as we have used the term *secretion* to express something material we apply the proposition merely to the viscera of organic life. Now it may also be extended to the organs of animal life. A violent expenditure of nervous power may relieve the brain or spinal cord, and delirium and convulsions prevent or modify organic changes, just as secretion from the lung or bowels may prevent ulceration.

I have said that the brain might be relieved by convulsions. Let us, holding this assertion in view, compare the phenomena and results of apoplexy with those of epilepsy. In the first place, it is to be remarked that the earlier phenomena of both are the same, namely, an active congestion of the vessels of the head. Any one who has seen the first stage of both must admit this. But let us follow them up through their remaining stages. In the one we have the determination to the head followed by convulsions more or less violent and protracted, which, however, subside after some time, and the patient gets well; in the other there is either death from the violent determination of blood and probable effusion, or, if the patient recovers, there is very often paralysis, showing that injury has been done to the substance of the brain. Now, here we perceive that the case of determination without convulsions is that in which th re is either death or recovery with paralysis; there are no such bad consequences to be dreaded where the determination to the head is followed by convulsive fits. In apoplexy we have congestion followed by death, or recovery with paralysis; in epilepsy we have congestion, convulsions, and relief. It is plain that, if we admit the identity of the phenomena in the early periods of both, we must then also admit that the only cause of relief we can ascertain is convulsions. This idea of the subject will explain how it is, that a man may continue for years subject to repeated attacks of cerebral congestion, and yet continue to enjoy tolerable health. It will also explain why it is unnecessary and sometimes even dangerous to bleed in epilepsy. It also shows why it is so often unaccompanied by paralysis, because the brain is relieved by the expenditure of its nervous energy on the muscular system. I think we should generally look upon the occurrence of convulsions, in a case of cerebro-spinal irritation, in the light of an attempt at a crisis made by nature itself. What is a crisis? An organ labouring under irritation is suddenly relieved by a new process taking place, either in itself or in some other part; and when we come to examine what these modes of relief are, we find them to consist in the occurrence of supersecretion, hæmorrhage, exanthematous eruptions on the surface, or convulsions. There is no doubt that when we look to the results of the sudden supervention of a copious secretion in an inflammatory affection of any secreting organ, the source of relief is manifest. If we take two cases of hepatitis or bronchitis, one attended with copious secretion, the other without any secretion at all, it will be easy to conceive how much more dangerous the latter is, and how much more difficult to manage. Now, if we consider the brain in this point of view, we find that it is not a secreting organ, in the ordinary acceptation, and that the only mode in which it can relieve itself is by the expen-

diture of its excess of nervous energy on the muscular system, or by the same expenditure of mental energy, as in the case of high delirium. I think we might fairly draw an analogy between this mode of relief and that which in other diseases is the result of hæmorrhage or secretion. One fact, at all events, appears certain, that in two most remarkable cases of different diseases, each, however, characterised by the same phenomena in the early stage, namely, active determination to the head, we find that the case which turns out favourably is that in which convulsions occur (namely, epilepsy); while, in apoplexy, where these symptoms are absent, we have either death or recovery with paralysis.

If this opinion be well grounded, it would militate strongly against the practice of checking the convulsions of meningitis by opiates. I feel convinced that this practice is wrong and dangerous. Its effects may be as injurious as the arresting the reactions by astringents in a case of acute inflammation. There are two ways in which we can explain its bad effects. In the first place, opiates prove detrimental by checking the convulsions, which appear to be a mode of relief adopted by nature; and, next, they must do mischief from their well-known tendency to add to the existing cerebral congestion. I have now seen a good many cases of meningeal inflammation, in which convulsions took place, and where opiates were employed to remove them, and feel compelled to state that the opium has certainly relieved the convulsions, but the patients have afterwards fallen into a state of profound coma, from which they never recovered. I have witnessed this so often, that I should not discharge my duty properly, did I not warn you against the employment of opium in arachnitis. The same rule most commonly holds good in cases of visceral inflammation, where an organ is in a state of irritation, and has its secretions suppressed. Here also opium, by arresting secretion and increasing congestion, will be productive of bad effects. I allude here particularly to the treatment of pneumonia by opium, as recommended by Dr. Armstrong, who lays great stress upon its use in full doses after having premised a single bleeding. I have had some experience of this mode of treatment, and find that the effect of the opium is, not to remove, but to convert a manifest into a latent disease. I have seen the pain, dyspnœa, and cough subside, but the fever continued, and the destructive process of the lung went on as usual. This is the result of my experience.

I shall now make a few observations on the occurrence of delirium in disease of the brain. In one of my former lectures I alluded to the important fact, that in the majority of cases of meningitis, where delirium was present, there was inflammation of the convexity of the brain. I stated also, that, when inflammation attacked the base of the brain, we might have it going through all its stages without delirium, and pointed out the importance of this in favour of the phrenological doctrines. Andral admits the occurrence of delirium in case of inflammation on the convexity of the brain, but his reasoning upon this subject appears to me to be inconclusive. He divides affections of the convexity of the brain into those which are characterised by delirium through their whole course, and those in which coma is the most remarkable feature, and seems to think that where coma is the most remarkable symptom, the results of the case are unfavourable to phrenology. But we shall find on examining these cases, that in many of them, where coma was the predominant feature, there had been delirium in the commencement. He gives the details of thirty-nine cases accompanied by delirium all through, in thirty-six of which there was disease of the convexity of the brain, either simple or complicated with arachnitis. As far then as his first set of cases go, they are in favour of the opinion that inflammation of the convexity of the brain is most commonly attended by delirium. It appears also, that those cases in which coma was the most remarkable symptom, there was more or less delirium in the commencement; so that whether we take the cases in which there was delirium all through, or those in which there was coma, the conclusions appear to be in favour of the doctrines of phrenology.

I shall now proceed to make some remarks on the phenomena of organic life in cases of cerebral inflammation. In the first place, with respect to the tongue, we find that in simple arachnitis it is but slightly affected; there may be some trifling degree of foulness, or it may be quite clean and moist. You will observe the value of this, as connected with the diagnosis of irritation of the brain from disease of the digestive system. There are many cases of irritation of the digestive system putting on the semblance of hydrocephalus to such a degree, as even to mislead an experienced practitioner. Now, if it be true that in simple arachnitis the tongue remains clean, it furnishes us with very material information, as, under such circumstances, our attention will be directed to the true seat of disease. Andral says, that in some cases of arachnitis he has found the tongue red, or dry, or foul, but that at the same time there was disease of the digestive system. The majority of his cases, however, were simple, and exhibited no marks of an affection of the tongue or digestive system.

There is one more symptom on which I wish to offer a few observations, and that is the occurrence of vomiting in the hydrocephalus of children. In all cases where there is obstinate vomiting, particularly in children, you should have your suspicions roused, and look carefully to the state of the head. Vomiting is a symptom which occurs in many cases of arachnitis; in some it is slight, in others more constant, while in a third class it

is harassing, incessant, and produced by swallowing the most unirritating substances. The nature of the fluid rejected from the stomach is various, being sometimes bilious, sometimes mucous, sometimes only consisting of what has been recently drunk. In some of these cases you will find the symptoms of incessant vomiting, unaccompanied by pain of the stomach, tenderness of the epigastrium, or any other sign of disease of the digestive system. I have even seen it co-existing with a good appetite. Many persons have been lost by such cases having been mistaken for disease of the digestive system, the practitioner being ignorant that vomiting was here only symptomatic of disease of the brain. No matter what the situation of the meningitis may be, it is now established that you may have vomiting as a common symptom. I recollect the case of a delicate child, about seven years of age, who laboured for some time under catarrhal fever, on the subsidence of which she got an attack of vomiting, which came on at different times in the day, but without headach, delirium, or intolerance of light. This vomiting continued from day to day; and, at the end of a week, the pupils became suddenly dilated, and coma set in, under which she died. There is one very remarkable circumstance connected with this subject, with which I am anxious you should be acquainted. *Where this incessant vomiting is present, you will have the other symptoms of meningitis more or less latent.* This illustrates a law before alluded to, that where the phenomena which are the result of sympathy with an affected organ are very prominent, those which characterise the disease of the organ itself are more or less latent. If we take the reverse of the former case, and consider a case of gastric disease, we know that the irritation of the stomach will produce violent cerebral symptoms, and that here also the same law is exemplified, for we shall have absence of pain, tenderness, and vomiting. The great value of this rule is, that a knowledge of it will put you on your guard, and that the mere absence of the peculiar symptoms of an affection of an organ possessing extensive sympathies, should not lead you to conclude that there was no disease of that organ. In some remarkable cases of gastritis, the principal symptoms observed were convulsions and delirium; there was no vomiting or thirst, very little pain on pressure, and nothing remarkable in the condition of the tongue. The same latency of inflammatory disease is frequently seen in cases of delirium tremens.

With respect to respiration and the state of the pulse in meningitis, there is very little to be said. You may have meningeal inflammation with every variety of pulse, strong, weak, full, rapid, slow, or intermittent. Generally speaking, the pulse is, towards the close of the disease, feeble and intermitting, but you may have the disease running through all its stages without any peculiarity in the character of the pulse. Respiration seems to be very little affected, and this would appear to favour the opinions of Sir Charles Bell. There is no doubt, at least, that the sympathy of the brain with the respiratory system is much weaker than with the digestive.

Treatment of Hydrocephalus.—I shall occupy your time but very briefly on the treatment of the hydrocephalus of children, as it appears to me to be a disease in which, of all others, the principles of treatment are most simple. The old idea of this affection was, that it was a species of dropsy, depending on a relaxed state of the cerebral vessels, and hence the term hydrocephalus. Modern pathology has shewn that the occurrence of serous effusion is a mere accidental circumstance, as it is present in one case of arachnitis, and absent in another. When it does occur, however, *it is the result of inflammatory disease*, and it is to the prevention and cure of this that the practitioner must direct his attention. With the symptoms of this disease, I shall not take up your time, as you will find them sufficiently detailed in books; but with respect to treatment, I shall say that hydrocephalus is a disease *much more* under the influence of treatment than persons generally think. It is said that, when once effusion has taken place, the case is hopeless, and nothing can be done. This remark appears to me to be unnecessary, for there is no symptom from which you can venture to assert that *effusion* has set in. You may, from the inflammatory state of the brain, have delirium, coma, deafness, blindness, and paralysis, without any effusion of serum, and in many cases life has been saved, even after the appearance of all these symptoms.

This term *effusion* is one of the bugbears of medicine. Many patients are lost from the prevalence of false ideas connected with this subject; for as soon as *effusion* is supposed to have set in, the efforts of the practitioner are given up. Hundreds of patients die of bronchitis and pneumonia, in whom life might be saved if the symptoms of *effusion* had been treated for those of inflammation; and so it is with respect to the brain. This effusion is not the disease; it is not even a constant result of the disease. We have no certain means of ascertaining its existence; and we know, that, by a persistence in antiphlogistic treatment, life may be often saved, even after all the supposed symptoms have occurred.

Gentlemen, take this with you as a rule in medicine,—always to keep your eye more upon the causes than the effects of disease.

The treatment of hydrocephalus in the child should always be active, and conducted on the same principles as those of general encephalitis in the adult. Shaving the head, bleeding when practicable, *repeated leeching*, *cold affusion*, *calomel*, and *purgatives*,—these are the great measures upon which we are to rely for success. It is satisfactory too to reflect, that many cases have been saved by the

prompt and steady adoption of this simple mode of treatment.

Of Internal Remedies.—The use of mercury seems to be that on which you should most rely. Some of the most singular recoveries have occurred after ptyalism has been produced. Let me remind you, however, that the rules connected with this mode of treatment, which I pointed out in speaking of hepatitis, apply equally in this case. There is a terrible consequence of mercurial action in the lymphatic temperament with which you should be acquainted,—I allude to a violent and destructive inflammation of the soft parts of the mouth and face, which has got the name of the *mercurial cancrum oris*. An œdematous inflammation of the cheeks, lips, and tongue, takes place, and, if not checked, rapidly runs on to extensive ulceration. I have seen one cheek, half of the nose, the lower eyelid, and the opposite angle of the mouth, utterly destroyed, in a case where but five grains of calomel were used. This drawing represents the disease, after a frightful perforation of the cheek. In this case the quantity used was nine grains. I have seen the disease from the use of so small a quantity as a grain and a half of calomel! These facts shew that there is a state of the constitution in which a minute dose of calomel may have terrible effects. The same too may arise from the external use of mercury. I recollect the case of a young woman in the Meath Hospital, whose head was rubbed with *one drachm* only of mercurial ointment, for the purpose of destroying vermin. She was attacked, and with difficulty saved.

The disease may also come on suddenly in a patient who has been for some time using mercury in considerable doses; but this is the rarest case.

You recognise this disease by the sudden supervention of great swelling of the lips and cheeks, so as to completely alter the expression. The tongue is also swollen. All these parts are hot and tender to pressure. The breath is fœtid, and the internal surface of the mouth excoriated, and often covered here and there with patches of lymph. At other times we have a circumscribed œdematous swelling, occupying the centre of the cheek, which runs on to ulceration; but most commonly the ulceration of the external parts begins at the depending angle of the mouth.

Gentlemen, in a case of this kind, if you are called before ulceration has taken place, I believe you can often save your patient, and prevent destruction of the face. Treat the disease as a violent inflammation. Use repeated leeching, poulticing, and the warm bath. *While you do this, you must keep up your patient's strength by light nourishment and wine.* Apply to the internal ulcerations the mel æruginis, the nitrate of silver, or the chloride of soda. I have now saved many cases by bold and repeated leeching. I remember one case of a man in which ninety leeches were used: he recovered perfectly.

In the treatment of this affection, it is of the utmost consequence to attend to the position of the patient. By keeping him as much as possible upright, or by preventing him leaning constantly on one side, we do much to prevent the occurrence of the ulceration of the angle of the mouth.

As far as I can see, hydrocephalus, when taken in time, is a very manageable disease; and there is only one case in which it is difficult to treat, and that is where the cerebral affection is accompanied by symptoms of gastro-enteric disease. In several cases of hydrocephalus, this complication certainly exists; and you have first symptoms of disease of the digestive tube, and then of the head. Such cases as these are involved in great difficulty, and in their treatment you run the hazard of falling into a twofold mistake. The first is your acting on the supposition that the disease of the head is only sympathetic, and that it will subside as soon as the abdominal symptoms are removed; the other is occupying your attention exclusively with the head. Now there is one rule with respect to this, which I think will serve to guide you through many difficulties, *and this is, never to neglect the head.* Though you have first an affection of the digestive system, and then of the head, it is better (even though the symptoms of the latter still continue) to pay attention to the head. You can do this at the same time that you are attentive to the condition of the digestive organs. Another rule is, that the cases of disease in which the purgative plan does not answer are generally those in which there is primary inflammation of the digestive tube. Dr. Cheyne, in speaking of the treatment of hydrocephalus, says, that some cases are benefited by purgatives, others not; and that the latter are those in which there is disease of the intestinal canal. In such cases you will not irritate the bowels, or add to the existing inflammation by purgatives. Let the bowels be kept open by enemata, and direct your attention immediately to the head. Children with largely developed heads, and of a strumous diathesis, are very subject to this disease; and I feel convinced that the present rage for the early mental education of children has a strong tendency to produce it in subjects of this description. I believe there are many cases of fatal hydrocephalus, from which the poor victims would have escaped but for the pernicious efforts of the parents to make them literary prodigies. I have observed many cases of this kind among the children of persons who, having been originally situated in an humble sphere, and deprived of the benefits of education, accumulate wealth, and then, feeling in their new condition the want of education, are anxious to communicate it to their offspring; and with that view have them educated with too much care and from too early a period. The child

is constantly kept at his books, his little mind is perpetually tasked, a degree of cerebral excitement is kept up, and while he is delighting his gratified parents with the manifestations of a precocious intellect, his health is neglected, and the seeds of disease are insensibly sown. One of the most ordinary consequences of this early application of the mental powers is hydrocephalus. These little creatures, too, have a congenital disposition to disease of the brain, for they have generally large heads. Such cases are examples of the results of an arrest of development. A relative condition of head exists similar to that which occurs during fœtal life, and this is always accompanied by a remarkable susceptibility to inflammation. This peculiar development of head also produces a precocious state of intellect, which is increased by the pernicious habit of obliging children to study at too early an age. Where you meet with children suffering under these circumstances, you will not discharge your duty properly if you do not point out to the parents the mischievous tendency of their conduct. In such cases as these it may be justly said that ignorance is bliss.

CLINICAL LECTURES

ON THE

SURGICAL ANATOMY AND TREATMENT OF THE UTERUS AND ITS APPENDAGES.

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LECTURE IV.

Peculiar Tumour of the Uterus—Polypi—Ulcerations—Simple Ulcerations—Ulcerations succeeding Tubercles—Fungous Tumours—Ulcerations and Carcinomatous Vegetations.

GENTLEMEN,—In order to complete my description of the affections of the uterus, it remains for me to add a few remarks relative to a peculiar species of uterine tumour, and to describe the polypi of which this organ is the seat.

A Particular Species of Uterine Tumour.—There exists a tumour, the nature of which is little known, which developes itself in the substance of the parietes of the uterus, and to which it is necessary for me to draw your attention. The ordinary seat of this tumour is at the inferior portion of the posterior uterine wall. If the finger be introduced through the dilated cervix into the cavity of the womb, you will feel on a point, the extent of which varies from the diameter of a shilling to a crown piece, a projecting round, and more or less circumscribed tumour, imbedded in the uterine parietes, and resembling one of those marbles with which children play, and of which the half only will be protuberant. It neither possesses the softness of a vascular, nor the hardness of a fibrous polypus. It is sometimes found insensible to the touch, at others the contact of the finger produces acute pain; its shape scarcely ever varies; but in one female I found it in the form of a cock's spur. The remainder of the organ is healthy in general. Is this tumour carcinomatous, or is it only the result of partial inflammation of the uterus, or a white point indurated scirrhus? Is it a polypus, a cyst, a cartilaginous, or osseous concretion? Pathological anatomy has shown the alternate existence of these different productions in the uterus, but, as regards the tumour which is now under consideration, it is necessary to avow that the examination on the living will not suffice to affirm its nature.

In this case the indications are limited to two kinds, viz. to combat the sub-inflammation, if it exists, and when it has disappeared, to have recourse to discutients, proceeding however, with a prudent reserve.

These tumours are considered as necessarily fatal, but I am not of this opinion. I have attended a great number of females labouring under this affection, and by arresting the inflammation, I have frequently prevented their degeneration; they sometimes disappear entirely, in other cases they become small and indolent, and no longer exercise an influence on the general health. They still retain, however, during a long time, a disposition to become again affected with irritation; their cause is an inflammation which must be combated by the means I have already described.

Uterine Polypi.—The nature of uterine polypi has been more correctly investigated than that of any other affection of these parts, and more particularly by Malgaigne*, I shall, therefore, only dwell on those points, which are either the least known or completely new.

The two most frequent varieties of these polypi are the cellulo-vascular, and the fibrous; the first are constantly seated either at the inferior portion of the uterine neck, between its two labia, or at the inferior part of the internal surface of the uterus. They are, in general, of little volume, single or multiplied, and present the form of granulations which are sometimes immoveable, and broad at their base, but they are commonly attached to the extremity of a more or less elongated pedicle. In the latter case it is somewhat difficult to recognise them on examination, particularly when the pedicle is inserted above the cervix, as they then recede from the finger into the interior of the womb. It is necessary to introduce the finger into this organ, which manœuvre is generally permitted by the sufficiently dilated neck.

In order to remove them you must dilate the vagina by the aid of a speculum, cleanse the parts with a camel's hair pencil, and seize

* See Des Polypes Uterins, 2nd edition, 1833.

the polypus with a pair of long forceps, twist it round several times, and afterwards tear it away. The only precaution necessary to be observed is, to seize the polypus near its root, in order to be sure of completing its total extirpation; the operation has succeeded if a slight depression be perceptible to the finger at the spot from which the pedicle had grown.

These polypi are frequently accompanied with hypertrophy, œdema of the uterine neck, and engorgement of the womb itself. Thus, all is not finished after the operation has been performed. The resulting wound forms an additional cause of irritation to the already diseased organ. It is, therefore, proper to ascertain, eight or ten days after the removal of these bodies, how far cicatrisation has advanced: this process encounters the same difficulties in its completion as after the amputation of the uterine neck.

In fibrous polypi I recommend you to exercise torsion only, when they possess a very slender pedicle. The ligature appears to me to be an inappropriate agent, and should be employed only as a last resource: the operation which ought to be preferred is excision. Most of you know in what manner excision is performed;—the polypus is seized with a pair of forceps, and lowered to such an extent so that the uterine neck presents itself at the vulva. Then, if it be necessary, the finger is introduced, and a pair of curved scissors (which suffice to make the section) conducted along it as far as the pedicle. When the root of the tumour is seated too high in the uterine cavity, you must incise the cervix itself, which division subsequently affords every facility to the operator. There is nothing to be feared from hæmorrhage; I have never seen more than a few spoonfuls of blood flow after the excision of these bodies, and plugging would be the certain means of arresting it in every case.

But, occasionally, when we attempt to draw down the polypus, it is found too soft, and tears under the action of the forceps. This circumstance would appear to render the excision performed in the ordinary manner impossible. It is no longer the polypus which ought to be seized in these cases, but the uterine neck itself. A few little punctures made in this organ by the forceps of Museux excite unnecessary alarm. It is known that the application of leeches to this part is unattended by pain, and even the amputation of the uterine neck is not a severe operation. Pressure alone appears endowed with the property of producing an acute sensibility on this organ, a phenomenon which is very remarkable, but not without analogy in the economy. I shall now, gentlemen, adduce certain facts in support of this new mode of proceeding.

A few months since I was called to visit a young female in the Rue des Cherche-midi, who had experienced a considerable flooding fifteen days after a favourable accouchement. The hæmorrhage had so greatly deteriorated the health of the patient by its continued repetitions, at certain intervals, that when I was consulted she was in a state of apparent death. MM. Andral, Bouillaud, and Hatin, had been already simultaneously consulted. I recognised the presence of a polypus, attached by a broad base to the fundus of the uterine cavity. No time was to be lost, consequently an operation was immediately resolved on. But the tumour was soft, spongy, and tore on the slightest effort that was made to exercise a traction upon it. I seized the cervix uteri with the forceps and brought it to the vulva. The research now became facilitated; the finger was enabled to traverse the entire base of the polypus; and, taking into consideration the dilatation of the uterus, and the debility of the patient, I gave the preference to the ligature, which was placed by means of the instruments of Levret. The thread was scarcely tightened before the blood ceased to flow. The following morning the pulse was increased in strength and fulness, and I was enabled to have recourse to a small bleeding. On the eighth day the polypus came away in a putrefied state, and on the fifteenth, a slight degree of debility being excepted, the patient was perfectly cured. The punctures caused by the forceps did not produce any accident.

A short time after this, the sister of a commander of a garrison in Paris placed herself under my care for an affection of the same nature. She had two polypi inserted contiguously into the interior of the uterus, half an inch above the os tincæ: one was of the size of a large walnut, the other elongated, somewhat flattened, and attached to a very slender pedicle, which glided along the former. I seized the largest with the forceps, and brought it to the vulva. I then insinuated a pair of curved scissors as far as the two pedicles, which I thought to have divided at one cut. But it was not so, as the first polypus was alone excised, whilst the other accompanied the uterus in its ascent. It would have been impossible to have thought of seizing it on account of the tenuity of the pedicle, and it was therefore upon the cervix that I fixed the forceps. In this manner the uterus was brought down to the vulva, the second polypus excised, and in three days the patient was able to walk in the gardens of the Luxembourg.

A question here presents itself which no author that I am aware of, has ever proposed. The polypus being detected, and the urgency of the operation proved, is it necessary to defer it because the female is at the menstrual period? I would answer this question by quoting the following case.

A young female from the south of France came to Paris to be cured of an affection of the uterus, she was unsuccessfully treated during three months, the case being taken for an uterine engorgement, when at length M. Latapie, who visited her in conjunction with two other medical practitioners, requested that I should be called in. I was told that every eight days this woman experienced expul-

sive pains, a symptom which, in these cases, always deserves attention, and which ought invariably to cause the suspicion of the presence of a tumour contained within the cavity of the uterus. On examining her I found the uterine neck dilated, almost obliterated, and on penetrating into the interior of the uterus, and describing with the finger the arches of a circle, in the manner which I have pointed out when speaking of the original examination, I arrived at a rounded body, which projected nearly an inch and a half from the internal surface of this organ. To avoid error, I examined several times. At length, having glided the finger between the tumour and uterine parietes, I was enabled to announce with certitude the existence of a polypus. The patient was ostensibly perishing, and consequently the operation was urgent; but the menses were about to return the next morning, and for this reason I considered a postponement necessary. Hemorrhage supervened, which was followed unfortunately by peritonitis, and the patient was carried off in two days. The autopsy confirmed my diagnosis.

I have since seen in St. Augustin's ward a female die of a metro-peritonitis, which came on during the menstrual discharge. Thus my resolution is fixed not to allow myself for the future to be dissuaded by the presence or approach of the menses from an operation, the urgent necessity of which I have foreseen.

Ulcerations of the Uterus.—I now come to treat of a very important and difficult subject, that is to say, of the ulcerations which declare themselves on the neck or else on the body of the uterus.

For the sake of introducing the necessary order and clearness in the study of these affections, I shall speak successively of redness and phlyctæna of the uterine neck, which frequently precede, and sometimes resemble ulcerations; of ulcerations, properly so called, and scrofulous ulcerations, the result of a degenerate tubercle; fungous tumours which succeed certain ulcerations; and lastly, ulcerations and carcinomatous vegetations.

Redness—Phlyctæna of the Uterine Neck.—You will find in almost every female who is affected with abundant discharge, on the posterior lip of the os tincæ, a redness, which appears owing to the contact of the liquid secreted by the uterus, in the same manner as in epiphora the tears cause a redness and excoriation on the skin of the cheeks. This redness in itself is only of very slight importance, but the mucous membrane may finally become diseased, if the catarrh, which is the exciting cause, be not cured.

But there is another species of this affection which is entirely independent of this cause, and shows itself on a portion or on the totality of the uterine neck, although the vagina may not have lost its natural colour; it resembles the blotches produced on the skin by a cutaneous disease, its reddish-brown colour announces the presence of inflammation; it is slightly elevated above the remaining healthy portions of the cervix, is sometimes disposed in isolated spots, and as neatly circumscribed as if made with a punch. I have seen them in some females formed by an interlacement of little prominent vessels, in the same way as is observed in inflammation of the fauces. They are accompanied in every case by simple engorgement, seldom, however, by induration of the cervix uteri, the mucous membrane in general being found on examination soft, thickened, villous, downy, and bleeding with the greatest facility.

These red patches, which frequently terminate in the production of ulcerations, deserve particularly to be attended to. If they are accompanied with smarting, heat, pain, you must have recourse to antiphlogistics, general baths, injections, glysters, and emollient drinks. If there exist acute suffering, it must be combated by narcotics and revulsive bleedings from the arm. When all these symptoms of irritation have disappeared, these blotches occasionally become in the course of time spontaneously dispersed, but more frequently, however, the least exercise, coitus, or the use of excitants, re-produces the acute stage accompanied with all its phenomena. You must not therefore be lulled into a deceitful security, and believe the cure complete because the affection has arrived at its chronic period. Antiphlogistics, then, are no longer useful; the case requires the application of astringents on the diseased part. But the mode of their employment is not indifferent; some practitioners introduce daily, by the aid of the speculum, a piece of lint imbibed in liquid; but this is a powerful source of irritation, and at most is only suited to girls of the town, whose vaginæ, being so accustomed to the contact of foreign bodies, have lost the greater part of their sensibility. Injections possess another inconvenience, for when very active they irritate the mucous membrane of the parts, and when less weak they do not exert a sufficient action on the uterine neck. The remedy which is by far the best, and that which frequently succeeds in its first application, is a slight cauterisation made with the nitrate of mercury. You should previously cleanse with a very soft camel's hair pencil the affected surfaces, to remove the mucosities, which would prevent the action of the acid, and afterwards touch the parts very gently, in such a manner as to whiten only the blotches; and it very often happens that eight days suffice to obtain a perfect cure.

You will also frequently observe on the uterine neck little white miliary vesicles, which are distinct or confluent, and are sometimes limited to a portion of this organ, whilst at others they occupy its entire surface. After they have burst, these vesicles leave little superficial ulcerations, which frequently unite together, and form rather extensive excoriations. At other times there is found

upon these parts a number of pimples, which resemble aphthæ; in such cases also I prefer the cauterisation with the nitrate of mercury, as the surest means of dissipating the accidents and preventing the formation of ulcerations.

2. *Simple Ulcerations.*—Before proceeding further I would remark to you, that as the inferior lip is more frequently than the other the seat of inflammation, eruptions, and ulcerations, you may likewise observe a similar predilection as regards the posterior margin of the cervix uteri. It is this portion which is attacked, as it were, in preference by the red patches, phlyctæna, and excoriations. Nevertheless ulcerations are likewise seen to show themselves elsewhere, as, for example, between the labia of the os tincæ, where they escape the eye if the precaution of raising its anterior wall be not observed.

They are also occasionally found as far as the inferior portion of the uterine cavity, and here the vaginal examination alone is capable of indicating their presence.

The cervix is in general sufficiently dilated to permit the penetration of the finger, which instead of encountering that smooth polished surface similar to a serous membrane, which the interior of the uterus presents in a state of health, perceives a thickened and villous state of the parts, and is frequently stained with blood, however delicately the examination may have been performed. Hence it is impossible to be mistaken as regards the alteration, however difficult it may be to ascertain precisely its extent.

Ulcerations show themselves in different forms; sometimes they are limited to simple excoriations, at others they present a slight excavation. The mucous membranes in numerous instances, being increased in thickness, their tumefied, projecting, and perpendicular edges make them appear deeper than they are in reality. Their base is sometimes irritated, traversed by numerous fissures, and may be compared to a dog's skin; at others it is covered with fleshy granulations, which in some cases assume a fungoid appearance, and has hence caused some inexperienced surgeons to believe in the existence of carcinoma.

It is not always easy to distinguish a simple redness from an excoriation. The side view of an object seated at the bottom of the speculum is almost altogether impossible, whilst a full view of the parts is liable in this case to induce into error. You will readily perceive, however, how important this diagnosis may be: for example, in a case of cicatrix resulting from the amputation of the cervix. A very valuable sign, and one which has never deceived me, is the following:—Pass a piece of fine lint gently over the diseased spot; if it be a redness, this will not produce any effect; but if it be an ulceration, it will render a small quantity of blood perceptible.

There are superficial ulcerations which bleed with the greatest facility, and consequently it is necessary to notice them. This symptom indicates, in the first place, that the uterus is gorged with blood, no matter what may be the cause, since that which is the most to be dreaded is the development of a varicose tumour, which I shall describe presently. The slightest excoriations, with or without induration, occasion in other females nearly all the symptoms which characterise cancer. I have had the anatomical proof of the simplicity of these ulcerations during the cholera. Many of my patients having fallen victims to this disease, the uterine neck was the object of the most minute research. I found the mucous membrane red, softened, and somewhat fungous, the ulceration very superficial, and beneath it the uterine tissue was sometimes superficially altered in texture, and allowed itself to be readily torn; occasionally, however, it was perfectly healthy.

The principal therapeutic agent to be employed in cases of simple ulcerations is cauterisation, but it requires a certain condition of the parts to enable it to succeed. If, for example, there exists either a partial or general tumefaction of the uterus, to such an extent as to render the volume of the affected portion double, I strictly forbid its employment. I have seen the opposite precepts adopted a great number of times, in which cauterisation has been almost invariably followed by metritis, or metro-peritonitis. Death has sometimes supervened; and it is this circumstance which has caused numerous medical practitioners to reject a remedy, which their inexperience alone had rendered dangerous. Lastly, cauterisation has hastened the degeneration of the organ in the most favourable cases. Thus, I lay it down as a rule, that a considerable engorgement is a counter-indication to cauterisation, whilst one of a slighter description may permit its employment. It is therefore necessary, in the first instance, to direct your attention to the treatment of the tumefaction. The second exception is in those cases in which a superficial ulceration makes progress in spite of the employment of medicinal means.

Here you may hazard cauterisation, although it must be performed with caution, and with that promptitude in the suppression of those resulting accidents which I have just enumerated. Inflammation of the vagina or cervix, and even acute pain, are counter indications. Lastly, it is necessary to abstain from its use four or five days before the expected appearance of the menses, as well as during the period of their discharge, and three or four days after their suppression, so as not to subjoin an artificial excitement to that of which the uterus is then the seat.

The manner in which the caustic should be applied is very important; cauterisation has been for a long time injured by imprudent manœuvres. Thus some practitioners place plugs of lint imbibed in the nitrate of mercury upon the uterine neck, retaining them in this situation during eight or ten minutes, whilst

others employ a conical piece of potassa fusa. What could we expect from such unscientific means, except that which actually occurs, viz. dreadful and even fatal inflammations, perforations and obliteration of the vagina? I have adapted the means proposed by M. Alibert for the cauterisation of corroding cutaneous affections, to the ulcers of the uterine neck, namely, to attack the superficies, not so much with the intention of destroying the tissues as with the idea of changing their action. Thus you have often observed me in this hospital perform even a partial cauterisation on external ulcers, which has sufficed to modify their entire surface.

The following is, then, the manner which I adopt:—after having introduced the speculum, I remove the mucosities by the means of a fine camel-hair pencil. If a small quantity of blood flow from the ulcerations, I inject some cold water, and, if this does not suffice, I cauterise the bleeding surface, and when the blood is arrested, I remove the clot which covers the ulceration, in order to apply the nitrate of mercury to the tissues themselves. For this purpose I use the smallest camel-hair pencil employed by miniature painters, and, after having touched the ulcerations, I throw cold water into the speculum by means of a syringe, in order to arrest the action of the caustic, and to prevent its extension beyond the diseased surfaces. This lotion being continued for about a minute, the speculum should be withdrawn. The proto-nitrate of mercury is, according to my experience, the best form of caustic that can be employed in these affections, as, from numerous trials of this preparation, I have always found it the most successful. In my opinion, it is much more preferable to the nitrate of silver, which has a tendency to reproduce the menstrual discharge; but it is impossible to detect a satisfactory explanation of this phenomenon.

The result of cicatrisation is not invariably the same in every female. In general, it is not even perceptible; but in some cases it causes, on the contrary, acute suffering. In some instances, however, it commences only at the expiration of the fourth, fifth, or sixth application. Can this be attributed to the circumstance that the substance employed had only exerted, in the first place, its action on the diseased tissues, but that it had afterwards attained it, when returned to their healthy, and, consequently, more sensible condition? In general, however, pain supervenes at the expiration of an hour or two after the operation; or, if it had already existed, an exasperation ensues, the patient experiencing a sense of smarting in the vicinity of the uterus and lumbar region, which continues for a time rarely exceeding twenty-four hours. The pains are already calmed by the exhibition of tepid emollient injections, small clysters made with a decoction of linseed meal and poppy-heads, warm baths protracted to the time previously designated, and, as a last resource, a general revulsive bleeding from the arm. I have never witnessed, in the immense number of females whom I have cauterised up to the present moment, any symptoms that might have deserved the appellation of serious. Cauterisation is much more painful in tempestuous weather, or, in other words, during the atmospheric variations, since it is well known, that these circumstances produce in females, especially those endowed with a highly sensible temperament, a peculiar influence; and there are some that never support its employment; this, however, is rare, as I have never seen but two examples.

After a suitable exhibition of baths, emollients, sanguine emissions, narcotics, &c., and the pains had disappeared, and every thing seemed to indicate the propriety of cauterisation; this operation caused the reproduction of the symptoms, acute pains, sensations of heat, nervous excitability, and even diarrhœa, so that in these two females it was necessary to abstain altogether from the employment of this means. Another anomaly, which is less rare, but very remarkable, is that a female, who has suffered greatly from the first cauterisation, does not experience any pain from the second, performed eight days after, and *vice versâ*. I have often observed this fact, but cannot explain it, however, in a satisfactory manner.

Cauterisation should in general be repeated every eight days, but if the pain caused by the caustic is very acute, you must wait ten or twelve days before you attempt to renew its application. But at what epoch shall we judge that the cauterisations are sufficient, and that we can abstain from their use?

This remedy is intended to modify the surface of the ulcer, to disperse the hardness or simple hypertrophy which occupies its circumference, and to repress the luxuriant granulations. If after two or three applications of the nitrate of mercury these results be obtained, and if cisatrisation proceed from the circumference towards the centre, the latter point should alone be touched; and frequently after the fourth or fifth time, all is finished. But very often, after the fifth or sixth application, the cicatrice suddenly remains stationary, in this case you are recommended to continue, and even I participated for a long time in this error, until I was undeceived by the following circumstances. During the three diseases with which I have been attached, I ceased for a month or more to cauterise my patients; on seeing them again, I found some completely well, whilst others were in a state of incipient convalescence. These observations did not fail to impress on my mind the necessity of adopting in future the following line of conduct:—after five or six applications, when the luxuriant granulations, induration, and violet colour no longer exist, or, in a word, when the ulcer presents a healthy aspect, I suspend the cauterisation, whether the process of cicatrisation be going on or not;

and during three or four days I prescribe emollient injections, which I afterwards replace by the use of remedies of a more healthy nature.

It would first appear that the chloruret of the oxide of sodium ought to afford the same result here, as that which we obtain from the use of this substance in ulcers of the leg. But it is not so; this preparation has completely failed, after numerous trials that were commenced with the greatest expectation of success. I have likewise employed decoctions of the cortex Punic. granit. of the rosa Gallica, but without deriving any benefit from their use. Lastly, I have had recourse to an infusion of cinchona, in the proportion of 3j. to a pint of water, gradually increasing the quantity, and substituting the decoction for the infusion, in order to augment still more its energy; this liquid thus employed appears to me to be endowed with the most suitable cicatrising properties. A few days have sufficed to heal ulcers, which have resisted all other means. These injections may cause heat and slight smarting during five or ten minutes: this symptom is scarcely worthy of notice; but if these sensations continue for a longer space of time, you must dilute the solution with water, or even suspend its use.

Thus, when cicatrisation has not sufficed, you may have recourse successfully to the injections I have just indicated; and if, as it sometimes happens, cicatrisation does not go on, under their influence, you must cease to employ them for a few days, and return to the use of the nitrate of mercury, which, under these circumstances, scarcely ever fails to produce beneficial results. It would appear that, in these cases, the cinchona has so modified the tissues, that the action of the caustic is rendered more efficacious, and, in fact, it is observed that it promotes the development of fresh granulations.

The time necessary to obtain a perfect cicatrix is very variable, and difficult to be foretold with anything like precision. Some females are cured in fifteen days or a month, whilst others require from three to five months, or even more.

It is not uncommon to see white spots declare themselves after the ulcers have been healed; but, in general, the cicatrix remains of a reddish colour, which circumstance may cause you to believe in the existence of a very superficial ulceration. As it is, as I have before stated, almost impossible to obtain a side view of the parts by means of the speculum, it is necessary, in order to give a certain diagnosis, to have recourse to the means already indicated, namely, to touch the wound with a piece of lint to see if it bleeds or not. Thus it is seen that the treatment of ulcerations presents numerous indications, which it is essential to expose in the manner I have adopted. I have recommended cauterisation as a general remedy; I do not mean to state, however, that there are not occasionally found cases in which antiphlogistics and revulsives have alone sufficed to effect a cure; but these are so extremely rare, that I esteem their proportion as 1 to 100. If, nevertheless, cicatrisation advances by the use of these means, it would be unquestionably useless to employ cauterisation.

Scrofulous Ulcerations.—I thus name the ulcerations which succeed the suppuration of tubercles occupying the uterine neck. In the five or six cases of this description that I have met with, the general temperament of the patients, and the escape through a small aperture of a caseous matter, analogous to that which is furnished by the cervical ganglia in a state of suppuration, did not leave scarcely any doubt as regards the diagnosis. You have seen, in St. Augustin's Ward, one of the females in whom, in proportion as the cervix entered the speculum, the pressure of this instrument caused the escape of a caseous matter, through a little orifice, which communicated with an abscess situated in the parietes of the uterus. This female was cured, became pregnant, and was safely delivered. You are daily in the habit of seeing the nurse, who is in the same ward: she had an uterus enormously distended by a tubercular abscess, seated in the posterior parietes; this abscess burst externally, and after two years' treatment, she enjoys a state of health of which you are all capable of judging.

Tubercular abscesses in general proceed in the same way as those of a common nature; the finger is capable of feeling a fluctuation, and an opening can be made by means of a bistoury.

These narrow and fistulous apertures insensibly enlarge; their margins, destroyed by ulceration, soon leave the bottom of the cyst exposed, which appears greyish-pale, whilst its edges are uneven, rugged, perpendicular, and allow the abundant discharge of a matter which has a very disagreeable odour, not, however, resembling that of cancer. There occasionally exists at the same time an engorgement of the neck, and even of the uterus itself. This happened in the case of a nurse, in whom, after I had obtained the cicatrisation of the parts, there remained a tumefaction of the body of the uterus, which was a long time in subsiding. I even entertained very serious apprehensions for her safety, for if this tumefaction had been owing to the presence of other tubercles, they might have opened into the peritoneum, and have produced fatal accidents.

The uterus is sometimes embossed, which circumstance has more than once caused a belief in a carcinomatous condition, which did not exist. I, as well as many other practitioners, fell into this error, in the case of the nurse in St. Augustin's Ward.

With the exception of lancinating pains, this affection is, in fact, attended by all the symptoms of cancer; and it is only fluctuation that can guide us, at the commencement, to a

direct diagnosis. When the disease is more advanced, it is impossible to be mistaken as to its nature, from the caseous appearance of the discharge, the facility with which the ulcer becomes cleansed, and lastly, on account of the promptitude with which cicatrisation is effected.

At the commencement the treatment ought to be directed to the suppression of inflammation, if it exists, taking care, however, to proportion the employment of antiphlogistics to the temperament and force of the patient. You may afterwards prescribe astringents and cauterisation, the beneficial effects of which may be assisted by the internal use of bitters.

Fungous Tumours of the Cervix Uteri.—This disease, which possesses such serious characters, frequently succeeds (as I have already stated) those superficial ulcerations which have a tendency to bleed with the greatest facility. Not many years have elapsed since I had an opportunity of witnessing, in private practice, two females labouring under a similar species of ulceration, which afforded a considerable emission of blood at each introduction of the speculum. Although the finger could not detect the slightest softening of tissue in either of these cases, I still feared the existence of some more serious affection, and consequently proposed cauterisation. This advice was not, however, adopted. On being again requested to visit the patient a short time afterwards, I detected all the characters of a well-defined fungus hæmatodes developed on the uterine neck, and which did not tarry long in causing the death of these two individuals.

Fifteen months since I observed an ulceration presenting a similar predisposition to bleed with facility, in a lady who resides in the vicinity of Paris. I again recommended cauterisation as a necessary remedy; but the practitioner who habitually attended the family did not think himself justified in consenting to its employment. And within these last three months I was again consulted by the patient, when I detected the presence of a fungoid tumour, seated in the uterine neck, the result of which may be easily described.

In these cases, the fungous, or varicose tumour, had passed the limits of the cervix, and had encroached on the superior insertion of the vagina, a circumstance which renders the operation impracticable. Every time then that similar ulcerations may present themselves to your notice, if there be no inflammation, you should immediately cauterise, in order to arrest the progress of such a serious affection.

When a fungous tumour is developed, it is soft, villous, intersected by fissures, and arranged in a series of lobules; it is the seat of a very abundant albuminous exudation, and of serious hæmorrhages, which, however, are generally unaccompanied by pain. What remains to be done, when it has exceeded the limits of amputation? To touch it every eight days with the caustic, so as to retard its progress. I have often succeeded by these means in prolonging the existence of numerous patients. Compression would prove perhaps advantageous; but I do not know of any case in which it has been tried. Amputation is unquestionably the only efficacious remedy, and you must hasten to have recourse to it, as soon as you have conceived its possibility.

Cancerous Ulcerations and Vegetations.—It now only remains for me to treat of cancer of the uterus, a subject which presents great difficulties, since in no other part does this disease assume such varied forms. Sometimes it commences by ulcerations accompanied with vegetations, fungous excrescences, indurated and scirrhous elevations; at others, the finger can be thrust into the tissue as into a quagmire, from whence it returns impregnated with a most horribly fetid matter.

In these cases, the patient is tormented by pain, diarrhœa, fever, yellowness of the skin, &c. &c. She exhales a characteristic odour, and reveals to every eye the nature of the affection which preys upon her frame, and the proximity of that moment which threatens to terminate her sufferings.

But occasionally this disease is less formidable in its attack, you will only find a dry ulceration, which is unattended by pain, but corrodes the tissues in the same way as phagedænic ulcerations, which are observed on the face. Are these a veritable species of cancer? the answer concerns but little the treatment to be pursued; and in many cases it is necessary to attack the disease with promptitude, for in proportion as it proceeds pains supervene, which become dreadful in the end, especially in females of a nervous temperament. The pains sometimes assume a singular and inexplicable form of intermittence. Thus I have seen them reappear only every five or six weeks. An example of this curious fact may be observed in several unfortunate females in St. Augustin's Ward, whose existence I have prolonged more than two years.

Lastly, the general or partial tumefaction of the uterus may be complicated with vegetations and soft fungous tumours, which are readily torn. They fill the vagina, and even project beyond the vulva, bleed from the slightest touch, and secrete a fluid in such abundance, that I have seen females soil from 50 to 60 napkins a day. This secretion exhales an unpleasant odour, and excoriates the thighs, notwithstanding the precaution has been taken of besmearing them with some oleaginous substance.

It is very remarkable that with the exception of a sense of uneasiness, and weight within the pelvis, and slight pain in the lumbar region, these females do not suffer at all in any other part; the *embonpoint* does not diminish, the freshness of the complexion continues, and this apparently healthy condition conceals from the medical attendant the severity of the affection until the discharge

awakens his suspicion. Have we to deal with a cancer in this instance? But how is it that in this case the local pains are absent? It is true that in general the pains supervene when the affection has existed a long time. It is my opinion that the disease is not cancer at the commencement, but that it possesses a tendency to become so at a later period. I have obtained a cure in three cases of this description. In a lady residing in the Rue St. Lazare, who had been condemned by several practitioners, the fungous tumour fell spontaneously, and has not since reappeared; this female is now enjoying the most perfect state of health.

It is moreover necessary to avow that with the exception of those simple ulcerations, which I described at the commencement of this lecture, and those which result from suppurated tubercles, it is a fact that the differential diagnosis of all the others still remains in the greatest obscurity. Several authors have endeavoured to lay down certain characteristic signs, which, however, are not observable at the bed-side of the patient; but when the disease advances in spite of all our efforts, of what importance is it, whether its carcinomatous nature be demonstrated or not, if the general health be affected, and the progress of the malady can only be arrested by amputation? Thus would I answer those superficial critics who have reproached me with having removed uterine necks in which it was impossible to discover any scirrhous or encephaloid tissue. Ought I to have allowed the disease to increase and become incurable? When every other hope is lost, and an affection exercises a deleterious influence on the economy, it must be removed without delay, whatever may be its nature; this is true surgical philosophy.

When I have to treat diseases which possess a doubtful character, I commence by attacking the engorgement with the hope of reducing its volume; if the female be debilitated from the abundance of the secretion, and from the repeated hæmorrhages which supervene, I have endeavoured to destroy as much as I could of these soft vegetations with the fingers, having recourse afterwards to cauterisation. This remedy has, however, produced inflammatory symptoms, and it became necessary to discontinue its use. In another female it required three years and a half to overcome the disease, but the two last were speedily cured, with the exception of the engorgement, which continued some months.

If these means fail, or if the ulceration be decidedly cancerous, some practitioners recommend cauterisation. You may, without doubt, have recourse to this remedy when the depth and surface of the disease are not very extensive, in the same manner, as you proceed in analogous affections of the skin; but if the disease be deep-seated, and especially if it has attacked the body of the uterus, it would be highly imprudent to think of employing these means. The only resource then, which art possesses in such cases, is the amputation of the uterine neck.

[We shall here terminate the lectures of M. Lisfranc on this subject. He described at some length, before a numerous class, the surgical anatomy, and the mode of performing the amputation of the cervix uteri, but as we are in hopes of shortly being enabled to give to our readers a paper on this subject by M. Lisfranc himself, we abstain from publishing this part of his course. One word only on the total extirpation of the uterus; M. Lisfranc demonstrated on the dead subject, that, by making a slight incision through the perineum, the uterus descended sufficiently to expose the broad ligaments, thus facilitating the ligature of the artery contained in their substance. By this manœuvre we are enabled to avoid including the whole of the tissues which constitute these ligaments, one of the most powerful causes of peritonitis after the operation.]

MOST IMPORTANT INQUEST AT YORK.

Verdict—"MANSLAUGHTER," by Morison's Pills.

CONSIDERABLE excitement has prevailed in this city since Friday last, in consequence of the death of Mr. Richard Richardson, aged about twenty years, an apprentice to Mr. Thomas Sowray, draper, Pavement, who had been ill of the small-pox, and who, it was very strongly reported, had had his death considerably accelerated by taking Morison's Pills. To such a length were various rumours carried, that, on Saturday afternoon, it was determined to have an inquest held over the remains of the unfortunate young man; and Mr. John Wood, one of the coroners for this city, immediately issued his precept for summoning a jury.

Samuel Robson.—I am an apprentice to Mr. Sowray: deceased was also an apprentice there. He began to be ill on Monday the 16th of June. He told me on that day that he was ill; and, at his request, I felt at his breast, which was all full of rash. He also told Mr. Sowray that he was ill, who felt his breast at the same time that I did. I do not think that he took any medicine that night. On the following morning the rash had all gone in again. He took some pills that morning, of Mr. Sowray's, with whom he slept. I fetched a 5*s*. 6*d*. packet of pills on that day from Mr. Webb's, and Mr. Webb also came to see him. I can't say whether he was sent

for or not. I also fetched some ginger beer from Mr. Webb's, but never fetched any more pills. They were Morison's Pills. On the following Friday the rash again broke out. When Mr. Sowray came down stairs on that morning (Friday), he said, that "the deceased had broken out again, and that it was the small-pox." Mr. Webb had attended him during the week. After the spots had come out again on the Friday, Webb attended him every day, and sometimes two or three times a-day, I fetched Webb occasionally by Mr. Sowray's orders. Deceased told me he continued taking the pills; and, once, I saw him take some powder. He took it with ginger beer, or water and sugar, I can't say which. I believe he got the powder from Mr. Webb, and Mr. Sowray mixed it for him. When Mr. Sowray came into the shop after visiting the deceased, he always told us he was getting better; I thought from his appearance he was getting worse. When the eruption first came out, I did not see any on his face. When the pox came out again, there were a few on his face: they were very full on his breast,—clustered together; they appeared to die away in the afternoon. The pills he took on the Tuesday purged him very violently, as also did those he took afterwards. He was also very sick, and complained of great pain at his stomach. He never appeared to be delirious, but talked very little. He did not express any desire for a regular medical man, neither did I hear Mr. Sowray propose it to him. When he was first taken ill he did not complain to me of shivering or chilness. On the Friday, when the spots came out and died away, Mr. Webb said they would all die away in the same manner. Deceased continued to be very ill until Friday the 27th of June. He was not attended by any medical man, except Mr. Webb, until that morning, when Mr. James Allen, surgeon, came to see him, a little after eleven o'clock. Mr. Webb had visited the deceased that morning before Mr. Allen came. I fetched the deceased's mother the night before. When she arrived, Mr. Webb said he was better, and was coming round very nicely. Deceased appeared to be well up to Monday the 16th of June, and attended regularly in the shop until that day. He was never down stairs from that time except once, when he went as far as Mr. Triffett's, which is the next door but one to our shop.

Mary Brittain, Mr. Geo. Robson, and Mr. Jacob Hugill corroborated the evidence of the first witness.

Mr. Joseph Spence, druggist, being a member of the Society of Friends, affirmed, I have examined the pills called Morison's pills, No. 1. In my opinion, they are composed of Cape aloe, gamboge, sulphate of potass, and gum guaiacum. I cannot state the proportions. I have examined the vegetable powder, but it is some time ago, and to the best of my recollection, it appeared to be composed of sugar, cream of tartar, and cinnamon. The pills now produced, No. 1, appear to be the same as those I have examined, and I should suppose are composed of the same ingredients. I have examined the pills, No. 2, and believe them to consist of about equal proportions of gamboge and aloes. Three pills of No. 1 weigh nearly seven grains; and three of No. 2 weigh nine grains.

Mrs. Elizabeth Whipp, mother of the deceased.—I was sent for by Mr. Sowray, and came on Thursday last; I found my son worse than I had anticipated, and mentioned my fears; Mr. Sowray told me, that Mr. Webb was attending him, and that he was doing very nicely. Mr. Webb also told me that he was getting better. Mr. Webb stayed with him until about twelve o'clock on that night, and I sat up with him all the night. Mr. Webb came again early in the morning. On Friday morning he took some roll and butter and coffee, of which he eat very greedily. Mr. Webb said that I had not taken proper care of him, and that the fever was very high. He also said that he would soon be better, as he had cured many cases of small-pox.

Mr. James Allen, surgeon.—I was called in to attend the deceased on Friday morning last, I attended him between eleven and twelve o'clock. Mr. Webb informed me that he had attended the deceased at his (deceased's) own request, and that it was a case of very severe small-pox. I then went into the room, and found him labouring under small-pox of a very bad sort. His eyes were very much sunk, his hands cold and livid, and the body covered with cold and clammy perspiration. I could not distinguish any pulse: the pox presented the appearance of perfect maturation. I told

Mrs. Whipp I considered her son in very great danger. Mr. Webb remarked, that the fever was very high: and I said, "if you can discover any pulse it is more than I can do." I directed some warm wine and water to be immediately given to him, by which deceased expressed himself very much relieved. I then gave him some cordial medicine, and saw him again about an hour and a half afterwards, when he was quite insensible and rapidly sinking, and died, I believe, within half an hour afterwards. When I first saw him I expressed my opinion that it was not possible to recover him. I examined the body on the following day (Saturday) in company with Dr. Wake, Dr. Belcombe, and Mr. Matterson. We found the stomach and bowels indicated considerable inflammatory action, the upper portion of the stomach approaching almost to mortification. This, in conjunction with the other morbid action, was quite sufficient to destroy life. The inflammation we found occasionally accompanies the small-pox, and other eruptive diseases. My opinion is decidedly that such treatment, as has been described by witnesses, was not only injudicious, but most calculated to render a mild and manageable case a highly dangerous one, by depressing the powers of life so frequently and constantly. Supposing the disease to have commenced on the Friday, when the eruption came out (and which I think is the day on which the disease ought to be taken to have commenced), then the patient dying on the following Friday was a period earlier than usual for patients to die of the small-pox. I am decidedly of opinion that the treatment he received was such as was calculated to accelerate his death.

Baldwin Wake, Esq., M.D.—I was present at the examination of the body on Saturday night, and found it covered with an eruption of the confluent small-pox. I observed the same appearances as those described by Mr. Allen; and, having made similar examinations after death by small-pox, I observed, in the present instance, a greater degree of inflammatory action to have existed in the stomach and small intestines than I had ever witnessed before, which I conceive might have arisen from some severe irritant having been taken; and finding that the diseased had taken very large doses of Morison's pills, which do contain gamboge, I have no hesitation in saying that the appearances of the stomach were owing in a great measure to the highly improper exhibition of so violent a drastic purgative, which, by inducing extreme debility, must have converted a disease of a mild character into one of the malignant form which the body presented. It is my opinion that the number of pills described by the witnesses to have been taken by the diseased, in the short period of his illness, were sufficient to cause his death, independent of the disease under which he laboured.

William Matterson, Esq., surgeon, gave similar testimony; and added, that he had been twenty years in practice, and had never known a case of small-pox become fatal when the patient had been vaccinated, and where proper treatment and attention had been given.

Henry Stephens Belcombe, Esq., M.D., also spoke in the same terms as the other medical gentlemen as to the appearances of the body after death, but would not go so far as to say that the quantity of pills which the diseased had taken would have the effect of producing the inflammation of the stomach. Gamboge, when taken in over doses, is a very deleterious medicine.

It being now ten o'clock, and there appearing no probability of the inquiry being concluded, the coroner adjourned the inquest until Tuesday evening, at seven o'clock.

Dr. Wake, on being further examined, deposed, that if the strongest man in York was to take thirty grains of gamboge per day, which he knew Morison's pills to contain, it would make him extremely ill, without his having any other disease. Each pill, as far as could be ascertained, contained about one grain of gamboge and one of aloes, so that taking thirty pills per day would be thirty grains of each drug. The proportion of the other ingredients in the pills was too small in quantity to neutralise the deleterious effects of the gamboge and aloes.

Mrs. Sarah Shepherd, of Gillygate, deposed to having heard Mrs. Whipp say she paid Mr. Webb 15*s.* for the pills.

The coroner then read over all the evidence, and told Mr. Webb that if he had any statement to make, he was ready to hear him, cautioning him, at the same time, that as it was impossible to anticipate what the verdict of the jury might be, though he would not

be on his oath, neither would he or the jury ask him any questions, yet he must take down what he said, and it might be produced against him in evidence, if future proceedings should be the result of the present inquiry.

Mr. Joseph Webb then stated that he wished to correct a statement which was contained in a letter to Mr. Robson, with respect to the time mentioned in it, which must be wrong, though it was written by himself. The letter states, that at six o'clock in the morning he thought he was better; which ought to have been, that, when he went at six o'clock in the morning, he found him altered for the worse. The letter was written under great excitement, and might contain expressions which he did not intend to convey. Mr. Webb then went into a minute detail of every circumstance that had occurred from the time of his being called up by his brother-in-law, Mr. Sowray, on Tuesday morning, the day following that on which the deceased was taken ill, to the time of his death. His statement occupied about three hours, and was patiently and attentively listened to by the jury; but as we have given the circumstances so fully, we do not consider it necessary to go through the whole of what he said. It was one o'clock in the morning before he had finished, at which time another adjournment took place.

The further Adjourned Proceedings.

At six o'clock on Wednesday evening, the jury again assembled.

Thomas Smith and John Render were brought forward by Mr. Webb; the former to prove that the deceased had told him he had the greatest confidence in Morison's Pills, and that he would take them in preference to any other medicine; and the other, that he had been cured of the small-pox by taking the pills. Mrs. Ann Rumfitt also deposed to the good effects she had received from taking the pills, both for the small-pox and other complaints.

The coroner then summed up: he said it was his duty now to address them in this important case, important not only to the public, but to the individuals concerned. He trusted they would dismiss from their minds every report or assertion they might have heard out of doors, and be guided solely by the evidence which had been brought before them in their decision. The evidence had been heard at great length, and much time had been consumed in the inquiry, and all parties concerned had had an equal chance. They had listened to the evidence with great patience. It had been read over to them twice; but nevertheless, if they required it, he was ready to go over it again. He should abstain as far as possible from making any remark on the evidence, and confine himself to propounding the law as applicable to the case. There had been no evidence, neither had it been in any way suggested that there was a desire to impute any disposition to do injury to the deceased; consequently no question could arise as to that. That Mr. Webb had administered the pills to the deceased for the purpose of curing him, there could be no doubt; the question more immediately to be decided was, whether Mr. Webb had acted legally in administering medicine at all. The first question was, whether the deceased came to his death from taking Webb's medicine, which it was most important to decide, as on this must rest the foundation for their verdict; for if they were satisfied that the medicine had accelerated death, or caused the patient to die sooner than he otherwise would have done, which of course would be accelerating death, they must find their verdict accordingly; but if they were satisfied that he died from the effects of the disease, then they must say that he died by the visitation of God. The coroner next drew the attention of the jury to the law of the case, and quoted opinions on both sides of the question. The most important, however, and the one on which the most particular stress was laid, was that of Mr. Justice Bailey, in a case tried at Lancaster assizes in 1827. The prisoner was an old woman who had administered an emetic to a sailor, who had been discharged from the hospital at Liverpool, for the purpose of getting the mercury out of his bones, and the ingredients being of a deleterious nature, the man died from the effects of taking the powder, which was intended to cure him. The opinion of Mr. *Justice* Bailey was thus expressed:—"I take it to be quite clear, that if a person, not of medical education, in a case where professional aid might be obtained, undertakes to administer medicine which may have a dangerous effect, and thereby occasions

death, such person is guilty of manslaughter. He may have no guilty intention, or may have a good one; but he has no right to hazard the consequences in a case where medical assistance may be obtained. If he does so, it is at his peril." This the coroner thought the highest authority that could be brought to bear upon the case; and after again entreating them to dismiss from their minds all considerations but what were to be derived from the evidence, he left them to consider for themselves.

The Jury then retired; and, after an absence of an hour and a half, returned to have the evidence of the medical men again read, when they remained locked up for some time longer; after which they again came before the Coroner, and said that they were all agreed on their verdict except one. The Coroner said, if twelve of them were agreed he could take their verdict, but would prefer having it unanimous; and after hearing the evidence of Dr. Belcombe, they once more retired; but the refractory member declaring he would not give way, at very near 11 o'clock they came before the Coroner, and returned a verdict of "*Manslaughter*" against JOSEPH WEBB, at the same time stating it as their opinion that Mr. Webb administered the pills, not knowing that they contained any deleterious drug.

Mr. Webb immediately afterwards entered the room, attended by Mr. Leeman as his legal adviser, the latter of whom stated that Mr. Webb had come for the purpose of surrendering himself.

A commitment was accordingly made out and delivered to the constable; the Coroner also expressing a wish that, in consequence of the handsome manner in which Mr. Webb had surrendered, he should have every kindness shown to him by the constable.

Mr. Webb remained at his own house all night, and on Thursday morning was taken to the city jail.

CORONERS.

SIR,—Being aware that the subject of the attendance of medical men on coroners' inquests will not be overlooked by the Committee of which you are Chairman, I take leave to submit the following communication.

As the law now stands, a medical man who accidentally sees a wounded person *before* death is liable *as a witness* to give evidence before the coroner, and perhaps to be kept in attendance at some remote assize town for *many days*. For his attendance before the coroner he is seldom remunerated, unless the friends of the deceased are able *and willing* to pay him for his attendance; at a prolonged assize no payment would be a competent remuneration.

It is true that, if a surgeon has only been called to see the body *after* death, he may refuse to enter into a recognisance to give evidence at the assizes; but as it is impossible for any medical man to foresee the consequences of visiting a patient under *any* given circumstances, it is incumbent on the profession to obtain legislative interference for their protection.

It may not be inapplicable to mention, that at the special commission, held in Bristol in January 1832, three medical men were in constant attendance during the whole thirteen days, in compliance with a summons from the coroner. That officer very properly brought the subject prominently before the Judge (Mr. Justice Taunton), whose observations were exactly what might have been expected from so liberal and enlightened a character; but his power did not extend to any further interference in the matter.

Perhaps the most effectual method of obtaining the object in view, would be the introduction of a clause in the Bill now before a Committee of the House of Commons, to empower *all coroners* to issue a compulsory summons to the overseers of the poor, *or other persons having the management of the poor-rates*, to provide for the attendance of a surgeon upon every inquest, for the purpose of examining the body, or to give evidence, and to defray the expenses from the poor-rates.

There is no law by which any public officer is compellable to provide medical evidence, and the expense appears to be the real difficulty of the case.

I have the honour to remain, Sir,

Your very obedient servant,

WILLIAM HETLING.

HENRY WARBURTON, ESQ., M.P., *Chairman of the Committee on Medical Education, House of Commons.*

Clifton, Bristol, 13th June, 1834.

THE
London Medical & Surgical Journal
Saturday, July 12, 1834.

JOHN ST. JOHN LONG'S LOTION.—MORISON'S PILLS.

We have this week to give a niche in our obituary to the celebrated John St. John Long. He died on Friday last, in consequence, says a Sunday paper, of a rupture of a blood-vessel, which occurred about two years ago; and it is but fair to add, continues our authority, that this was not one of the diseases he professed to cure. This is exceedingly consolatory to his afflicted patients, whose attachment to their master, and enthusiasm in support of his pretensions, paralleled and justified the bold effrontery with which he advanced them. He was a shrewd, clever man, and well versed in the weak points of human nature. A morning visit to his parlour at Harley-street afforded a valuable illustration of the powers of self-deception. There were assembled every morning a party of chronic invalids in the highest state of excitement; every one detailing, with pleasurable minuteness, the history and progress of his own ailments, and swallowing the nauseous recitals of others. After the first enquiries were over, the gentlemen stripped and rubbed in each other's presence, while a few straggling curious visiters were watching the miraculous effects. The great magician generally observed a discreet silence. Now and then he played Sir Oracle, but the master might repose under the zeal of his disciples. Soon after the untoward accidents of Miss Cashin and Mr. Lloyd he published a singular volume in abuse of medical practitioners, in which he explains his notions of diseases.

"The primary cause of disease," he said, "consists of a morbid fluid inherent in the system, and incident to all of the human race." To the quantity of this morbific humour, more or less, he attributed the common origin of all diseases. And, in uniformity with the operations of nature, as exhibited in the earliest outbreak of this treacherous enemy in small-pox, his practice consisted in producing a copious discharge of the morbific humours, by the "attractive powers of his remedies acting as if a new gland had been added to the system." His embrocation had, he asserted, an attractive power over the disease, and produced no effect on a healthy part; and, of course, its power of healing the sore originally produced by it, when there was no more disease in the part, was duly asserted and authenticated. In one recorded case, a young boy suffered from a rotten tooth, which St. John Long very prudently advised should be extracted. The tender confiding mother objected, and appealed to the sovereign lotion. It was applied with faith, and the stump rejected its morbific humour, and all pain ceased. We have even heard faithful witnesses record instances of like extraordinary power of the lotion upon inanimate matter. In one case a handsome Turkey carpet was soiled by the upsetting of an ink bottle; the lotion was applied, and lo! the inky stain evaporated, and the pristine colours of the carpet revived untarnished!

This celebrated rubbing mixture consisted mainly of spirits of turpentine. It was oily and whitish;—at least, such was the lotion *after* the celebrated catastrophes. A large extent of surface was usually rubbed—the whole back or breast, or down the whole leg—and the friction was kept up for a considerable time.

St. John Long was dark complexioned, tall, and slender. His manners were plain if not vulgar. He seemed on terms of

perfect equality with his titled visiters, and bore with meekness the deference and adulation of his admirers.

We hope we shall be excused this slight sketch of the most eminent quack of modern date. Whether he has authoritatively disclosed his secrets we are not acquainted; but we are given to understand the consumptive portion of his mantle has fallen on Dr. Ramadge and Dr. Williams, of whom the former was a notorious admirer of the deceased.

Our readers will find, in another part of this Number, a strange account of a coroner's inquest upon a young man who was dosed with a meal, or meals, of Morison's Pills when suffering under small-pox—and died. We observed in a daily paper a report of Purcell *v.* Stevens, in which the plaintiff, a surgeon, got 500*l.* damages for a puff laudatory of Morison and libellous of the plaintiff, in the shape of a letter from a grateful mother whose child was cured by copious draughts of the same pills.

MEDICAL JURISPRUDENCE.

We find that, through inadvertence in a critique upon Mr. Chitty's extraordinary work on Medical Jurisprudence in our last number, we made an inaccurate statement, which, as it might be prejudicial to him, we hasten to correct. We stated, it appeared to us the author proposed to extend his work to five volumes as large as that already published. We find we were mistaken. It is stated to be his intention to compress the remaining four parts, into which he has subdivided his work, into a single volume; in which he proposes to comprise a practical view of Pathology, and Surgery and Therapeutics, a comprehensive view of Medical Jurisprudence, Police, and Evidence, the laws relating to Medical Practitioners, and, lastly, a view of Medical Evidence. When we add to this the matter of the part already published,—Anatomy and Physiology, with a full account of the various functions,—we must be struck with the very expanded view Mr. Chitty has taken of his subject. All, in fact, that belongs to the human being is, he may say,

Nostri farrago libelli.

It is plain, from his own classification of contents, the author is sensible he has purposed far to exceed the limits of medical jurisprudence, as it is very accurately defined by Beck to be "that science which applies the principles and practice of the different branches of medicine to the elucidation of doubtful questions in courts of justice."

Reviewing the work before as an epitome by an unprofessional writer, of many popular treatises on distinct parts of medical science, we are filled with admiration of the happy manner in which the learned writer has brought the habits of his profession to bear upon a science so remote from his ordinary studies. His analysis of the works of others resembles those compact well-digested treatises, that make a lawyer's library, wherein there is little scope for originality, or pretence to it; but extreme industry, and caution, and precision are apparent. Our wishes, that Mr. Chitty's labours in the general collateral field he has chosen to traverse may be serviceable in extending the knowledge of medical science, exceed our hopes. We apprehend the generality of readers will prefer the less startling, more attractive pages of some original writer, whose work is not so multifarious. This desire to engross every thing in this elaborate treatise, is rather laughably exhibited in some passages we could cite. The whole doctrines of phrenology, ac-

cording to De Ville, are stated at length; and in the author's preface he points with satisfaction to this portion of his work, as useful to a judge, in order to counteract any attempt to prejudice a prisoner or witness by the appreciation of his countenance and supposed character upon the doctrines of phrenology or physiognomy. In another part we are minutely informed in a note, that "the period of separation of a husband and wife after parturition is usually a month, or after she has returned thanks for her deliverance, or, as commonly termed, been Churched. See the short service in Common Prayer, consisting of an exhortation, the 116th and 117th Psalms, the Lord's Prayer, and other appropriate thanksgiving!" This, it must be acknowledged, is an extravagant specimen, far exceeding any other we have met with: but instances of minor impertinencies are not a few; for example, the account of whistling, p. 95, and the descriptions of sighing and groaning, yawning and gaping, sucking, panting, straining, coughing, wheezing, sneezing, laughing,—the list is too formidable to go on with. In another place, we find the learned author intends to furnish a chapter on domestic medicine, with a list of recommended medicines, which country gentlemen should have in their houses, and directions how to renovate their medicine chest.

In pointing out these blemishes in our author's plan of monopoly, we are perfectly sensible of the great merit of his work as a clever compilation. The display of authorities is enormous, and sometimes partakes of the exuberance we have already remarked in the subjects he has handled.

Our author's summary of the leading works upon insanity is particularly good.

This subject, as a branch of mental philosophy, has been but very inadequately studied in the abstract by metaphysicians, who were wholly ignorant of the vital functions. It is impossible to sever judiciously the study of the phenomena of mind from a consideration of the corporeal instruments of thought. Much has been latterly done by physicians towards elucidating it. Amidst the mass, of which we must be for ever ignorant, we may hope there remains still more to be achieved.

Among the unprofessional authorities, we know of none of so great weight as Lord Erskine, in some of his celebrated speeches on criminal trials. We may perhaps introduce into our next number a long extract from one of these, which Mr. Chitty has had the good sense to select.

Since the preceding comments were in print, we have received a communication from Mr. Chitty, which he commences in these words:—"The general liberality of your reviews assures me you will take pleasure in withdrawing the sting of criticism, when you think it misplaced; and therefore I trouble you." He then replies to our strictures; and we shall have much pleasure in placing his statements before our readers in our next. In the mean time, we are bound to admit that it appears by Mr. Chitty's preface, to which he refers us, that our remark was unjust, when we supposed that he was not aware of the vitality of the embryo from the moment of impregnation. We offered the comment which was called for by the text, as we regretted that so able and eminent a lawyer had not emphatically exposed the absurdity of the law on animate and inanimate fœtuses. We also learn with astonishment, that Mr. Chitty alone compiled his laborious work,—a treatise decidedly the most comprehensive and most instructive, in our language, for non-medical readers.

VACANCY IN THE PROFESSORSHIP OF ANATOMY, TRINITY COLLEGE, DUBLIN.

We regret to observe that the University of Dublin is about to lose the eminent services of Dr. Macartney, whose fame as a Professor of Anatomy and Physiology is well known in all civilised countries.

"Whereas it is provided by an Act of the 40th of George the Third, for establishing a complete School of Physic in Ireland, that the several Professorships in the School of Physic in Ireland shall be open for a new election at the end of every seventh year, unless the Board shall think fit to continue the same for another term of seven years, to all persons as well as the present Professor.

"Notice is hereby given, that the Board of Trinity College, Dublin, will proceed to an election of a Professor of Anatomy and Surgery, on Tuesday the 29th day of July next (which Professorship is about to be vacated), according to the 19th clause of said Act.

"The emoluments of the said Professorship consist of the fees paid by the Pupils who attend the Lectures given by the Professor of Anatomy and Surgery, viz.—(at present) Four Guineas for each Pupil; also a fee of Three Guineas from each Pupil who may attend the said Professor's Clinical Instruction in Sir Patrick Dun's Hospital; and also the fee of Thirty Shillings (late Irish currency), paid by the Students in Arts, in the University of Dublin, during their Senior Sophister year.

"By the said Act it is directed that all persons, intending to offer themselves as Candidates, shall send in their names, the place of their education, the Universities in which they have taken their degrees, and the places where they have practised, to the Registrar of Trinity College, and to the Registrar of the King and Queen's College of Physicians in Ireland.

"By Direction of the Board,

"Robert Phipps, Registrar, Trinity Coll.

"G. A. Kennedy, M.D., Registrar, King and Queen's College of Physicians in Ireland."

Dublin Papers, July 4 and 5.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

It is, no doubt, in the recollection of many of our readers, that an association under the above name was formed, under the most promising auspices, at the Worcester Infirmary, in July, 1832; and that its first anniversary was triumphantly held at the Bristol Infirmary, on the 19th of July, 1833. At each of these meetings some of the most distinguished cultivators of medical science, resident in the English provinces, were present; and as the result of the labours in which they have been employed, the society have already published two volumes of Transactions, singularly rich in practical information. We have neither time nor space to enter into any detail of the extended objects which engage the attention of this flourishing society; but we have much pleasure in announcing that the second anniversary meeting, which will rival in interest and importance either of those which have preceded it, is fixed to be held at Birmingham, on Friday, the 18th inst., and that Dr. Johnstone will preside on the occasion. Some idea of the importance of the meeting may be formed from the following extracts, which we have made from the circulars sent to each member, announcing the anniversary:—"The general meeting of the members will take place at the theatre of the Philosophical Institution, in Cannon-street, at half-past twelve o'clock; at which meeting a report of the proceedings of the past year will be made by the council. Dr. Conolly, of Warwick, will also deliver an oration, in which he will take a retrospective view of the principal medical occurrences of the past year. Reports on the different branches of medical science, fixed upon at the last anniversary meeting, will be given in by the respective members who were appointed for that purpose. Communications will also be read from the members for foreign correspondence, and the general business of the Association will be transacted. The lecturers of the school of medicine have been so kind as to arrange that the museum of anatomy, and of natural history, shall be open during the day; and any member of the Association will, on application, be admitted to inspect the same." We observe, also, that

the membors of the Association, amidst all their zeal for science, do not neglect to pay due attention to bodily comforts, for after meeting they intend to dine together at Dee's Royal hotel, where, doubtless, every delicacy of the season will be produced for them.

Foreign Hospital Reports.

L' HÔPITAL MILITAIRE DE VERSAILLES.

Wound of the Chest, with Lesion of the Pericardium.—Cure.

Favier, carabinier to 2nd regiment, twenty-three years of age, of robust constitution, received on the 15th of February, 1834, a cut from a sabre in the chest, about two inches in length, between the seventh and eighth ribs of the right side, about two inches from the sternum. About eight in the evening, he was brought to the hospital much inebriated, so that no particulars could be ascertained as to his exact position when he received the wound.

The surgeon on duty examined the wound, found that its direction was from right to left, but did not probe it to any considerable extent, for fear of producing hæmorrhage. The surrounding parts became emphysematous; sixty leeches were applied, and the part, after their application, covered by a poultice. Bleeding was deferred until the next morning, in consequence of intoxication.

16th. Pulse small and retracted; laborious respiration; hæmoptysis; countenance extremely anxious; excessive thirst; skin hot and dry; complained of acute pain in the præcordial and epigastric regions; emphysema not diminished. Scarification of the painful parts; diet, gum water. The scarification produced slight alleviations; in the course of the day his countenance became flushed, eyes glassy, and pulse increased in frequency; cephalalgia supervened, and he complained of excruciating pain in the cavity of the chest. Twelve ounces of blood were taken from the arm, and he passed a tranquil night.

17th. Wound remains the same; great sensibility of the epigastrium. Ten leeches were applied, from which, for a short time, he found relief, but towards the evening dyspnœa increased; pulse became more frequent; profuse perspiration ensued; features became contracted; great anxiety of countenance; no rest.

18th and 19th. Symptoms remained much the same. Bloodletting and scarifications were again had recourse to; and on the 19th all the symptoms appeared alleviated.

20th. Symptoms of irritation have again returned; the neighbouring parts of the wound are continually emphysematous. Towards noon the patient was attacked with violent cough, and difficulty of expectoration, which was tinged with blood; much dyspnœa; excruciating pain at the lower part of the chest: pulse hard and accelerated. Ten ounces of blood were again extracted from the arm.

21st. Always at noon the symptoms become worse. Has been slightly delirious. Mustard poultices to the feet. Sulphate of quinine to be taken two hours before the usual period of the increase of symptoms.

24th. All the symptoms are alleviated, the patient has become more rational, and feels stronger.—Medicines to be continued.

25th. Has slight difficulty in respiration; cannot lie on the left side, which emits a dull sound on percussion, particularly inferiorly. This side is more prominent than the right, nevertheless there are no symptoms indicative of effusion. A large blister was applied on the affected side, and this relieved the difficulty of respiration. No sooner had he obtained this relief than he was attacked with violent pain in the shoulder, the accession of pain always increased towards evening. It was combated by blisters and increased doses of quinine; and on the 22nd of April he was sufficiently well to leave the hospital.

British Hospital Reports.

ST. THOMAS'S HOSPITAL.

Efficacy of Iodine on Secondary Syphilis.

(*Continued from p.* 735.)

Case IV.—George Leighton, a butcher, aged 34, of sanguineous temperament, and good constitution. States that he has twice been the subject of venereal chancres; the first that he suffered from is about six years ago, the ulcers healed after taking a few doses of mercury, without the least salivation being produced; no secondary symptoms supervened, and at the expiration of two years, he again contracted the same affection. At this time,

before the healing of the sores, he was profusely salivated, which appeared to destroy the venereal virus, and, as he thought, to have entirely eradicated it from his system; for not until six months ago, four years from the last attack, he experienced any thing like secondary syphilis; at this time a copper-coloured eruption made its appearance, and pains of the limbs supervened. His medical attendant again prescribed mercury for him, which controlled, to a certain extent, the eruption, but the pains of his limbs increased, became so excessive, that he could get no rest. On the 19th of June he came into Edward's Ward under Dr. Williams; at this time the pain continued severe; there were lumps on the periosteum covering the tibiæ, which from the least pressure by the finger caused excruciating agony. Eight grains of the hydriodate of potass were prescribed; in the course of five days the pains had nearly disappeared, the thickening of the periosteum gradually subsided. He is now perfectly well, with the exception of a slight eruption in various parts of the body, this has not at present been inclined to subside under the influence of the iodine. He states positively that he has not had the venereal disease for the last four years, moreover that he has been married for the last three.

Case V.—Edward Burke, an Irish labourer, aged 36, who states twice in his life he has been unfortunate enough to have contracted this disease; the first time was about eight years ago, and the latter about a twelvemonth since; at both periods he was profusely salivated, and always obliged to continue his work during the continuance of the mercury. Has several times suffered from pains in his limbs, but never so severely as two weeks previous to his admission. He came under Dr. Williams into Edward's Ward on the 19th of June; there was then great thickening of the tibial periosteum, pains so excessive that he could scarcely move about, in which state he had been for a fortnight. The hydriodate of potass, in the same proportion as in the other cases, was prescribed; the pains soon ceased, and the nodes are fast disappearing.

Case VI.—Joseph Lawrence, of short stature, and scrofulous diathesis, a tailor, 18 years of age, who was first affected by the disease a twelvemonth since, came into the hospital last November, with ulceration of the bones of the nose, throat, and pharynx, and with such excessive pains in the limbs, that he was unable to move. Dr. Williams prescribed for him the hydriodate of potass, which in the course of a week so much relieved him, that, at the expiration of that time, he could walk about the ward. The ulceration of the nose and pharynx varied sometimes for the better, and others for the worse, and has not, apparently, been the least alleviated by this medicine. He still remains in the hospital for this latter disease, but the pains have not returned. The hydriodate, after being discontinued for three months, within the last week has again been prescribed, and certainly with slight beneficial improvement.

Many other cases to illustrate the efficacy of this medicine on this particular stage of the disease, we could subjoin from the above hospital, but most of them so nearly resemble those we have already observed, and the control of this medicament over certain stages of this disease being so satisfactory, that a further number of cases we fear would be tedious. Nevertheless, as a still further proof of the effects of this medicine, we cannot do better than subjoin a case illustrated by Dr. Williams before the College of Physicians, and which, in fact, appears to be the chief cause of his persevering research.

Case VII.—Isaac Chitton was admitted into St. Thomas's Hospital 17th January, 1831, with large periosteal nodes on each tibia; his sufferings were most severe, and his health was much impaired. The first medicines that were prescribed for him were mercurial, and he was salivated, but his pains returned as soon as his mouth healed. A decoction of smilax aspera was next tried, but without success. On the 7th of April, therefore, the decoction of sarsaparilla was substituted, and which was taken till the 2nd of June, a period of nearly eight weeks, but still there was no alleviation of his sufferings; on the contrary, the first phalanges of the second and third fingers of one hand became thickened, and in a short time the inflammation terminated in necrosis, so that one finger was obliged to be amputated; and this untoward event occurred in spite of the application of leeches, and a variety of local treatment, as also of minute doses of the pil. hydrargyri, and of colchicum, and even of the nux vomica, which was tried when the other medicines failed in producing any good effect.

The parts having healed, experiments became necessary to save the other finger, which seemed to be rapidly running into a similar state of necrosis. On the 2nd of July, therefore, and not until nearly six months after his admission into the hospital, five grains of the potassæ hydriodatis, out of camphor mixture, were ordered three times a day; and this quantity was, during some part of the treatment, increased to ten grains. The results were most happy; his pains were relieved, the nodes subsided, and his finger was saved. This patient subsequently laboured under iritis, ulcerated throat, affection of the nose, and also of the skin, as also of the ligaments and synovial membrane of the joints, and was consequently under my care or observation for at least twelve months afterwards, but had no return of the periostitis.

Case VIII.—The treatment of this case had scarcely terminated, when the coachman of a member of parliament was admitted into St. Thomas's Hospital, with an exactly similar

state of the tibiæ, and of the phalanges of the fingers. This man had been for many months under a treatment by mercury and sarsaparilla, and was so reduced by constant suffering that his family thought his death inevitable. Eight grains of the hydriodate of potass were directed to be taken by this person three times a day; and in two months he was discharged cured.

A vast number of cases might be cited from the wards of Drs Elliotson and Roots, which have been controlled by this medicine; but these gentlemen have not only been satisfied with its internal effect, but have had the iodine ointment rubbed on the affected surfaces, and I think I may say in every instance attended with the most beneficial result.

Rupia has also been checked by the internal use of this medicine; but in almost every instance, owing probably to some peculiar state of constitution, this disease has remained stationary while under its influence; and the cases that we here subjoin, in proof of its efficiency on this state of the disease, it will be right to observe, the patients who were submitted to its use had no periosteal inflammation.

The first was a man named Lucrane, admitted under Mr. Tyrrel's observation. He was attacked with rupia, which extended all over his body; the ulcerated patches increased in size; his constitution became so much debilitated, that no hope of his recovery was entertained. Sarsaparilla and almost every remedy that could be suggested, were had recourse to, but without success. At last, Mr. Tyrrel prescribed for him the mistura potassæ hydriodatis three times a day:

Iodine gr. ss.
Potass. Hydriodat. 3ss.
Aquæ Puræ ℥ viij.
Fiat mistura, cujus sumat cochlearia iij ampla ter die.

After a short perseverance in this treatment, the ulcers became healthy, his constitution improved, and, after continuing it for some time, he became well enough to leave the hospital. It is now since the commencement of 1832 that he was attacked; the disease has not since returned, and he remains in a tolerable state of health.

Another similar case to the above, after suffering for a long time with ulcerations about the face, nose, and various parts of the body, was put under the influence of this medicine by Mr. Travers; the parts kindly healed, and he became quite well. Some months afterwards, the disease again made its appearance, for which he has been since admitted into the hospital. He is now taking the mistura potassæ hydriod. three times a day, and the disease is rapidly disappearing.

From the preceding observations, this medicine appears to have a specific control over the distressing pains resulting from this disease, and appears to check the osseous deposition, which is the commencement of the hard periosteal node, and in many cases causes its entire disparition. Another most happy result from this medicine is (and which puts it beyond comparison with the powers of mercury) that we have not those distressing effects arising from enlargements of the salivary glands, which so often passed into a state of suppuration, debilitated so much the constitution, that death frequently was the result. There yet remains much to be done; the good effects of this medicine, in particular stages of this disease, are any thing but satisfactory, for instance, there are, at this present time, cases in the hospital in which the syphilitic eruption has disappeared under its influence, and others in which it has remained stationary; again there is a case of caries of the bones of the nose, which has been greatly mitigated by its use, and another which we have recorded above, in which no beneficial effects were observed. However, by comparing these two cases together, one suffering excruciating agony from pains and periosteal inflammation, whilst the other merely had slight roughness of tibial periosteum, its different effects are not surprising; and further, when it be recollected during the time the former suffered so severely from the pains in his limbs, the disease of the nose remained in a state of torpitude. Thus, then, when disease is set up in two different tissues of the body, we observe the virulent effect of one checking the progress of the other, so we must expect with medicine in controlling the most severe form of the disease, that all its powerful agents are absorbed by the one, which, until entirely eradicated, are unable even to mitigate the other. In Case VI. it will be observed that the medicine was left off after one form of the disease had been checked, and when continued three months afterwards, its effects over the other form became manifested.

Thus, then, we can observe the happy effects of medicine over such a specific and deadly poison, combated in one form by mercury, another by sarsaparilla, and in the third by hydriodate of potass, the latter medicine subduing the last stage, which is increased, if not often produced, by the former.

WESTMINSTER HOSPITAL.

Salutary Effects of the Application of Caustic Potass to a Scirrhous Breast.

—— Holingsworth, æt. 40, of emaciated appearance (the result of her disease), came into the hospital last October with scirrhus of the right breast, under which she has been labouring during the last several years. Since her admission into the hospital, Sir Anthony Carlisle has resorted to all those remedies generally used in such cases; but the sufferings of the patient were not in the least alleviated, and her symptoms assumed a very aggravated and pressing character. Her appearance gradually became exceedingly miserable, and her situation on the whole very precarious. An operation was not had recourse

to, as the disease was too extensive, and consequently the chances of recovery very small. A short time ago, she was removed from the care of Sir Anthony Carlisle to that of Mr. White, who ordered the diseased parts to be frequently touched with the caustic potass. Mr. White is convinced that though the disease in question cannot be entirely cured, its symptoms may be considerably alleviated, and the sufferings of the patient much lessened. His anticipations have been in a great measure realised. The disease has put on a milder and less severe character, and the poor woman has greatly improved in flesh. Her nights are not as formerly sleepless, and her health appears considerably renovated. It is not improbable that she may survive many years under the disease.

Erysipelas of the Leg.

Mary Poole, æt. 65, was admitted on the 30th June with erysipelas of the right leg. According to her own account, her limb has been swelled during the last three months, and, about a week previous to her admission, assumed the erysipelatous character, accompanied with a sensation of burning heat in the parts. She attributed the erysipelas to a severe wetting which she recently encountered. She was ordered to take

℞. Submur. hydrarg. gr. v.
Ext. colcyn. gr. x.
Fiant pil. ii. Capiat stat.

℞. Confect. aromatic. ℥ j.
Carbon. ammon. ℥ ij.
Tinct. cinchonæ, ℥ ij.
Decoct. cinch. ℥ vij.
Capiat ℥ ij. 4tis horis.

The results of this treatment have been most favourable. The tumefaction of the limb has subsided, the pain has disappeared, and the leg is almost restored to its pristine state of health.

ROYAL COLLEGE OF SURGEONS.

NAMES of Candidates who received Diplomas during the month of June 1834.

T. M. Lambert	Hull.
J. Hirst	Boynhill, Yorkshire.
J Coates	Rochdale, Yorkshire.
William Heane	Gloucestershire
E. Y. Steele	Bath.
Henry W. Rush	London.
J. Taylor	Huddersfield.
E. S. Hare	Yoxhall.
W. Fawcett	Horncastle.
W. Blaxland	Linstead, Kent.
J. Bean	Colchester.
J. P. Aldridge	Christchurch, Hants.
R. L. Gray	Nova Scotia.
Robert W. Smith	Gloucestershire
W. Lover	Dublin.
J. Kirby	Army.
G. J. Farish	Nova Scotia.
Henry Pargeter	Fordingbridge.
Theodore Dennis	Overton, Hants.
A. F. Greig	Aberdeen.
A. J. Manson	Caithness.
W. C. Fowler	Aberdeen.
P. Panton	Aberdeen.
D. Culhane	Glin, Limerick
H. Hill	Cooper's Row.
H. B. Webb	Vauxhall.
A. Fry	Colehill, Longford.
J. M. Parke	Askrigg, Yorkshire.
J. I. G. Wilkinson	London.
W. Ross	Aberdeenshire
J. Paterson	New Deen, Aberdeenshire.
P. B. Lucas	Guildford-st.
W. Whitmore	Cleobury Mortimer.
A. Squire	Pentonville.
H. Hancock	Westminster Hospital.
B. G. Page	Truro, Nova Scotia.
H. Sullivan	Torrents, U. Canada.
T. Bartlet	Devonport.
J. C. Atkinson	Calcutta.
G. Cunningham	Dublin.
H. Miller	Peterborough.
R. C. Knaggs	Dublin.
R. Duncan	Abbeylaix, Queen's Co.
R. I. Atkinson	Calcutta.
T. Hamilton	Dungannon.
T. Reid	Trellic, Tyrone.
J. W. Knight	London.
F. Longden	Sheffield.
J. Moyle	Chasewater Key, Cornwall.
P. Orr	Fintona.
F. Rea	Fintona.
J. Burges	Fethered.
J. Knaggs	Piccadilly.
A. Lord	Northram.
G. Leney	Wrotham, Kent.
J. B. Brown	Connaught Terrace.
W. H. Evans	Hendon.
J. W. Kimpton	Ware.
E. I. Atkinson	Hartforth, York.
W. Grant	Dublin.
J. E. Bright	London.
J. Willis	Clapham, York.
D. Embleton	Newcastle-upon-Tyne.

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification from Thursday, May 29, to Thursday, July 3rd.

Charles Arnison	Allendale, Northumb.
Edmund John Galton	Brixton, Surrey
Charles Hayes Higgins	Bristol.
William Rumbelow	Isleham, Camb.
William Sharples	
Joshua Sutcliffe	Halifax.
William King Toase	Derby.
Thomas Watts	Macclesfield.
Charles Ilderton Crofts	London.
Christ. Browning Emmott	Hounslow
Frederick Foaker	Great Baddow.
Alfred Foote	
Thomas Hayes Jackson	East Cowton.
William Thomas Richardson	London.
James Wilkes	Birmingham.
Adolphus Barnett	London.
John Richard M'Collah	Reath, Yorks.
Evans Davies	Merthyr.
John Flood	
George Rawdon Robson	York.
William Pryddere James	Milton-street. Euston-sq.
George Slade Jolliffe	Crewkerne.
Henry Moon	Horsham.
Frederick Page	Beccles.
Frederick Snaith	Boston.
William Bevan	Swansea.
Andrew Bury	Over Darwen.
Thomas Davies	Chester.
Zechariah Lindo	London.
Frederic Manby	East Rudham.
George Pearson	London.
Henry Savage	Hertford.
W. Stead Taylor	Leeds.
William Francis Askham	Eckington.
Henry Booth	Ashton-under-Lyne.
John M'Crea	
William Dawson	Sheffield.
Fred. William Fazakerley	Manchester.
Samuel Nelson	York.
Frederick Row	Devonport.
Charles Trotter	Huddersfield.
Edward Trotter	Ditto.

BOOKS.

The Medico-Chirurgical Review and Journal of Practical Medicine. Edited by JAMES JOHNSON, M.D., Physician Extraordinary to the King, and HENRY JAMES JOHNSON, M.R.C.S., late House Surgeon to St. George's and the Lock Hospitals. July.

The American Journal of the Medical Sciences. August and November 1833.

The Library of the Medical Sciences, or the Cyclopædia of Medicine and Surgery, a Digest of Medical Literature. Edited by ISAAC HAYS, M.D. Part I. July 1833.

We have already expressed a favourable opinion of this work.

CORRESPONDENTS.

Mr. Chitty's communication has been received.

Dr. Churchill and Mr. Tatham's communication in our next.

METEOROLOGICAL JOURNAL.

MONTH. July, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
3		61	71	58	29·79	29·80	66	66	N.E.	E.	Cloudy	Fine	Fine
4		65	75	59	29·86	29·85	66	65	N.E.	E.N.E.	Fine	——	——
5		66	74	62	29·79	29·71	65	76	N.E.	E.	——	——	Rain
6	☾	64	70	63	29·63	29·66	85	81	E.N E.	S.S.W.	Cloudy	Rain	Cloudy
7		70	74	63	29·66	29·06	79	73	S.	S.S.W.	——	Fine	——
8		68	73	61	29·60	29·69	71	68	S.S.E.	W.N.W.	Showy.	——	Fine
9		65	71	60	29·82	29·91	67	66	W.	S.S.W.	Cloudy	——	——

50, *High Holborn*. WILLIAM HARRIS and Co.

ALL Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 129. SATURDAY, JULY 19, 1834. Vol. V.

LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE XCVIII., DELIVERED APRIL 30, 1833.

Gentlemen,—I have now to describe to you the operation for strangulated femoral hernia; and you will find that it is not always performed in one way, different surgeons having different modes of proceeding, according to their view of the parts chiefly concerned in forming the stricture, and of the safest place for the incision, with reference to the epigastric artery and spermatic vessels; for the round ligament in the female ought not to have much influence on the question, a wound of it being a thing of little importance. At the school where I was brought up, the surgeons usually began the operation by making an incision, which commenced about an inch above the crural ring, or pubic portion of Poupart's ligament, and extended obliquely downwards and outwards over the centre of the swelling. This plan answered very well where the intention was to divide Gimbernat's ligament near the pubes, in order to free the protruded parts from strangulation in the crural ring itself, and to be able to reduce them. In other words, you can in this manner very safely and conveniently get at the side of the crural ring, which I have specified as formed by Gimbernat's ligament. This is the mode of proceeding I have commonly adopted myself, on the principle that the seat of strangulation was mostly at the crural ring, and indeed I have always found that a proper division of Gimbernat's ligament has enabled me, as well as others whom I have seen operate, to reduce the viscera without difficulty. This first incision is likely to divide the external pubic artery, and it exposes the superficial fascia, which is here generally thicker than what lies over an inguinal hernia, though, in thin persons, and recent cases, it may be so delicate as to escape notice. After the division of the skin and superficial fascia, you come to the tubular sheath of the femoral vessels, or *fascia propria*, as it is named by Sir Astley Cooper. Your next object, gentlemen, is to lay open the fascia propria, first lifting up a piece of it with the forceps, and then making a small opening in it with the edge of the knife directed horizontally. A director is then to be introduced into the aperture so made, and the fascia propria divided upwards and downwards to the neck and fundus of the sac. After having laid open the fascia propria, you may meet with a quantity of fat, which, in consequence of the long pressure of trusses, sometimes presents a thickened dense feel, and assumes very much the appearance of indurated omentum, so as to cause an erroneous suspicion of the hernial sac having been already divided, followed by pernicious efforts to push back the parts into the abdomen. This is a subject, on which you will find most useful practical information delivered in Key's edition of Sir Astley Cooper's work on Hernia. Here is the book, and a plate exhibiting an unopened sac pushed back into the abdomen with the strangulated bowel in it. The hernial sac having been exposed is now to be cautiously opened, in which step of the operation first nip up a small portion of the fundus of the sac, and feel that no portion of the contents of the hernia is directly within it. Then take hold of it with the forceps, and make a small opening in it with the edge of the knife directed horizontally, and kept close to the extremity of the forceps. On this being done, a certain quantity of clear or turbid serum mostly gushes out, but not invariably. The director is now to be introduced, and the sac laid open upwards and downwards to the crural sheath and fundus of the sac itself.

Having proceeded thus far, gentlemen, it sometimes happens that you may easily return the contents of the hernia without the further use of the knife; but, unless this be practicable without any squeezing and bruising of the parts, the stricture ought to be cut. In this very important stage of the operation I have generally been accustomed to divide Gimbernat's ligament, and with it the neck of the hernial sac, and the contiguous part of the fascia transversalis. A director is introduced along the inner side of the protruded viscera into the

crural ring, with the groove turned towards the pubes. Then, with a narrow probe-pointed bistoury, or with Sir Astley Cooper's hernial bistoury, which has but a small cutting edge, and none at all towards the point, so as to occasion less risk of wounding the bowel, you are to cut the base or deep expanded part of Gimbernat's ligament in the direction inwards, or inwards and upwards. In this part of the operation you find the bowel continually exposed to injury, on account of the small space in which you have to act, and I recommend you, therefore, not only to use this kind of bistoury (suggested by Sir Astley Cooper) for the division of the stricture, but to be particular in keeping the intestine out of the way of the instrument with your own left fore-finger, or with the hand of an assistant. I ought to have mentioned to you, gentlemen, that sometimes when you make the incision in the skin, you find the hernia concealed by dense fat and enlarged diseased glands, and you are not to be perplexed by the circumstance, provided you are clear and certain respecting the existence of hernia. I remember being sent for to a poor woman in St. Giles's, last Twelfth-night, for a strangulated femoral hernia, when, as the symptoms were urgent, and I had not much time to spare on account of a private engagement, I proceeded to the operation directly after the taxis had failed. Now, on making the incision through the integuments, I came to such a mass of diseased fat and glands, that I was a little staggered, and led to consider for a minute or two whether I might not have been in too great a hurry to operate, and mistaken a case of enlarged glands for a hernia. But a little reflection convinced me that the patient's symptoms could not depend upon the latter cause; and, on dissecting more deeply, I came to a small hernial tumour. The patient recovered, as I think most patients do, in whose cases the operation is not deferred till too much inflammation and other mischief have had time to take place.

When the bowel has been strangulated beyond a certain time, it becomes dark coloured, and though not actually gangrenous at the period of the operation, it will sometimes give way afterwards. This happened in a case, where I operated rather too late on the sister of the celebrated harlequin, Bologna. She was a dancer, a profession which, you know, is particularly exposed to the risk of herniæ. After the operation, her sufferings ceased; she had several motions, and her pulse came down to 80; but, all on a sudden, forty-eight hours after the operation, she was seized with excruciating agony in the abdomen, faintings, quick faltering pulse, and cold sweats, with which symptoms she soon died, and, on opening her, it was found that a small point of the ileum had given way, that the contents of the bowel had become effused, and that a rapidly fatal inflammation of the peritoneum had been the consequence.

Gentlemen, if you begin the operation, and open the hernial sac in the manner explained to you, it would not be safe to cut the crural ring upwards in a male subject, because you would wound the spermatic cord. In a female, however, in whom we find that this hernia is most common, I do not know that the round ligament need frighten you from cutting in this direction, if you had any reason for selecting it. You could not cut upwards and outwards, because you would injure the epigastric artery, and you could not turn the edge of your knife precisely outwards, or in the direction away from the pubes, because you would wound the femoral vein. The safest plan, therefore, seems to me to be generally that of making the requisite division of the crural ring by cutting inwards, or inwards and a little upwards.

The only case in which the division of the deeper part of the stricture, in the direction inwards, would be attended with danger, is that in which the obturatrix artery arises from the epigastric, high up, and, in its way into the pelvis, descends round the inner margin of the crural ring. This position of the obturatrix artery, however, in relation to the neck of the sac and the crural ring, is computed not to occur more frequently than once in about eighty cases of femoral hernia. The way of operating, gentlemen, which I have been describing to you, has not the sanction of some surgeons, for whom I entertain the highest respect, and though it is the method which I have adopted, and found answer, let me not induce you to suppose that I do not see reasons for sometimes following other plans. Where the hernia is larger than it commonly is, I would make the incision in the skin in the way preferred by Sir Astley Cooper and Baron Dupuytren; that is to say, an incision in the shape of the letter T reversed. For this purpose, you may lift up, with the aid of your assistant, a longitudinal fold of the skin over the tumour, divide it transversely, and then make another cut from Poupart's ligament downward, so as to join the transverse one. The flaps or angles are then to be dissected up, by which means greater room is obtained for future proceedings, than in the method of operating already explained to you. With respect to other modes of dividing the stricture, I may inform you, that Sir Astley Cooper cuts the anterior part of the crural canal by carrying the knife as far as the front margin of the crural arch, in the direction upwards and inwards. When this is not sufficient, he next cuts the thin posterior border of Poupart's ligament in the same direction.

There ought, indeed, to be some variety in the method of operating, according to the circumstances of each individual case; and the valuable investigations of the eminent surgeon, whom I have mentioned, tend to prove that the seat of strangulation in femoral hernia is not always in the same place, but may be either in the crural sheath, where the stricture is occasioned by the semilunar edge of the fascia lata; or it may be at the posterior edge of the crural

arch; or, lastly, at the mouth of the hernial sac, in the fascia which covers it.

Having laid open the hernial sac, Sir Astley Cooper introduces his probe-pointed bistoury, which does not cut near the point, into the crural sheath, at the anterior part of the sac, and divides with it the sheath as far as the front edge of the crural arch. This cut, which does not exceed half an inch, he finds sufficient for the reduction of small herniæ. But if the bowel cannot now be returned by gentle pressure, he passes in his finger about half an inch higher, and divides the posterior edge of the crural arch and fascia transversalis immediately next to it. As these two incisions are made from within the sac, they will of course remove any stricture formed by the sac itself. The direction of an incision for the division of the stricture, which he deems most eligible, is upwards, with a slight obliquity towards the umbilicus.

Baron Dupuytren, in operating on femoral hernia, cuts the same parts as Sir Astley Cooper, but uses a curved probe-pointed bistoury, which cuts with its convexity; it is introduced into the crural sheath flat on the left forefinger, and its edge is then turned upwards and outwards, and the upper extremity of the falciform process divided as far as the front margin of the crural arch. Hesselbach also regards an incision through the front side of the crural canal safer than one through Gimbernat's ligament. These distinguished operators, though directing the knife towards the spermatic cord, do no injury to it, because they take care not to cut beyond the anterior margin of Poupart's ligament. Dupuytren also avoids the epigastric artery by taking care to make a very limited cut.

Here, gentlemen, is a preparation exhibiting a femoral hernia, in which the operation has been performed, and the intestine reduced. In this instance, you see that the surgeon has cut the neck of the sac. In the next specimen, the strangulation is also in the neck of the sac. The intestine is in a mortified state, as evinced by its colour. The distended inflamed portion of it within the abdomen is the upper part of the canal. The protrusion, you may observe, is merely a small fold of the bowel.

Gentlemen, I next proceed to speak of *congenital inguinal hernia*, the great peculiarity of which is, that the protruded viscera lie in the tunica vaginalis, which serves as the hernial sac. The bowel or omentum is therefore in contact with the testicle.

The congenital inguinal hernia arises in the following manner. In the fœtus, the testes are situated immediately below the kidneys, on the forepart of the psoas muscles, with their anterior and lateral surfaces covered by reflected peritoneum, and their posterior surfaces connected to the psoas muscles by means of cellular substance. About a month or six weeks before birth, but sometimes subsequently to this event, the testes descend through the abdominal ring into the scrotum, where there is a production of the peritoneum already formed for their reception, and afterwards constituting the tunica vaginalis. The testes in their descent, gentlemen, do not fall loose into the tunica vaginalis, but carry with them the peritoneum immediately adherent to them.

Soon after the testes have got into the scrotum, the upper part of the tunica vaginalis is closed, by which change all communication between the cavity of that membrane and the belly is shut. Sometimes, however, this closure is delayed, and then, if any of the bowels insinuate themselves into the passage, they become of course, as long as they continue unreduced, an impediment to its further obliteration; and the case is a congenital inguinal hernia.

The congenital inguinal hernia, therefore, differs from all common herniæ in having no hernial sac produced by a protrusion of the peritoneum with the bowels themselves.

No doubt, gentlemen, one of the most frequent predisposing causes of congenital hernia is the occasional delay in the descent of the testicle, which circumstance has the effect of retarding the closure of the passage between the belly and the scrotum.

Gentlemen,—You should understand, that the disease is not generally produced by the insinuation of the bowel into the tunica vaginalis at the same time as the testicle itself. Before birth, the small intestines are but little distended, and, in the absence of respiration, they can suffer no compression from the diaphragm and abdominal muscles. Hence, notwithstanding the expression *congenital*, the disease is hardly ever noticed in infants directly they are born, but makes its first appearance afterwards.

One accidental circumstance, however, may really make the hernia strictly congenital, namely,—the intestine or omentum may become adherent to the testicle previously to its leaving the abdomen, and consequently descend with it into the scrotum before birth.

The formation of such adhesions between the bowels and testicle before birth, may also sometimes prevent or retard the descent of the latter organ.

Frequently you will be consulted for cases of congenital herniæ, where the testicle has not yet descended through the ring.

The congenital inguinal hernia must always necessarily be external, or oblique, because the neck of the tunica vaginalis invariably corresponds to the point, at which the spermatic cord passes under the border of the transversalis muscle. Also, as the tunica vaginalis enters the inguinal canal beyond the point at which the spermatic cord crosses the epigastric artery, it must have this artery on the internal side of the ring.

In young children, you will find, that the congenital hernia more frequently contains intestine than omentum, because in them the latter part is very short.

The impossibility of feeling the testicle, while the bowels are down, is the most im-

portant criterion between this hernia and a common bubonocele, where you can always feel the testicle at the lower and back part of the swelling. Then a suspicion of the nature of the case may be entertained, if the hernia has existed from early childhood; not that infants may not be occasionally the subjects of common bubonoceles.

Gentlemen,—I may next observe, that the viscera, included in a congenital hernia, but more especially the omentum, are frequently adherent to the testicle; a complication attended with serious inconvenience, unless removed, as it prohibits the reduction of the protruded parts, and the use of a truss. The bowel and omentum may also adhere to the sac, and sometimes to the sac and testes at the same time.

A congenital inguinal hernia is to be treated on the same general principles which apply to other herniæ. If the bowels admit of reduction, the patient be young, and a proper truss constantly worn, the communication between the abdomen and scrotum will frequently become obliterated, and a radical cure be the result. The chances of this desirable event diminish, however, as the individual grows older, and, after the adult age, a truss can hardly ever be safely dispensed with.

Unfortunately, you cannot always apply a truss, as must be obvious, when it so happens, that a piece of intestine or omentum is in the sac, while the testicle is in the groin, or even within the abdomen, for, in the first case, it would press upon and inflame the testicle, and, in the second, prevent its descent.

However, if the patient should be beyond the age, when any chance of the descent of the testicle exists, I would recommend you to reduce the hernia, and apply a truss.

In young subjects, in whom no congenital hernia exists, but one or both testicles have not yet passed the ring, their descent should be watched, and as soon as they are low enough, a truss should be worn, constructed so as not to make any hurtful pressure on them.

The congenital hernia is remarkable for the thinness of its sac, as manifested in this preparation, a fact dictating caution in the first steps of the operation. The sac is indeed frequently not thicker than the natural peritoneum.

This hernia, gentlemen, is also well known to be particularly often strangulated at the inner opening of the ring, or by a contraction of the neck of the sac within the inguinal canal.

The congenital hernia has another peculiarity, which is, that it sometimes becomes strangulated by constrictions in the body of the sac. In the preparation 726 the stricture is pushed down quite to the testicle.

As the epigastric artery is always on the inner side of the neck of the sac, the division of the stricture may be safely made, either directly upwards, or upwards and outwards.

I need hardly remind you, gentlemen, of the care that should be taken not to handle, wound, or in any manner injure the testicle in the operation.

I must not conclude the account of congenital inguinal hernia, without mentioning one peculiar case that is sometimes met with, consisting of a protrusion of the viscera, together with a peritoneal hernial sac, into the cavity of the tunica vaginalis. It is formed after the recent obliteration of the communication between the abdomen and the tunica vaginalis. Were you not aware of the possibility of such a case, you might be considerably perplexed on meeting with it. Here is a preparation of a double kind of hernia,—first, a congenital one, with omentum in it, and then you see another hernial sac pushed down into the tunica vaginalis.

Hernia of the Cæcum and Colon, gentlemen, are attended with particularities well deserving your notice.

Scrotal herniæ of the right side, formed by the cæcum, the appendix vermiformis, and commencement of the colon, draw after them into the scrotum that portion of the great bag of the peritoneum by which those viscera are naturally fixed in the right ileo-lumbar region; and, on opening the sac, you will find the cæcum and colon connected to this part of the peritoneum, just as they were in the abdomen previously to the displacement. The same kind of natural adhesion of the large intestines to the hernial sac may also take place in a scrotal hernia of the left side, when the protrusion consists of that part of the colon, which is naturally fixed in the left ileo-lumbar region by duplicatures of the peritoneum.

Another peculiarity of these herniæ arises from the fact that the cæcum and beginning of the colon are partly situated out of the peritoneum; hence they can only be partially surrounded by a hernial sac, a portion of their external side being in immediate contact with the adjacent cellular membrane. In such a case, were the surgeon to cut too much towards the outside of the tumour, he would find the cæcum and colon immediately under the cremaster and infundibular process of the fascia transversalis.

From what has been stated, gentlemen, you will readily understand the cause of another peculiarity of herniæ of the cæcum and fixed portion of the colon, namely, the impossibility of their reduction. The appendix vermiformis may be returned, but the cæcum itself cannot be reduced, unless the sac itself admit of being replaced.

The circumstances which I have explained, must make it a matter of importance to discriminate a hernia of the cæcum and beginning of the colon from others. Now, *such a case can only form gradually;* the displacement of the cæcum and colon, fixed as they are in their natural situation, must be a slow process. Herniæ of sudden formation, therefore, cannot be of this kind. The tumour will also generally be of large size, of long standing, and of an irregular knobby shape.

In this species of hernia, as well as in all others of large size, the symptoms of strangulation are seldom violent, on account of the width of the opening through which the protrusion takes place. You must in such cases be cautious not to mistake the colic and irritation, to which the viscera in the tumour are liable, for the symptoms of strangulation. When a large old scrotal hernia is really strangulated, the evacuations from the bowels are always totally suppressed, the swelling is painful, and the patient is affected with vomiting, eructations, and fever. On the contrary, in the colic from irritation, resembling strangulation, the discharge of air and fæces from the rectum is never entirely suppressed; and the evacuations are increased when mild purgatives and clysters are given. If nausea and tendency to vomiting occur, it is at long intervals, there is not much fever, and the swelling, though tense and bulky, is not painful on being handled. Under such circumstances, mild saline purgatives, clysters, and cold applications, may frequently be employed with success, and you should not be in haste to perform an operation.

But, if a large hernia of the cæcum were to be truly strangulated, you should remember, before you begin the operation, that the bowels will not admit of being completely returned, on account of their particular and natural adhesions to the sac; and that in this, as well as in all scrotal herniæ of large size, the neck of the hernial sac is not the seat of strangulation. Perhaps the best plan would be merely to expose the abdominal ring, and make a division of it, upwards and outwards, without opening the hernial sac at all, and then try to reduce the viscera as far as practicable.

Gentlemen, *the Exomphalos*, or *Umbilical Hernia*, is a protrusion of the viscera through the navel, or in the neighbouring part of the linea alba. The first case, whether met with in the infant, or adult, has a *circular neck*, at the circumference of which, the tendinous margin of the umbilical ring can be felt. Whatever may be the size of the tumour, its body always retains nearly a spherical shape; nor can any wrinkle of the skin, nor anything at all resembling the cicatrix of the navel, be seen upon the convexity or the sides of the swelling.

On the contrary, in a hernia of the linea alba, the *neck of the swelling* is of *an oval shape*, like the fissure through which the protrusion has taken place; and, if the hernia be very near the navel, the *umbilical cicatrix may be seen on one of the sides of the swelling;* a sure proof that the viscera do not protrude through the umbilicus itself.

In a true exomphalos, the tumour in a thin person is free and pendulous; in a fat subject, broad at its base, less prominent, and hence spherical. The protruded parts will naturally tend downwards, so that the opening into the abdomen is from the upper part and not from the middle of the swelling, as exhibited in the specimen before us.

The umbilical hernia is not only furnished with a true peritoneal sac, as you see in the preparation, No. 721, but with a superficial investment of condensed cellular substance. The coverings of this hernia, however, are frequently very thin, and, in old cases, portions of the sac are sometimes absorbed. In the preparation 723 the most prominent part of the sac is exceedingly thin, nearly absorbed, and closely connected with the integuments: nay, the viscera may be adherent to the integuments, and strangulated in the opening in the sac, through which they have protruded, and which has been occasioned by its partial absorption.

Gentlemen, an umbilical rupture in an adult rarely contains intestine unaccompanied by omentum; and I may also tell you, that it happens with much greater frequency in women than men; a fact explicable by the consideration that pregnancy has more influence than any other cause in bringing on the complaint. Dropsical and corpulent subjects, however, of both sexes are liable to the disease.

Herniæ of the Linea Alba, or *Ventral Herniæ*, of which one example is before us, an epiplocele, are much slower in their progress than true cases of exomphalos. On account of their small size, gentlemen, they are frequently unobserved, especially in corpulent subjects, or when situated on one side of the ensiform cartilage. However, they bring on complaints of the stomach, and habitual colics, and are more liable to simple obstruction, than strangulation with inflammation and tendency to gangrene. But when this state unfortunately does occur, the symptoms are more intense, and the accession of mortification more rapid, than in any other species of hernia. Even when merely the omentum is strangulated, the symptoms are particularly violent, a circumstance ascribed to the proximity of the stomach.

When practicable the exomphalos and ventral herniæ should be reduced, and a truss worn. You will find in Hey's surgery the description of an excellent truss for umbilical hernia. In young subjects the pressure of a truss will often radically cure the disease; and the plan is much more commendable than that of reducing the viscera, and then extirpating the integuments and sac with a ligature.

When, in adult subjects, an operation is unavoidable, the sac should be laid open with the greatest caution, and the umbilical ring divided either directly upwards or downwards. When the hernia is very large, but not attended with gangrene, you should be content with cutting the umbilicus, without opening the sac at all, or as little of it as possible.

The division of the stricture in ventral hernia may also be made upwards or downwards, due regard being paid to the epigastric artery which crosses the linea semilunaris.

In *Cystocele*, or *Hernia of the Bladder*, the protrusion is most frequently through the abdominal ring; and generally in male subjects who have been repeatedly afflicted with

retention of urine. Cystocele has been noticed, however, in children, from the irritation of stone, and even in women from the effects of dropsy and pregnancy.

Gentlemen, you well know that only the fundus and a part of the posterior surface of the bladder, down to the insertions of the ureters, are covered by peritoneum. Now, as it is usually the anterior and lateral part of the bladder, which first passes through the ring into the scrotum, the peritoneum will not protrude at the same time, and the displaced part of the bladder will not be covered by a hernial sac; but, as more of it descends, its fundus at length passes into the scrotum, drawing after it the peritoneum naturally attached to it. Thus the bladder first protrudes, and a hernial sac follows afterwards, into which a portion of the omentum, or intestine may glide. Here the bladder is invariably excluded from the other hernia, and situated at its posterior and inner side.

Sometimes the case is reversed, and the cystocele is the consequence of an ordinary hernia.

The symptoms of cystocele are a fluctuation in the tumour, the swelling becomes large and tense when the patient holds his water, and diminishes when the urine is discharged. If the scrotum be compressed, an inclination to make water is experienced. Sometimes the muscular coat of the bladder being paralytic, the patient cannot expel the urine from the swelling, unless he raise and compress the scrotum; indeed, as the bladder is always drawn to one side, the patient invariably has some difficulty in making water, and is sometimes afflicted with a total retention.

The disease has been mistaken for hydrocele, though the marks of difference are great. Thus, the tumour produced by the bladder always extends into the ring, the testicle is plainly perceptible below the swelling, and the tumour diminishes when the patient voids his urine.

Cystocele may occur also under the crural arch, in the perinæum, or the vagina.

The reduction of a cystocele is soon rendered totally impossible by adhesions; and all that can be done is to apply a suspensory bandage. If a total retention of urine were to attend it, caused by the displaced condition of the organ, and not to admit of a catheter being passed, the swelling should be punctured. If a calculus were to form in the protruded bladder, an incision might be practised for its extraction.

Gentlemen, this is all the information which I can offer on the subject of hernia in these lectures. Some rare forms of the disease, like herniæ at the foramen ovale, or ischiatic notch, in the vagina or perinæum, or through the diaphragm, you will probably never meet with; though I would still advise you to remember them, and be prepared for them. You are more likely, I think, to meet with cases in which the bowels within the abdomen become strangulated by accidents, displacements, bands of adhesion, or various other causes.

NON-EXISTENCE OF VAGINA, REMEDIED BY AN OPERATION.

BY JOHN C. WARREN, M.D.,

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A YOUNG woman, twenty-three years old, well constituted, applied to me for a natural malformation of the organs of generation. On examining, I found the os externum wanting, and, so far as could be judged, there was no vagina. The aperture of the urethra was well formed; the clitoris and nymphæ appeared as usual. The breasts and all the other external parts were natural; but no uterus could be discovered on a careful examination by the rectum, either by Dr. Channing, Dr. Hayward, or myself. The patient had never experienced any unusual enlargement of the abdomen.

Believing it possible that the uterus might exist, although not sufficiently developed to be discoverable by the rectum, I determined to comply with the patient's wish and attempt the formation of an artificial passage: for this purpose she entered the Massachusett's General Hospital in January last.

The patient being placed on her back on the edge of a bed, feet each in a chair, I attempted to pass a probe in behind the urethra, but found this impracticable, there being no aperture or excavation. The forefinger of the left hand was introduced into the rectum, and a small probe-pointed bistoury employed to make an aperture in front of the rectum as near as might be in the situation of the fossa navicularis. This was accomplished, but I was disappointed in finding no cavity behind or within this aperture. It was necessary, therefore, to proceed with the same instrument, the convexity being towards the rectum, to dissect from behind forwards. In this way an opening was made sufficient to admit the point of the finger. The dissection being carefully continued in the same manner, a passage was formed about three inches long, and wide enough to admit the finger.

The bleeding was considerable; this was arrested by the introduction of a tent. Subsequently to the operation she had much fever, pain and tension of the abdomen, and suppression of urine. The symptoms gradually disappeared.

The wound was carefully dressed by the introduction of a tent daily. The suppuration was considerable ; after it had subsided the tent was removed, and the passage exhibited no disposition to close.

On examining subsequently to the cicatrisation of the wound, something like labia of the os uteri was discovered.

After her recovery she had some appearance like a catamenial discharge. She then left the hospital. Four weeks afterwards she was seen by Dr. Hayward; he found the aperture and cavity open, and she had had a sanguineous discharge resembling the catamenia; and he thought he could distinguish something like an uterus.—*American Journal of the Medical Sciences.*

DR. TYTLER'S PROOFS OF THE REAL DISCOVERER OF GALVANISM.

We copy the following statements from the work of Dr. Tytler, published in India in 1819, entitled " A Concise Narrative of Facts, connected with the Disease which occurred in the District of Jessore during the Months of Aug. and Sept., 1817; together with Observations upon its Symptoms, Causes, and Treatment. By Robert Tytler, M.D., M.A.S., Assistant-Surgeon, Civil Station, Zillah Jessore." In a former number of this Journal we inserted the author's history of contagious diseases, and we feel that no one can peruse it without awarding to him the merit of great research, profound erudition, strong reasoning powers, and very extensive observation on the cholera of Jessore in 1817. In the history to which we allude, Dr. Tytler has, in our opinion, satisfactorily and incontrovertibly proved that deteriorated grain was the cause of pestilence in many ages and countries. We have also shown, by a history of the epidemic diseases of Ireland, from the earliest period of the history of that country to the present time, published in the present volume of this Journal, that famine and pestilence have borne the relation of cause and effect in that part of the United Kingdom.

Dr. Tytler is entitled to the thanks of all civilised governments and nations for his exposition of the deleterious influence of bad rice in causing Asiatic cholera abroad and at home; and he has accumulated such a mass of evidence on this point as ought to lead to the prohibition of the sale of bad rice. We refer to his pamphlet for this evidence; and shall now introduce his facts with respect to the real discoverer of galvanism. They appear to us to be conclusive; but we leave our readers to form their own opinions.

" It is not unfrequently noticed that traces of scientific discovery, the reputation of which is claimed by natives of other countries, are, in the first instance, to be found in the labours of our own countrymen, who, although the merit of originality attaches to them, receive but little, if any, of that fame which is liberally bestowed on more fortunate and later observers. As a proof of one instance of this description, I give the following extract from the 2nd vol. of the Medical Essays, published in Edinburgh so far back as the year 1734.

" ' Dr. Alexander Steuart, Physician to the Queen of England, having cut off the head of a frog, observed, that upon thrusting a blunt probe into the medulla spinalis the muscles of the body were brought into convulsive contraction: and that the same happened to the muscles of the head when the probe was thrust into the brain; from which he concludes the brain and nerves to contribute to muscular motion, and that to a very high degree.'—*Phil. Trans.* No. 424.

" This passage contains indisputable testimony, that the leading fact upon which the discovery of galvanism is founded was first made by a Briton. I am not aware of this circumstance having been mentioned in any publication that details the manner in which this extraordinary agent was accidentally detected by Galvani. The discovery, as is well known, is universally admitted to have originated with him, or rather his wife. But, admitting that he was unacquainted with the important fact, which had been previously ascertained by Dr. Steuart, surely this gentleman deserves, at least, equal merit, although his pretensions, probably from being unknown, never appear to have been acknowledged.

" As I understand that this communication has attracted some attention from those who feel an interest in scientific pursuits, and having procured the volumes of the Philosophical Transactions, which contain the account of Dr. Steuart's experiments, it may probably prove acceptable to my readers, to afford a more enlarged detail of what appears, to myself at least, an indubitable fact, viz., that the

phenomena, at present known under the name of galvanism, were distinctly described to the Royal Society of London, and printed in their Transactions several years prior to the birth of Galvani, who was not born till the year 1737. The experiments of Dr. Steuart were performed, according to his own testimony, for the purpose of proving the existence of the nervous fluid. But, at the commencement of his process, he detected galvanism, and mistaking the phenomena excited by this stimulus for effects produced by the presence of a fluid existing within the nerves, otherwise named animal spirits, he there stopped, contenting himself with having afforded, as he imagined, a complete demonstration of his theory, which was deemed *of so much consequence in the animal economy, and practice of physic.* Thus biassed by a preconceived hypothesis, he rested, as it were, upon the threshold of nature's portal, and, unfortunately, refrained from prosecuting this interesting subject of inquiry, and confirming by its means those mighty results to which his discovery was calculated to lead, and, in the hands of others, has subsequently produced.

"His first experiment is detailed in the Philosophical Transactions for the years 1731 and 1732, and is as follows: —

"'I suspended a frog by the fore legs in a frame, leaving the inferior parts loose; then the head being cut off with a pair of scissors, I made a slight push perpendicularly downwards, upon the uppermost extremity of the medulla spinalis, in the upper vertebra, with the button end of the probe, filed flat and smooth for that purpose, by which all the inferior parts were instantaneously brought into the fullest and strongest contraction; and this I repeated several times on the same frog with equal success; intermitting a few seconds of time between the pushes, which, if repeated too quick, made the contractions much slighter.'

"Now, on reading this account, can we doubt that these convulsions were entirely owing to the misnamed galvanic fluid? the merit of whose discovery becomes in consequence due to this ingenious and learned gentleman. To avoid all cause of irritation, the blunt end of the probe, it appears, was flattened, and therefore to no other cause excepting galvanism can this singular result with propriety be ascribed. In this instance, a very high degree of merit attaches to Dr. Steuart for this blunting of the probe, or, in other words, applying a broad surface of metal to the nervous substance was not the mere effect of chance, but the result of a process of reasoning, which, however erroneous, is nevertheless extremely ingenious. Thus in the Croonean Lectures, on Muscular Motion, printed in the same Transactions, for the year 1737-8, he observes,—'The extremity of the probe applied in this experiment being flat, cannot produce this effect by irritation, but by compression; and (reader, mark the ingenuity of the inference) the compression of the pliable extremities of tubes, full of any fluid, must depress or propel the contained fluid towards the lower or opposite extremities, with an increased degree of velocity.' But setting aside altogether the cause of nervous sensation, it is evident that the effects here produced entirely arose from galvanic stimulus, excited by metallic application. In the second experiment, which is not less decisive, the same results, and by the same means, were obtained.

"'With the same flat button end of the probe, I pushed slightly towards the brain in the head, upon that end of the medulla oblongata, appearing in the occipital hole of the skull, upon which the eyes were convulsed. This also I repeated several times, on the same head, with the same effects.' These were followed by an experiment of a different description, made in order to ascertain the comparative elasticity of arteries, veins, and nerves, and, finding that the latter do not contract upon being removed from the body, he draws these conclusions. The *two* first experiments show, that the brain and nerves contribute to muscular motion, and that to a very high degree.

"'The third experiment makes it as plain, that what they contribute in muscular motion, cannot arise from, or be owing to, elasticity, which they have not.

"'What remains, therefore, but to conclude, that the action of the nerves in muscular motion, is owing to the fluid they contain, by whatever name we may choose to call it.'

"To establish Dr. Steuart as the discoverer of galvanic effects, produced upon the nerves by the application of a metal, it only remains for us to be convinced, that the motions, thus excited in the limbs of the animal, were

actually those which we are accustomed to describe under that denomination. But on this can a doubt reasonably be entertained? And hence it follows that the discovery of this agent, as I have already mentioned, was not only fully detailed, but commented upon to the Royal Society by a native of Great Britain, even previous to the birth of the Italian philosopher, from whom it so undeservedly derives its appellation.

"The work of Mr. Wilkinson, which is the most elaborate upon this subject, commences with the following remark:—

"'The first printed notice which is to be found of the phenomena since called galvanic, is in a work by Sultzer, published in 1767,' &c. Now, sir, it is most assuredly remarkable, that, with the Philosophical Transactions in our hands, such an assertion should not only be made, but universally admitted, and moreover that it should have continued without contradiction, or even an attempt offered to vindicate to Dr. Steuart the fame to which he is so justly entitled. Our astonishment at this circumstance, however great, is considerably increased, when we find the fact upon record, that his experiments were not performed in the humble laboratory of an obscure chemist, but, as is attested, in the presence of the Royal Society, who returned their thanks upon the occasion.

"'At a meeting of the Council of the Royal Society, Nov. 12, 1739. These letters on muscular motion, by Alexander Steuart, M.D., &c., having been, according to the will of the Lady Sadlier, communicated beforehand to me, and approved, and afterwards read at several meetings of this Society, for which he received their thanks, I do direct the same to be printed. HANS SLOANE, P. R. S.'

"The incident, which is said to have attracted the attention of Galvani to the powerful natural agent since known by his name, is not unlike the experiment of Dr. Steuart, for the contractions were excited also in the limbs of a frog, and by the same means, viz. the application of a single metal. The accidental presence of an electrifying machine, and no anterior process of reasoning, induced him to conceive that such convulsion might possess some connexion with electricity, an idea that has led to all the discoveries that have since ensued. In the case of Dr. Steuart, circumstances were not so favourable, yet he unequivocally succeeded in demonstrating the operation of the same wonderful agent, which was destined to be re-discovered (if the expression be correct) on the continent, and thence being transmitted to England, under a novel and foreign appellation, has immortalised, by the decomposition of the alkalies, the name of Davy, and affected an important revolution in the whole system of chemical science. The inattention of scientific men to the experiments of Dr. Steuart, particularly since the period in which the same phenomena were noticed by Galvani, is strangely unaccountable. Yet are the prominent features of the discovery as distinctly exhibited in them as in those performed by him or Volta; after perusing the facts published by the Royal Society, ought we for an instant to suspend our judgment in declaring whether to the Briton or Italian the honour of this important discovery belongs. It is certainly much to be regretted, that an unmerited appellation, now sanctioned by custom, should have crept into general use, by which our ingenious countryman, having never possessed the reputation of this discovery, is deprived of the fame which he justly deserves, yet may we trust that, in future accounts of Galvani's *glorious* career, this error will be corrected, and some amends made by succeeding authors for the injustice of their predecessors."

REPORT OF MIDWIFERY CASES,

BY FLEETWOOD CHURCHILL, M.D.

Licentiate of the King's and Queen's College of Physicians, Ireland, Physician to the Wellesley Institution for Females, Lecturer on Midwifery, with Diseases of Women and Children in the Medico-Chirurgical School, Digges-street, Dublin.

CASE I.—(Which occurred to me in Edinburgh.)—Mrs. Simpson, æt. 35, mother of several children, sent for me January 3, 1831. I found the pains strong and recurring quickly. The bag of waters protruded through the vaginal orifice. Having ruptured this, I ascertained a head presentation in the first position. The child was soon expelled, without diminution of the uterine tumour. As there was some hæmorrhage, I made an examination, ruptured the second membranes during a pain, and, finding the feet at the

upper outlet, brought them down, and delivered the child. Still the uterus preserved nearly the same size, and, on the rupture of the third membranous pouch, the head of the other child presented, and was speedily expelled, followed by the body and lower extremities. All the children lived for three months; the second labour was a girl, the others boys. As there was a tendency to hæmorrhage, I extracted the placentæ (a double and a single one) as soon as possible. The whole labour occupied but two hours. Some flooding took place during the day, which was arrested by a dose of laudanum, prescribed for her by my friend Dr. John Moir, at that time one of Dr. Hamilton's annual pupils. From this time nothing untoward interrupted her recovery.

Case II.—*Triplets.*—Mrs. Kane, æt. 35, healthy, having had two children after natural labours, on the 5th of May, 1834, engaged me to attend her in her approaching confinement, and consulted me upon her enormous size, and the anasarcous state of the lower extremities. Upon examination I found the abdomen very large and tense, with very evident fluctuation upon the slightest touch in any part. The skin did not pit on pressure. On applying the stethoscope, I heard a loud pulsation of the fœtal heart. This convinced me that the distension was intra-uterine, and I regret that I deferred to a second visit a more minute investigation. The limbs were greatly distended, and pitted on pressure. She stated herself to be in the eighth month of pregnancy. I recommended rest, with the horizontal posture, and prescribed some aperient medicine. The next morning I was sent for and found labour commencing. The cutting pains were frequent, the os uteri dilated, and the bag of the waters protruding. Whilst endeavouring to ascertain the presentation, the membranes gave way, and the liquor amnii was discharged. I could then feel the head of the child in the first position. After a short interval the pains recurring expelled the child, a healthy girl, about the usual size of twins. The size of the abdomen was scarcely diminished, and in about ten minutes another pain occurred. The membranous bag protruded, and I ruptured it. The head presented in the fourth position of Naegelè, *i. e.*, with the anterior fontanelle directed towards the right acetabulum. As the head descended, the rotation described by that author commenced, but ere it could be accomplished, the head of the child, owing to its small size, was expelled, with the face looking (upwards and rather to the right side). The chin was not extricated from under the pubic arch until after the vertex and posterior part of the occiput had swept through the perinæum. The body was delivered immediately. The infant was a male, about the size of the former, and living. The poor woman to my astonishment complained now "of something kicking" in the abdomen, and, upon placing my hand there, I felt plainly enough the motions of another infant. The pain coming on I ruptured the membranes; the head presenting in the first position, the child was speedily expelled, and proved to be a girl. Scarcely any draining had as yet occurred, and the binder previously applied having been tightened, she was allowed to rest a little. She was a good deal exhausted, though not alarmingly so.

Her pulse was a little weaker than natural. The whole delivery from the rupture of the first membranes had not occupied more than an hour and a half. I now examined the three cords, and having found the one which yielded the most on a slight attempt at traction, I extracted the placenta by pulling gently and at intervals. It proved to be the one to which the two cords were attached. The other was delivered in the same manner immediately after.

Case III.—*Twins—Breech and Footling Case.*—Mrs. B—, a healthy woman, the mother of three children, sent for me at midnight, having been taken in labour two hours before. She had calculated upon having yet a month to go before her accouchement. The waters were discharged an hour previous to my visit. I found the pelvis filled by a round soft tumour, which I recognised to be the breech, the genital organs were towards the left side, and the right tuber-ischii presented. The usual half turn was made, and the body and feet expelled. I extracted the head with the face in the hollow of the sacrum. The child was alive. On applying my hand to the abdomen, I found the uterine tumour still large, and a vaginal examination discovered another bag of water, which I ruptured on

the occurrence of the next pain. A single knee (the right) presented, the foot and leg being folded back; with a little assistance the body descended, and I extricated the other foot, and with some difficulty and delay the head. After a short time respiration was established. Both children were girls, and one died the next day; the other is thriving well. The placenta, a double one, was expelled in about five minutes without hæmorrhage. The woman recovered in the usual time. Three points of considerable importance present themselves to our notice in the preceding cases. The rupture of the membranes after the birth of the first child, the management of the second and third children, and the delivery of the placenta. Generally speaking within about half an hour after the birth of the first child, slight pains recur, and they appear to me to point out the period for rupturing the second membranes, as no good *can* arise from waiting, but much mischief and inconvenience *may be* the result. The parts are already dilated by the passage of the child, and the only change in them produced by waiting would be a partial return to their natural calibre. On the other hand, cases are met with where the uterus remains inert for several hours if left to itself, and in these surely rupturing the membranes, after the lapse of half an hour, might render artificial labour unnecessary. As to the second point there are two opposite opinions maintained by authors as quoted by Denman; those who advise the instant delivery of the second child by the feet, and those who would leave it entirely to nature. Denman himself advises not to interfere until after four hours, and then, if there are no pains, to deliver by turning. Hamilton advises the same after one hour. Dr. John Clarke agrees with Denman, provided it be not a cross-birth. Burns coincides with Hamilton. But I need not multiply authorities. It is evident and agreed upon that, if the second presentation be preternatural or the labour complex, instant delivery must be attempted. But if not, it appears to me much wiser to leave the labour to nature, after rupturing the membranes, unless the uterus should remain inactive for a very long time. The binder, which should, if possible, be applied after the birth of the first child, will probably be a valuable aid in producing uterine contractions. There can be no necessity for introducing the hand, whether the head, breech, or feet present, if there be no complication. The only precautions to be adopted with regard to the placentæ, appear to be to ascertain, by gentle traction of each cord, which placenta (supposing there to be two) is the more completely detached, and to extract that first. It is also well to remove both as soon as possible, in order to avoid the danger of flooding. In the cases recited, I pulled each cord gently, and finding one give more than the other, I extracted by that, and the second placenta followed immediately.

Case IV.—*Unavoidable Hæmorrhage—Prolapse of Funis.*—March 15th, 1834. I was sent for to visit Mrs. ——, a dispensary patient, who had been during the last fortnight attacked with frequent flooding without apparent cause. She stated herself to have gone her full time. The waters had not been discharged, and the grinding pains were pretty severe, with some draining. On making an examination, I found the external parts somewhat rigid, and the pelvis not very large; the os uteri dilated to the size of half a crown; and, upon passing my finger through it, I distinctly felt the edge of the placenta extending to the os uteri, but *not further*, and situated at the left side and rather posteriorly. The head of the child presented; and within the membranes I could feel a loop of the cord. From the state of the os uteri and passages, I did not think that turning afforded any greater chance of saving the child than natural labour. I therefore ruptured the membrane, which increased the uterine contraction. The hæmorrhage ceased instantly. Unfortunately, the funis prolapsed, and, as the child could not pass rapidly through the pelvis, the circulation was arrested, and the child died. The placenta was expelled without hæmorrhage. The cord was found inserted near the lower edge, and the opening in the membrane *close to the placenta*. The woman did well.

This case affords a beautiful example of a transition from one variety of hæmorrhage to another. Strictly speaking, it was a case of unavoidable hæmorrhage, i. e. the separation of the after-birth, causing the flooding, was occasioned by the dilatation of the cervix; and

yet the remedy for accidental hæmorrhage was applicable, and succeeded in this case. The moment the head of the child came in contact with the placenta, the flooding ceased. I felt some difficulty in deciding whether or not to turn the child, as the probability of prolapse of the funis was very great. But, as the state of the passages gave very little hope of being able to extract the child footling speedily, so as to save its life, and as the operation of turning might endanger the mother, I decided to leave the operation to nature. After much reflection I think I did right, though I lament that so little can be done in funis presentations. Every plan I have yet seen appears either insufficient or very objectionable.

Case V.—*Spontaneous Evolution.*—I was sent for on Friday, July 27, 1832, to visit Mrs. Fitzsimmons, æt. 36, who had been seized with labour pains three hours before. She has had eleven children, several of them cross-births. She supposed herself in the eighth month of pregnancy. She is a healthy woman, with a well-formed pelvis. On examination I found the right arm protruded through the external parts and quite livid. At this time the labour pains had somewhat diminished in violence; but, upon passing a finger into the vagina, I found the finger of the child so jammed in the pelvis, that any attempt at turning was quite out of the question. In this dilemma I fortunately obtained the assistance of my friend Dr. Gordon. Before he had finished his examination of the presentation, strong uterine contraction came on. The shoulder of the child was forced under the arch of the pubis; then appeared *successively* the right side of the thorax, abdomen, and pelvis. The bending of the hip-joint allowed the body of the child to free itself from the vagina, and then the knees and feet were expelled without assistance, the child remaining suspended by its head from the pelvis. As the pains continued, I had no difficulty in extracting the head. The placenta was expelled without hæmorrhage. The fœtus was dead, but not putrid: it appeared fully the size of an eight months' child. The woman recovered, and has since had two children.

This case, extracted from my note-book, was taken down before I had read any explanation of the evolution, except Denman's, to which it is diametrically opposed. It would be presumption to question Denman's accuracy as regards his own cases; we can only look on them as remarkable variations from the ordinary process. I have since read all the other explanations, and derived much pleasure from the very intelligent and accurate observations of Dr. Douglass. Drs. Gooch and Burns coincide with Dr. Douglass. Dr. Kelly, of Swords, is opposed to the view taken by Dr. Douglass, and endeavours to support the opinion of Denman, with an important alteration, viz.—that the retraction of the arm takes place during the *relaxation* of the uterus, instead of during the *contractions*, as Denman supposed. He relates no cases, so that I know not whether his observations are the result of theory or practice. He certainly does not appear to do justice to the simple yet clear description of Dr. Douglass.

A case is related in the last Number of the Edinburgh Medical and Surgical Journal, by Dr. Malcolm, as illustrative of the process of evolution, in which, however, he anticipated the completion of the natural process by bringing down the feet. It appears to me, that the mechanism of evolution is sufficiently simple. The head, descending, catches upon the rim of the pelvis, and, by the violent uterine contraction, is turned to one side, whilst the arm, becoming free, falls down into the vagina. Now, if the pelvis be large, or the child unusually small, the continued powerful uterine contractions force down the parts next to that already in the pelvis, viz, the thorax and abdomen:—for the head, we have seen, is fixed. This process continuing, the body, hips, and lower extremities of the child are expelled successively, leaving the head to the last, as in a footling case. I do not deny that perhaps too much value may have been attributed to this process, for we cannot be certain of its taking place; but, on the other hand, there appears to me to be a mistake on the part of its opponents, who strenuously advise never to neglect turning in hope of a spontaneous evolution. Of course not; I know of no such proposition; the alternative is not *turning*, but *evisceration*.

Neither in Denman's, Douglass's, Malcolm's, or my own case, was turning practicable, or it would have been attempted. But surely, when this is out of the question, and the side of the

thorax seems descending after the shoulder, it is better, if the state of the woman permit, to wait a little than to perform a troublesome, and possibly hazardous operation, and which is still a resource available if evolution do not take place.

Since writing the preceding, a case resembling the above has been related by Mr. Thurman, in the *Lancet*.

MEDICAL ADDRESS TO MR. WARBURTON.

At a Special Meeting of the Medical and Surgical Society of this town, held on 11th June, 1834, the following Address was unanimously approved of, and has since been forwarded to Mr. Warburton, Chairman of the Parliamentary Committee of Inquiry into the present state of the Medical Profession.

Address of the Medical and Surgical Society of Newcastle-upon-Tyne and its vicinity, to Henry Warburton, M P., Chairman, and to the Members of the Committee appointed by Parliament, to inquire into the present state of the Medical Profession, and to report thereon.

"Gentlemen,—In common with the majority of our professional brethren, throughout the United Kingdom, we are deeply impressed with the zeal and impartiality which you have shown, during the present inquiry; and we deem it to be a duty, which we owe at once to society, our profession, and your honourable committee, to lay before you a sketch of the state of the medical profession in this extensive and populous district, and, subsequently, to submit with much respect, for your consideration, some suggestions which have occurred to us, as desirable in connection with anticipated reforms, when such shall be under the deliberation of the legislature. It may be satisfactory to inform you, that the Medical and Surgical Society consists of about sixty members, and includes physicians and surgeons exclusively.

"*Physicians.*

"In Newcastle and Gateshead there are eleven physicians, who practise without dispensing medicine. All, with one exception, (a respected and accomplished graduate of Groningen) are Edinburgh graduates. Two of the number are licentiates of the College of Physicians in London; although originally possessing the same degree with the rest, the licentiates are alone cognizable as physicians in a court of justice in England, or indeed legally licensed to practise medicine; and they only are protected by law in case of professional libel, as was lately ruled by Chief Justice Denman, in the case of Collins *v.* Carnegie. Hence, those, not licentiates, practise by sufferance only, and although educated in a medical school of such celebrity as Edinburgh, yet are denied privileges granted to graduates of Oxford and Cambridge, in neither of which places is there a perfect school of medicine; thus exhibiting the absurd anomalies, which arise from corporate abuse and nationality. Physicians have no legal claim for professional remuneration.

"*Surgeon Apothecaries, or General Practitioners.*

"There are about sixty surgeon apothecaries, or general practitioners. They all dispense medicines. A large majority are not licentiate apothecaries. The greater number are members of the College of Surgeons in London. Many are licentiates of the College of Surgeons in Edinburgh; and a few have diplomas from Glasgow. Very few of the last classes are licentiates of Apothecaries' Hall; and, therefore, although well qualified, are liable to considerable difficulty, from the absence of legal claim to remuneration. London diplomatists (not licentiates) share this disadvantage with them, but to a less degree; and all are liable to a penalty being inflicted (if not licentiates) by Apothecaries' Hall. Remuneration is almost exclusively derived from medicines dispensed, so that a large proportion (not licentiates) are at the mercy of their patients, according to the decision of Chief Justice Best, in Common Pleas, Steed *v.* Henley. This mode of remuneration is peculiarly disagreeable to the respectable practitioner, as either not being sufficient, or subjecting him to suspicion of sinister views in the mind of his patient. Neither should the impossibility be overlooked, that some (to be hoped few) less scrupulous, may dispense unnecessary or injurious quantities of medicine.

"*Apothecaries.*

"A few apothecaries, not surgeons, practise indiscriminately.

"*Druggists.*

"Many druggists in this town dispense medicines, and some to a very considerable degree prescribe, and even visit patients. There is too much reason to fear, that many of this class, including their assistants, are very incompetent, in the important branches of materia medica and pharmacy. It frequently occurs, that various other branches of trade, as groceries, &c., are carried on in the same shop, thus increasing the possibility of errors, and adulteration. Such establishments sell patent medicines and nostrums largely.

"*Quacks, and Quack Medicines.*

"This, like most other towns, is frequently visited by quacks, in the characters of dentist, oculist, aurist, surgeon and physician. The traces of their ruinous and irresponsible treatment too often meet our view, in the suffering victims of their cupidity and ignorance. There are three establishments devoted to the sale of quack medicines, which are, unfortunately, largely patronised by the credulous and ignorant. There are four or five repositories for patent medicines, all of which sources of mischief, it is painful to say, derive but too much support from the public press, which fosters the evil on account of advertisements. It is to be lamented that the duty on patent medicines, about forty-five thousand pounds sterling, annually, should weigh with our enlightened legislature for a moment, in the toleration of so sadly increasing an evil.

"*Coroners and Medical Evidence.*

"Here one of our coroners is always a medical man; an usage, for the ends of justice, which should prevail more generally throughout the country. Medical men here, as in other places, feel the disadvantage of possessing no legal claim for remuneration, when required to give evidence as to the causes of death, &c.

"*Hospital, Dispensaries, &c.*

"Newcastle possesses an excellent infirmary, containing 152 beds; to which four physicians, four attending, and two consulting surgeons, are attached. In this institution a clinical surgical lecture is delivered twice a-week. Newcastle has also a well supported dispensary, to which six physicians, one surgeon, and two apothecaries are attached. Besides, there is a fever hospital, an eye infirmary, lying-in-hospital, and a charity for attending married women in their own houses. Gateshead has likewise a dispensary, attended by three physicians, four surgeons, and one apothecary. In all of the above institutions, the appointments are for life.

"*Medical School.*

"In January last, a medical school was established here, in which four months' spring courses of lectures were given. In future, six months' winter courses on medicine, surgery, anatomy, midwifery, materia medica, and chemistry, will be annually delivered. It promises considerable benefit to the numerous medical pupils of this district, which possesses every facility for teaching all the branches of medical and surgical science.

"Many imperfections of the present medical system, mentioned in some of the foregoing sections, are so obvious, as almost to point out their remedies, so that the hints, we take the liberty to suggest, may be very brief, viz.:—

"*Suggestions.*

"1. The importance of uniformity of medical, surgical, and pharmaceutical, education, throughout the British empire.

"2. The establishment of three medical faculties, one in each city, viz. London, Dublin, and Edinburgh, to confer degrees in medicine, diplomas in surgery, and licences in pharmacy.

"3. Course of preparatory study and certificates, to be determined by a medical commission, appointed by government, and such to be altered and amended *only* by similar commission; the said commission to be constituted of an equal number (not being teachers) of English, Irish, and Scotch physicians and surgeons.

"4. Examiners in no instance to be lecturers, and each to receive a fixed stipend, derived from government.

"5. Examinations to be practical; each candidate showing on the subject his

knowledge of anatomy, and in a similar way proving his intelligence in the other branches of medical science, &c.

" 6. Apothecaries only to be examined, in what appertains to pharmacy, &c.

" 7. Members of each of the three branches of the profession to register their names on exhibition of degree, &c., in an office appointed for that purpose in each city, viz. London, Dublin, and Edinburgh. A list of such registries to be published annually.

" 8. Physicians, surgeons, and apothecaries, to have *legal claim* to professional remuneration.

" 9. Physicians and surgeons to possess *no legal claim* for value of medicines.

" 10. Apothecaries not to prescribe, or pursue other vocations.

" 11. All quacks, and quack and patent medicines, to be suppressed.

" 12. Appointments to hospitals and dispensaries, not to be *for life*. The election of medical men to these institutions, if for a certain limited period in rotation, would equalise opportunities for acquirement of medical knowledge, and hence be useful to society, by improving the junior class of medical men, who must hereafter fill the places of their seniors; this arrangement would also be advantageous to the institutions, as younger men have more leisure to devote, and they could still enjoy the aid of those whom they succeed, in consultation, when necessary.

" 13. Infirmaries and dispensaries might be much benefited, and at the same time encouraged to adopt No. 12 suggestion, were the legislature (on condition of compliance) to grant out of the poors' rates, a sum to each, bearing a certain proportion to the voluntary subscriptions possessed by such institutions; and further, that certificates from every infirmary containing 100 beds, whether metropolitan or provincial, so complying (and these only), be admitted to qualify students as hospital attendants for examination.

" 14. Appointment of medical coroners, to be imperative throughout the kingdom; and due provision made for remunerating medical witnesses in every case.

" 15. All foreign graduates, qualified in recognised schools, to possess equal privileges with those of this country; reciprocal acknowledgment to be established between the faculties of these and other countries, where the standard of medical education is equal.

" 16. Druggists already established, to receive a certificate to dispense medicine as heretofore, provided they produce respectable medical reference as to character and capability; all other druggists to be precluded from dispensing medicine.

" *Inseparability of Medicine and Surgery.*

" Lastly, gentlemen, from the inseparability of the two departments of this profession, in a very large number of cases, we would beg to impress the necessity for physicians and surgeons being *strictly* examined, both in medicine and surgery; indeed we are disposed to believe both classes might beneficially go through *the same probation*, leaving to the subsequent choice of the graduate the walk in the Profession which he may prefer to pursue; thus removing awkward anomalies, ensuring to society, in every place, able practitioners; and tending to produce that division of labour, in the practice of so extended a science as medicine, as should guarantee excellence in every department. In conclusion we would beg to refer your honourable committee, for many enlightened views *on a proper medical constitution*, to Professor Double's admirable report to the Academy of Medicine, Paris. With sincere desires that your meritorious labours may be crowned with the best result, we have the honour to be on behalf of the Medical and Surgical Society of Newcastle-on-Tyne, gentlemen, your very obedient servants,

" T. M'Whirter, M.D., *Chairman.*
" T. M. Greenhow, *Secretary.*"

Newcastle-upon-Tyne, June 11th, 1834.

Foreign Medicine.

Observations on the Therapeutical Effects of the Créosote.

BY M. REICH, OF BERLIN.

(*Journal de Hufeland, Janvier*, 1834.)

This empyreumatic oil has been discovered within the last year, by Professor Reichen-

bach of Halle, in soot, acetic acid, and in all kinds of tar. It is of a whitish yellow colour, and the consistence of oil of turpentine. It has a very disagreeable taste and odour, somewhat similar to the animal oil of Dippel. MM. Téallier and Duparque have lately used it with success in alleviating the pains resulting from ulcerated cancers; but, from the experience of M. Reich, the most happy results in various affections are to be obtained from it. The following are the results of the observations made by the author, who in the first instance became relieved from its use.

During the winter 1831 and 1832 (he says) I was exposed for many hours in an open carriage to wet, and snow. After this I became attacked with acute pain in the right ileo-femoral articulation, my right thigh became insensible, and, as it were, completely paralysed, which disease resisted all ordinary means. Believing that the *tinctura fuliginis* of Leclig owed all its beneficial properties to créosote, I decided on the use of this remedy. I commenced by mixing five drops of the créosote, in six ounces of an emulsion, and took two table-spoonfuls of it every two hours. The disagreeable taste of the medicine excited nausea, however I passed a more tranquil night. The next day I increased it to ten drops, and the following to twenty, which I took in four doses. The stupor and paralytic state of the limb entirely vanished. The pains of the articulation by the next morning had also left, but in the evening I had a relapse, also the sensation of stupor returned. I continued the medicine, taking twenty drops daily, for four successive days, all the symptoms disappeared, and I felt no more of them.

Case II.—A lady, who had been the subject of two attacks of acute rheumatism, with swelling of the joints of the hands and feet in the month of July, was attacked on the 24th of August with stiffness, and a sensation of numbness in the limbs, which in general is the forerunner of a severe form of the disease. I prescribed for her the créosote, and in order to disguise its disagreeable taste, I ordered it in pills; one drachm in a sufficient quantity of the powder of althæa to make 120 pills. By the 26th the stiffness had greatly subsided; on the 28th she descended to her garden, and by the 6th September she was freed from all rheumatismal pains, stiffness, and numbness; in fact the rheumatismal diathesis was entirely dissipated, for since then it has never returned.

Case III.—A man 53 years of age, addicted to drinking spirits, had a severe attack of gout in 1832; alleviated at first by the mineral water of Wisbaden, though in 1833 it returned with greater severity. Numerous physicians were applied to, consequently various remedies were now adopted, which only gave him temporary relief. On the 21st of September another violent relapse occurred; the patient could get about only by means of crutches, his ankles and knees became swollen, and his strength was debilitated by nocturnal sweats, his tongue was red, and gums spongy. I gave him the créosote pills, five night and morning, and allowed him to continue them till the 22nd of November, by which time the patient was able to walk about in his garden.

Two cases of pulmonary phthisis are also described by the same author, in which the pills were administered with the most happy results; but as he has not chosen to prefix to them the stethoscopic sounds, we certainly are rather doubtful upon this point, for so frequently has pulmonary catarrh been cured, and mistaken for phthisis pulmonalis.

M. Reich has also made use of this medicament as an external application; his first experiment was on the body of a woman who had been dead three days; putrefaction had taken place, and the stench was insupportable; the body was sprinkled with distilled créosote water, which checked the progress of the putrefaction, and destroyed the unpleasant smell.

Case IV.—A young man, affected with extensive confluent small-pox, whose body was covered by crusts, raised by a thick bed of pus, had the parts washed with an ounce of water containing one drop of the créosote, the disagreeable odour disappeared, and the ulcerations of the skin cicatrised.

Case V.—Another young man was affected by scrofulous ulceration of the right leg, which had existed for eight years, though many times had nearly cicatrised, but the ulceration in a short time increased again. For eight months it had continued to increase in size,

and its edges were rugged and indurated. The créosote was prescribed, the part which was painful became less so, cicatrisation had commenced, but the patient was unwilling to continue the medicine.

In blennorrhagia and syphilis the author also states he has found much benefit from its use.

[The beneficial effects of this medicine in such various diseases, we fear, are too valuable to be true; but we are happy to inform the reader ere long we shall be able to speak with certainty; as at the present time there are several patients, both of Drs. Elliotson's and Roots', in St. Thomas's Hospital under its influence.—Eds.]

MR. CHITTY'S REPLY TO OUR REVIEW OF HIS WORK ON MEDICAL JURISPRUDENCE.

To the Editors of the London Medical and Surgical Journal.

Gentlemen.—The general liberality of your Reviews assures me you will take pleasure in withdrawing the sting of criticism when you think it misplaced, and therefore I trouble you.

In page 725 of your review for the 5th inst. you refer to page 381 of my work, as incorrectly stating the *general* periods when the powers of procreating in men, or childbearing in women, cease; and you refer to instances of both sexes having evinced those powers at much later periods. I stated what I considered to be the *general rule*, and I also refer to the very instances as exceptions which you appear to have supposed I was ignorant of. With respect to the case in which you state Sir William Horne was concerned, I will, if you please, send you the decision in the King's Bench, and the papers on the cause. In K.B. the Court held that, as a Court of *Law*, they could not come to a *legal* conclusion, that it was impossible that a woman of sixty-three could not have a child. I argued the case afterwards in Equity, and the Court of Chancery compelled the purchaser to take the estate upon an *adequate indemnity* against the female having a child, so that the only result of the lawsuit was, that there is no *legal* supposition that a woman at sixty-three *cannot* have a child.

But your severest remark is, that I was *not* aware that the embryo or fœtus was not equally alive from the instant even of impregnation. On the contrary, you will find in my Preface, page ix., I expressly refer to the absurdity of our legal distinction relative to quickening, and there make it one of the prominent reasons for urging legislators to attend to the subject. In pages 402 and 434 in particular, you will find I very explicitly condemn the legal distinction; I am sure, therefore, you will take pleasure in relieving me from the stigma of the ignorance ascribed to me in your page 725, where you say "*Had Mr. Chitty been aware of these facts*, we feel convinced he would have commented on the defective state of the law," &c. &c. I observe, however, that probably you had not read so far as page 434 of my work when you wrote the comment.

Again; you will find in page 414, in the context at note (*k*), I particularly refer to the instance you state, of a child having been recovered *even two hours after apparent death.* I also refer, as regards the discovery whether a child has been born alive, to a fact I believe as yet unknown to lawyers, namely, the examination of the *ductus arteriosus* (see p. 410), and which shows that I refer to the *concluding* volume as to the other evidences. You will confer an obligation on the public and myself if you could find time to comment on this species of evidence, in an article in your valuable review *.

With respect to my not referring more frequently to foreign writers on medicine, I do confess I have a little national pride, and think we are too voracious after foreign materials; nor will I readily concede that our own countrymen are not the best, excepting in some points of surgery. I think English physiologists

* We have commented upon this evidence in our work on Medical Jurisprudence, p. 162, in these words: —"The obliteration of the umbilical arteries and vein, of the foramen ovale and the ductus arteriosus, evidently proves that the infant has been born alive. But these changes do not happen at the moment of birth, or sooner than two or three days, and often not before the first or second week; and consequently this evidence, in most cases, is of little value."

write with more sincerity. Besides, what contradictions do we find in foreign writers? for compare Leuret and Lassigne (Histoire de la Digestion) with Tiedemann and Gmelin on the same subject, and observe their contradictions. I assure you I have read, in the originals, nearly sixty recent French, German, and Dutch works, and I found the results so controversial that I deemed it better, as my work was principally for lawyers, to avoid the *affectation* of deep study, by omitting them; and, provided I am correct in the main, I am content. I assure you, that the accuracy of no physician or surgeon is implicated in my undertaking. At most, the *rough* proofs, and not the MS., were seen by Mr. Skey the able lecturer, and his corrections were little more than verbal, excepting in the article DEGLUTITION, in page 179.

I should be obliged by your explaining, that the *whole* work will be comprised in only *two volumes*, and the entire price will not exceed two guineas, with an allowance to legal and medical students, who may have the work at cost price.

I remain, Gentlemen,
Your faithful servant,
J. CHITTY.

Clapham, July 7th, 1834.

[In our review of Mr. Chitty's work, we endeavoured, as is our invariable custom towards authors, to do him justice, and the very favourable opinion we expressed of it is the best proof of our sincerity.

In reply to his statements in the above communication we have to remark, that though he gave the general rule as to the duration of fecundity in both sexes, he did not, in our opinion, attach sufficient importance to the singular exceptions which we noticed, or to many others that might be mentioned. We alluded to two distinguished members of our profession, one over 70 and the other near 90 years of age, who, within a few years, entered into matrimonial unions; and we might mention an eminent practitioner who, in his eightieth year, had four children, and received a piece of plate from the corporation among whom he resided. The point in dispute is highly important on the grounds of legitimacy and disposal of property; and we are pleased to observe, that our law courts have not attempted to decide upon the duration of fecundity. We are much obliged to Mr. Chitty for his valuable information on the subject.

With respect to the question of quickening referred to in the Preface, p. ix. and pp. 402 and 434, we are bound to admit that there is a short sentence in each page, but there should have been more; and Mr. Chitty will find much stronger comments in our epitome than in his systematic work. We dwell upon the question, as the law regarding it is manifestly absurd, and we commented upon it in the work before us with regret, as we are convinced had it been more forcibly criticised by our author, it would be speedily effaced from the statute book. Moreover, we know that some barristers defend the existing law, and one gentleman of high legal and extensive information observed to us, on perusing the received opinion of the humanity or vitality of the fœtus from the moment of conception, expressed in our review, that were the law to admit it few women could be executed, for as soon as they committed any felonious crime they would use the means to become pregnant; and he mentioned an instance of a woman who was tried for murder, and who was ordered to stand back in the dock before the passing of the fatal sentence, who submitted in that situation to sexual intercourse in order to plead pregnancy in stay of execution. But this objection appears to us to be invalid, because it is utterly impossible, in the present state of science, to decide positively whether a woman is or is not pregnant before the third month of utero-gestation. Supposing, however, that medical witnesses swore, to the best of their belief, a woman was pregnant, the execution ought to be stayed, for a doubt in favour of the laws of nature cannot be nullified by the arbitrary laws of man. And admitting that women become pregnant to escape death, it would be barbarous to order them to be executed, by which the lives of their unoffending offspring would be sacrificed. In justice to ourselves, we must state that our strictures on quickening were made on the text, p. 402, and not on the Preface, p. ix., or the summary of the laws relating to the generative function in p. 434. We therefore were justified in commenting upon the text as we found it.—EDS.]

LITHOTRITY.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—As lithotrity is becoming more generally adopted throughout the country, the following narration of the singular train of symptoms which succeeded this operation may not be unacceptable to many of your readers. The appearances after death show that it superinduced, in this patient, sympathetic irritation, and increased vascularity in the mucous membrane of the alimentary canal; and, though every care was taken to subdue the mischief, it extended so far as to baffle all our remedies. It was my wish to have transmitted a more brief account; but, as the patient was under treatment two months, I found it impossible to shorten it without destroying some of its most important features.

I am, Gentlemen,
Your obedient servant,
THOS. ROBT. TATHAM,
Surgeon, Huddersfield.
Late Surgeon to St. Mary's Parish, Nottingham, and its attached Hospital and Dispensary.

March 18, 1834.—Benjamin Hirst, æt. 50, near Huddersfield, of corpulent habit, has been suffering from a calculus in the bladder upwards of seven years, and during nearly four of the latter period confined to his bed, says he cannot alter his position, or sit up in a chair without causing much aggravation in the symptoms, as irritation at the neck of the bladder, and darting pains to the glans penis; for the last year and half he has had frequent desire to make water, and cannot retain more than four ounces of fluid at once without an irresistible desire to void it; the urine presents a little mucous deposit; general health upon the whole tolerably good; pulse 100. Upon inquiry, I find he has been under several practitioners in the neighbourhood three or four years back, but owing to his obesity they deemed it advisable not to perform the operation of lithotomy.

Mr. Valentine, surgeon, Nottingham, who has successfully performed lithotrity seven or eight times, having apprised me that he intended operating this morning at Wakefield, I took the opportunity of witnessing him operate on a man sixty years old. I was so satisfied with it, that I requested him to accompany me to Huddersfield to see Benjamin Hirst, which he kindly acceded to.

Mr. V. succeeded in injecting six ounces of tepid water into the bladder, when he called out from pain of distension; it was as much as he could bear. He then introduced the percuteur, immediately caught the stone, which he simply broke with a few strokes of the hammer. The whole period of the operation did not exceed five minutes. The patient showed much irritability of the bladder, and had involuntary dribbling of water during the operation.

19th A. M. Passed a restless night; perspired freely; complains of much soreness and heat in the bladder, and pain in making water; aching pains in his loins; headach, which he attributes to want of rest; surface natural; appetite unimpaired; pulse 112; discharged upwards of a quart of water, coloured with blood. A saline effervescing medicine was directed to be taken every three hours, and 3 ss. of carbonate of soda with 1 gr. of opium three times a-day.

21st. Much the same; required bleeding from the arm and opening medicine; scarce any detritus passed. Removed the following day to my house.

27th. Better; pulse 110, soft; urine still shows a cloudy mucous deposit; bowels open. Operated this morning in the presence of Dr. Walker and Mr. Robinson, Physician and Surgeon to the Huddersfield Infirmary, and Mr. Sargent, surgeon. I succeeded in injecting seven ounces of warm water. The first portion of stone I seized measured an inch and a quarter, the second an inch and a half, on the scale of the instrument, which required repeated strokes of the hammer to break, and appeared extremely hard. He seemed to bear the operation quite as well as before. To repeat the saline medicine every three hours, and the soda with opium three times a-day, tea and gruel. P. M. Complains again of pain in his loins, heat and soreness in the bladder and perinæum. Passed a pint of bloody urine.

28th. Had a tolerable night; sweat freely; pulse 116. Complains of soreness about the navel, and a disposition to strain at stool. Bowels not open; urine is free from blood;

no detritus come away. To continue the soda ℥ ss. without the opium three times a day.

Ol. ricini, ℥ vj. H. s. s.

29th. The castor oil operated freely. Tongue covered with a whitish fur; thirst considerable; had a severe rigor at noon, which continued three quarters of an hour; soon afterwards he was bathed in a profuse sweat; pulse 130; soreness of the navel gone, increased pain across the loins; heat and soreness of the perinæum and bladder much the same; urine less in quantity; no particles of stone have yet passed. Dr. Walker saw him at four o'clock, and wishes the following to be given: thinks I had better wait a little before abstracting blood; recommends a poppy head and chamomile fomentation to be used twice a-day.

℞. Potass. carb. ℥ iiss.
Potass. nit. ℥ j.
Aqua ad O ss.
M. ft. mist. alk., de quâ capiat. ℥ j. cum mist. acid. ℥ ss., 3 tiis horis in actu effervescentiæ.

℞. Acid. citric. ℥ iss. aq. ad ℥ iv.
Fiat mist. acid.

℞. Calomel. gr. iij.
Pulv. ipecacuan. gr. x.
Fiat pulv. sum. nocte maneque.

30th. Had a restless night; perspirations less copious; pain in the loins continues; bowels open; parted with several fragments of a tolerable size on going to stool.

31st. Tongue loaded; thirst considerable; surface cool and dry; has tenderness in the pubic region; pain in the loins about the same. Made near two quarts of water since last night, with a deposit of ropy mucus. P. M. 4 o'clock. Flushed countenance; headach; increased thirst; pulse 130, full, and hard; surface hot and dry. Continue mist. sal., et adde liq. antim. tart. ℥ iiss.

V. S. B. ad ℥ xviij., blood very sizy and buffy.

Dr. Walker recommends the application of sixteen leeches to the hypogastrium, and the following pills:—

℞. Calomel. gr. ij.
Pulv. opii gr. ss.
Fiat pil. sum. 4tis horis.

April 1st. Had a better night; heat natural; pulse 126; less pain in the bladder; not so much tenderness on pressure. Made a tolerable quantity of urine, tinged with blood and mixed with much mucus. When the urine is entirely drawn off, it adheres to the vessel with considerable tenacity. Bowels open.

3rd. Suffers from irritation at the neck of the bladder from frequently getting up to stool; pulse 108; surface cool; no tenderness in the hypogastrium; parted with another fragment. He omitted all the medicines as soon as he found the looseness to come on. To omit the calomel and opium, and the nitre in the saline medicine.

℞. Pulv. cretæ c. cum opio, ℈ ij.
Sum. 3tiis horis si opus sit.

7th. Urine slightly fœtid; pain across the loins continues; less pain in making water; complains of thirst, and has a relish for beer; in consequence I have allowed him a glass today. Continue mist. effervesc.

9th. Tongue coated, dry in the centre; no appetite; pulse in morning 108, but at night nearly 120; pain in the loins abating; bowels confined.

℞. Ol. ricini, ℥ vj. statim sumend.

10th. Bowels freely moved; appears rather better. Omit the saline medicine.

℞. Quinin. sulph. gr. iij.
Fiat pil. sumend. ter die.

To be allowed meat daily and a glass of beer.

22nd. Continues to do well; pulse 108; required occasional doses of opening medicine; deposition of mucus continues, though less viscid; fœtor of the urine has been absent several days: it has been tested with litmus paper by Dr. Walker and myself several times, which it reddened; no fragments have come away lately *.

23rd. Operated in the presence of Dr. Walker, Mr. Robinson, Mr. Wrigley, and Mr. Highley, surgeons. I injected about seven ounces of warm water, as much as he could bear, and succeeded in breaking up seven portions of different sizes, the largest of which

* At a consultation with Dr. Walker, Mr. Robinson, and Mr. Sargent this morning, we consider the patient in a fit state to undergo another operation; and are also of opinion that the late severe symptoms have been produced by the presence of large angular portions, which create irritation; and that the stone should be broken as much as possible during the next operation, to allow of its free passage.

was rather more than half an inch in diameter. I once laid hold of a large portion measuring an inch and a half by the scale of the instrument, which, with one stroke of the hammer, flew from its teeth. I then contented myself with taking up moderate-sized portions, which which I could readily seize without giving much additional pain. The time, occupied in breaking up the fragments, might be from ten minutes to a quarter of an hour. The patient showed his usual irritability, and in the breaking of the last portion became rather faint. A little wine was given him, and, when put to bed, a drachm of tinct. opii. Afterwards he became very hot and flushed, sweat profusely for three hours; the water injected into the bladder was retained during that period. P. M. 8 o'clock. Surface natural; pulse 126; tenderness over the pubes on pressure, and has frequent stinging pains to the end of his penis, with desire to pass his water; makes with difficulty two ounces at a time; he has parted with a pint since morning, highly coloured with blood, a small quantity of detritus came along with it. A bran poultice was applied over the pubes, four grains of calomel with one of opium at bed-time, and a simple saline effervescing mixture every three hours.

24th. Had a tolerable night; pulse 114; found relief from the poultice; still has much difficulty in passing his urine; made twelve ounces last night, less tinged with blood; there is the usual ropy mucous deposit, which, when washed in clear water, assumes a flocculent appearance, like films of floating membrane. ℞. Repet. bol. cal. et opii, h. s., et cataplasma.

25th. Appears to be doing well; pulse 108.

℞. Ol. ricini, ℥ ss. statim sumend.

27th. Had a bad night; countenance flushed and languid expression; tongue becoming furred; much thirst; surface hot; pulse 124, thready; tenderness increased in the hypogastrium; pain at the neck of the bladder about the same; mucous deposit very tenacious, similar to the brown sputa in inflammation of the lungs, it clings to the bottom of the vessel when inverted, and is become lately more viscous; complains of aching pains and soreness in his limbs; no large fragments have yet passed; bowels confined.

℞. Pulv. rhei, ʒ j., s. statim.

Dr. Walker concurs with myself in bleeding him to ℥ xvj. and to get him speedily under the influence of mercury.

V. S. B. ad ℥ xvj., blood very little inflamed.

Two scruples of strong mercurial ointment to be rubbed in night and morning. Tea and gruel.

28th. Restless through the night; much thirst; frequently sick; says he vomits the effervescing medicine; heat natural; complains of a diffused soreness all over the belly; bowels not yet moved. To omit the saline mixture.

℞. Magnes. sulph. ʒ iss.
Ess. Sennæ ʒ iss.
Tinct. jalap. ʒ j.
Aq. menthæ pip. ad ℥ iss.
Fiat haust. statim sumend.

29th. Had five copious motions yesterday; feels very low and faint; frequent sickness and hiccup; complains much of tormina and tenesmus, which have increased the irritation at the neck of the bladder considerably; gentle perspiration; pulse 104; motions of a natural and healthy appearance; urine becoming fœtid. To omit the mercury. Chalk mixture with tinct. opii ordered to be taken every four hours.

May 1st. Diarrhœa still troublesome; gums sore; parted with more fragments.

2nd. One o'clock. A. M. During the last six hours the diarrhœa has been very severe; says he has been up six or seven times; dejections of a brown watery appearance; countenance pale; frequent sickness; sweats profusely; pulse 120, small; feels very feeble and sinking. Continue mist. creta 3tiis horis. 8 o'clock A. M. Says he thinks he has been up to stool twenty times since I left him this morning. The food which he took yesterday is come away without undergoing any change; lumps of hasty pudding, orange pulp, gruel, bread, &c. are readily detected; countenance much sunk; sickness and hiccup more frequent; much thirst; still sweats most profusely, pulse 112, feeble; three fragments are passed; says that he parted with many more whilst at stool.

℞. Tinct. opii. ʒ iss.
Aq. menthæ p. ℥ iss.
Fiat haust. statim s.

℞. Ext. hematoxyli, 3 ij.
Creta ppt. 3 iiss.
Tinct. opii 3 iij.
Mucil. acaciæ 3 j.
Syr. simp. 3 iij.
Tinct. catechu. 3 vj.
Aq. menthæ p. ad O ss. M. ft. mistur.
Capiat 3 j. 3tiis horis.

10 o'clock P.M. Retained the laudanum draught, and was neither sick nor purged till after two o'clock, vomited twice since, and had two brown watery motions, containing fæcal matter; cadaverous aspect; nose pinched; thirst and hiccup unabated; slight subsultus tendinum; says he feels a benumbed sensation over the chest; pulse 112; surface and extremities warm; made a pint of urine to-day, which yields a firm viscid mucus; less tenderness of the belly, and of pain at the neck of the bladder. Dr. Walker and Mr. Robinson consider him in great danger; they recommend the following pill.

℞. Camphor. gr. iij.
Pulv. opii gr. ij.
Fiat pil. h. s. s.

Continue mist. hematoxyli 4tis horis.

A flannel, wet with turpentine, was applied over the abdomen. To be allowed some Sherry wine.

3rd. The flannel acted as a rubefacient. I visited him several times in the night; the sweating continued to be very profuse; at three o'clock got up to the close stool, vomited and purged at the same instant; seemed for a time quite exhausted; hands and feet became cold from exposure. I gave him some Sherry wine with another pill of camphor and opium, which induced a more comfortable state. To have wine and biscuit when he feels disposed.

Perstet in usum pil. camph. et opii 4tis horis.

4th. Since one o'clock yesterday morning he has taken a bottle of Sherry and half a bottle of ale: some light pudding, &c. Appeared better this morning. Hiccup came on to be very severe at three o'clock this afternoon; during each fit very yellow sour fluid is ejected; says the wine is too strong for his stomach; surface continues warm. Facies Hippocratica; voice altered; pulse 120, weak and fluttering; complains of more pain in making water; the urine presents the mucous sediment in the same quantity, but it is less viscid: on mixing clear cold water with it and stirring them together it produced a turbid mixture, instead of presenting the before mentioned flocculent appearance, like films of coagulable lymph: it now has more the appearance of muco-purulent matter; passed a large quadrangular fragment. Cont. pil. 4tis horis.

℞. Pulv. opii, gr. vj. Ft. supposit. administrand. h. s.

5th. More tranquil; drinks freely of some new wort (for beer), which he relishes, and particularly desired to have; perspirations less copious; urine scanty. Cont. pil. h. s. et supposit.

7th. Sickness and hiccup now almost constant; surface cooler; had, during the night, insensible discharge of both urine and fæces; requests to have a mixture of beer and milk to drink. P. M.—Has vomited three pints of sour yellow fluid since morning. Cont. pil. h. s. et supposit.

8th. Much the same; instead of beer and milk, I have given him a mixture of lime water and milk, which agrees with him.

10th. Had less hiccup and sickness these two days; appetite has been middling; thirst considerable; pulse quick and weak; evacuations pass insensibly from him; dejections yellow, and of a proper consistence. Continue pil. h. s. et suppos. h. s.

In compliance with his frequent request to be taken home, I this morning conveyed him in a covered cart on springs, the bed being placed in for him to lie upon. He bore his journey very well, and seemed not in the least overcome by it. I gave him a dose of laudanum soon after he arrived home.

11th. Says he suffered very little inconvenience from the removal yesterday; slept well; he appears now much in the same state. Mr. Brook, surgeon, a neighbouring practitioner, kindly volunteered to attend him daily as long as his services might be required.

12th. Died at five o'clock this evening.

14th. Afternoon. *Autopsy.*—Mr. Brook assisted me in the examination. On making a longitudinal incision from the sternum to the pubes, four inches of thick fat were cut through before I reached the linea alba. The peritoneum, liver, omentum, stomach, spleen, and peritoneal surface of all the abdominal and pelvic viscera appeared healthy, no appearance of inflammation or adhesion of their surfaces; the kidneys were healthy, and imbedded in a large quantity of fat. The sto-

mach was distended with air; its mucous membrane, and that of the duodenum and small intestines, were much injected, and of a diffused uniform redness, and so distinct was it in the jejunum and ileum throughout their extent, as to be visible through the peritoneal covering; there were also patches of red in the ascending transverse and descending colon. The following appearances presented themselves on examining the bladder, in the presence of Dr. Walker, Mr. Robinson, Mr. Wrigley, and Mr. Sarjent, surgeons. Its parietes were unusually thickened and cavity contracted; the mucous membrane did not appear so vascular as we anticipated; the superior portion or fundus was pale, and showed scarcely any appearance of inflammation; on tracing its surface downwards towards the inferior portion, we found it to increase in colour to a reddish brown, intersected with small vessels of a leaden hue, which thickened towards its neck; the prostate gland appeared redder and more vascular than natural; the bladder contained a little glairy mucus, and a large portion of the calculus of an oval shape, with both ends broken off; it was flattened at the sides, presenting some rough scabrous points on its surface, sufficient to account for much irritation when it rolled in the bladder; it weighed nearly ℥ ss, another portion ℈ ij., with some small fragments, altogether weighing twelve grains. The entire stone appears to have weighed about six drachms.

Mr. Highley, jun, of Elland, has been kind enough to favour me with his analysis of the calculus. Its specific gravity is 1·6. The whole calculus was made up of well compacted laminæ, forming round a central nucleus, each of which seemed to differ slightly in the shade from that which preceded or came after, while the inner was inclined to red; externally it was rough, and had on its surface a thin coating of reddish-brown shade.

Analysis.—Twelve grains of the nucleus and contiguous laminæ yielded nine grains of beautiful, small, white crystals of uric acid perfectly dried, the residue was a mixture of phosphate of magnesia and lime. The outer layers differed from the inner as follows:—

6·5 grains of uric acid.
3·0 grains of phosphate of ammonia and magnesia.
1·5 grains of phosphate of lime.
A little animal matter.

THE
London Medical & Surgical Journal
Saturday, July 19, 1834.

MORISON'S PILLS, LATE ACTIONS CONCERNING.

In our last number we referred to a case of Pursell *v.* Stevens, our note of which, from recollection of a very garbled statement in a daily paper, appears to be inaccurate. We now give a correct version of the facts, not so much on account of Mr. Pursell, a respectable practitioner at Stockbridge, whose character is unaffected by our unintentional error, as for the purpose of exposing the infamous artifices practised by the tip top quacks of the day; for it seems there must always be before the public some project of quackery, unless the law interfere to protect folly against knavery.

Mr. Pursell was called upon to prescribe for a boy under these circumstances, as stated by himself.

George Ray, æt. 13, a stout, robust boy, in the employment of a farmer named Judd, at Broughton, near Stockbridge, and residing with his parents, was, on Saturday, June 29, 1833, at a public house with his master, when the latter, for a "lark," took the boy to a privy, and, suspending him by the legs, attempted by force to thrust his head down the seat; the boy's struggles could not at first be overcome; more assistance was then obtained, and a second attempt succeeded. After this the boy was prevailed upon to take a glass of beer. On his return home the boy of course complained of giddiness in his head, and every precursor of apoplexy. As the small pox was in the neighbourhood, his mother, who was unacquainted with the brutal outrage, gave him some medicine, but, finding him no better, she applied to Mr. Pursell for

something to relieve his head. From the mother's account to him, Mr. Pursell was under the same mistake; and it was not till the following day, when the boy was getting worse, that Mr. Pursell was requested to see him, and observed his symptoms were very different from those of small pox. Upon inquiry, the real facts were ascertained. Mr. Pursell's subsequent treatment was judicious, and the boy recovered from a state of imminent peril. It seems the parents were unwilling to prosecute the boy's barbarous master. We have given the facts at full length, that the parish authorities may interfere, and make the cruel torturer feel how narrow an escape he had for his life. Had the boy died, the master and his crew would have been, every one, hanged.

Now for the Morison episode.—Morison sports a splendid equipage in Hampshire. A Miss Tomkins, of Broughton, for some reasons best known to herself, patronised Morison's Pills. She frequently called to see the child during his illness, and took notes. She also recommended the use of Morison's "Universal Pills." Morison finds it convenient and profitable to publish a newspaper for the purpose of puffing his quackery. Moat, his coadjutor and vice-president of "the College of Health," becomes accordingly proprietor of a newspaper with the captivating title of The Christian Advocate. In this paper appeared an advertisement of the eighty-fifth series of cases cured by Morison, in which was contained the libel. The remaining facts of the case, and the nature of the libel, will be sufficiently understood from the charge of Chief Justice Tindal, which we give at length, as it shows a tendency to protect the regular practitioner against the insults, at least, of quackery.

"Lord Chief Justice Tindal.—Gentlemen of the Jury, this is an action which is brought by the plaintiff against Mr. Stevens and Mr. Moat, who are concerned in the publication of a newspaper called *The Christian Advocate*, for a libel in one of the numbers of that paper, imputing to the plaintiff, who is a surgeon practising at Stockbridge, ill treatment of a patient under his care, accompanied with cruelty. The action is brought to recover a compensation in damages for the injury which this publication is in its nature calculated to inflict on the plaintiff, and also some remuneration for the distress of mind which he felt when he was so held up to public indignation and scorn for the alleged ill treatment of a poor child. It will be for you to say what is the fair and reasonable compensation he ought to receive for the injury he has sustained under all the circumstances of the case. It is quite clear, that the ground which has been urged as a defence has altogether failed the defendants upon this occasion. It is no answer at all, that a lady in the country, of an enthusiastic character, submits to the defendant a statement, which turns out to be fabricated, or at least very much exaggerated in its particulars; but, however, you are merely to assess the damages which the plaintiff has sustained: it is not a circumstance which you are to treat as affording a ground of defence to the present action. Indeed, it appears to me, from some parts of the libel, that it is not merely a dry statement of facts which takes place, but as taking place immediately before the eye of the person who is supposed to have given this statement to the defendant; this professes to give an accurate account of the course of treatment and cure of this individual, which seems only to have been put in for the purpose of inflicting a wound on the feelings of the plaintiff. It is not merely stated in the form of a letter or communication, but it gives their view of the course of treatment adopted. They call it—'From a Correspondent in Hampshire.—A dreadful Instance of Cruelty and Maltreatment practised on a poor Child by one of the Faculty.' One can hardly see that a man, who produces a publication with such enthusiasm as that, can have intended otherwise than to attack a man *who was regularly initiated in the profession on purpose to make way for their own remedies*, which they conceive to be useful, at all

events, for the purpose of serving themselves, in a pecuniary point of view, in selling and vending their medicines. As to the words with which they begin the statement, they are words evidently put into the publication after the letter had been written, and I doubt not after it had been received. In the course of her letter she states in one place that 'Mr. Pursell had been and pronounced the child worse, and in more danger than when he saw him last; squeezed his back where the blister had been, made the child cry, and then said, there is something wrong there; he must have another blister on the same part, and ointment to keep it open; leeches, powder, and lotion, the same as before.' Then he says, 'the mother told him she was quite sure the child was better, and that she should not attend to his orders any more, for she did not believe he tried to cure her child.' That is stepping out of the way, in detailing the treatment of a medical man, to say that the mother of the patient stated that; even if she had stated so, it would not have justified this attack, and in drawing your conclusion from the fact, it might be useful *that you should look at the difference between the practice of the regularly educated medical man, and the effect of this newly discovered remedy.* A person steps out of the course, and gives you an account of what the mother said, that she did not believe this person, who claims under the record, ever attempted to cure her child. The writer makes Mr. Pursell to call again upon the 25th, and when asked what he thought of the child, to have said, 'Oh, he is quite an altered person.' Mr. Pursell had previously seen some person to whom he said he could have cured the child long before, if he had been sure he should have been paid for it. A great calumny, in point of fact, for it is not justified, nor is it stated where the party is to be found, in order to have an opportunity of proving it, if it is true. It is a great calumny for a man who is attending a family in humble station, to charge him with leaving off that attention, and being guilty of such baseness upon a purely selfish feeling, and not exerting those faculties he possesses. That again is a circumstance in this case, which would stand quite clear of any enthusiasm about the good effects and virtue of these newly discovered pills, asserting, without reference either to the mode of treatment, or to the virtue of the newly discovered remedy, a falsehood which imputes to him great baseness of mind.

"Gentlemen, it appears after the publication had been made, there had been a republication, in another shape, of the libel; I should not advise you to make that a ground for the increase of damages, but this is a question for you. It is evidence to show that Mr. Moat has not done the thing privately or unadvisedly, when, so late as the month of June after, he puts this justification on the record, which he withdraws in July, he has countenanced it afterwards. Now, gentlemen, this is the case.—The defendants both insisted upon it that all they had asserted was true; they had allowed it to remain on the record until last Friday, the 4th of July.

"It is asserted, upon the part of the learned Counsel for the defendants, that this is no aggravation of the offence at all, for it shows that, before the investigation, they thought it was true, but afterwards found it was false. It is this assertion which has kept the mind of the plaintiff in a considerable degree of anxiety; and I leave it to you to say, whether you think that shows any dignity of mind on the part of the defendant, or not first asserting it was true, then hesitating, and thinking they could not justify it. If it was meant to deter the plaintiff from proceeding further, by the fear which it might provoke in a weak mind, then it bears a different aspect and conclusion.

"The question of damages, which is all you have to determine, is one that belongs to yourselves: you will say, under all the circumstances, what is a fair and temperate remuneration in damages the plaintiff ought to receive for the injury he has sustained."

A correspondent has sent us some critiques upon the medical evidence at the inquest at York, reported in our last number, in which the virtues of Morison's Pills were discussed. Our report is extracted from a country newspaper. We withhold the comments at present, as we suspect we cannot trust to the accuracy of our authority as to the nature of the medical evidence.

MEDICAL JURISPRUDENCE.

We apprehend medical practitioners will not be displeased to see now and then brief notices of occurrences in courts of justice relative to medical jurisprudence. We have latterly been led to examine some points on this subject, in reviewing Mr. Chitty's elaborate work; and we avail ourselves of this opportunity to give a short statement of two cases that occurred very lately. The first relates to the mode of stating a wound in *legal* form; the second is a case of infanticide, and illustrates the doctrine, that the infant must be born alive to constitute the crime. The report is deficient in not stating what was the evidence of non-vitality in the case. Let ignorant quacks tremble at the note at the conclusion of it.

The prisoner was charged with inflicting, "in and upon the right side of the head of the deceased, one mortal wound and bruise, of the length of three inches, and of the breadth of three inches," not stating the depth. On the authority of Lord Hale, it was contended it was necessary to state the depth also, although it was admitted it need not be stated accurately; however, it was held that as *common sense* did not require the length, breadth, and depth of wounds to be stated, it was not necessary they should be stated. —Rex *v.* Tomlinson, 6 C. and P. 370.

The prisoner was indicted at Oxford Assizes, 1834, for the murder of her bastard child. Two surgeons, Mr. Box and Mr. Hester, proved that the child had never breathed. The child was found in the water at Sandford Ferry. The learned judge (Park) held that the child must be wholly in the world in a living state to be the subject of a charge of murder; but if it had been wholly born and is alive, it is not essential that it should have breathed at the time it was killed, as many children are born alive, and yet do not breathe for some time after their birth.—Rex *v.* Brain, 6 C. and P. 349. The reporters refer to Dr. Blundell's Lectures on Midwifery (p. 60), for a case in which that able practitioner removed a child from the mother, by the Cæsarean operation, thirteen minutes from the last respiration of the mother; in two minutes after artificial respiration was commenced, and the child was completely resuscitated by the continuance of the artificial respiration for fifteen minutes. The process of resuscitation has been often continued with ultimate success for a much longer period. In a further note to the same cause, a case is mentioned, for the terror of quacks, where a midwife, who was grossly ignorant of the art she professed, injured the head of a child before it was completely born, and the child was afterwards completely born alive, and died of this injury; it was held to be manslaughter.

Reviews.

A Practical Treatise on Medical Jurisprudence, with so much of Anatomy, Physiology, Pathology, and the Practice of Medicine and Surgery, as are essential to be known by Members of Parliament, Lawyers, Coroners, Magistrates, Officers in the Army and Navy, and Private Gentlemen; and all the Laws relating to Medical Practitioners. With Explanatory Plates. By J. Chitty, Esq., Barrister at Law.

We consider the elaborate and erudite work before us of such value, and especially the legal part of it, that we fulfil our promise by noticing the article on insanity.

Mr. Chitty first describes the passions, emotions, and mental feelings, and how far they are objects of medical or legal interference. His description of the good and bad effects of

the passions on mind and body is very ably given. He then comments upon the defective state of the law as regards the punishment of injuries to the passions and emotions, and explains the reason of it. He shews that verbal slanders may injure the health, and destroy life. He gives, among many, the following illustrations :—

" In the House of Commons, the Solicitor-General Pepys, on Tuesday, 18th March, 1834, mentioned a distressing instance of such existing defect in our law. A young woman had in early life been seduced by a man of title; but after living with him for a certain time she became ashamed of the course of life she was pursuing, and, taking the opportunity of escaping from it, she retired into a distant part of the country, where her seducer was unable to discover her. She obtained a situation, in which she conducted herself with so much propriety that she not only gained the good-will of her employers, but was appointed to another situation in a public establishment. Several years after, her seducer discovered the place of her retreat, and having in vain made proposals for the renewal of their intercourse, he hit upon the expedient of depriving her of the means of subsistence, thinking that he should then succeed in his attempt to possess himself again of her person. He therefore published in the town where she resided the history of her early life. The consequence was that the unfortunate woman lost the esteem of the friends her good conduct had procured her, and she was deprived of the appointment by means of which she obtained her livelihood. Was not this woman entitled to compensation? Yet if she had brought an action against her persecutor, he would have justified, and she would have been turned out of court, with the aggravation to her misfortune of having incurred a useless expense. Unquestionably the law affords no compensation in such a case for the *malicious injury* to what might be termed her justly acquired *recovered character*."

" If any doubt should exist in the mind of any one whether our law be not defective in not *punishing corporeally* those who wilfully occasion *injuries to the passions, emotions, affections or feelings of another*, let him read some of the able speeches of Mr. Erskine, especially those relating to the injuries of adultery and seduction, and examine the French law, which is much preferable; and consider the numerous instances in which persons, who have been injudiciously only fined for an offence recognised by law, have with exultation instantly thrown down the money to the officer, and contemptuously left the court *."

Our author proceeds to describe the intellectual faculties, which he does with great ability and success, citing the best metaphysical and medical authorities, and embraces materialism and anti-materialism, which is succeeded by observations on the legal view of the mind and intellectual faculties at different ages, and when a person is deemed to be of unsound mind, with an exposition of the law on mental defects, idiotcy, lunacy, weakness, of mind. This article is, as we have already stated, one of the best, if not the very best in our language. It contains a host of opinions delivered by all our judges to the present period, but of these we can only find room for the eloquent and graphic exposition of Lord Erskine.

On Insanity. By Lord Erskine.—" The late Lord Erskine, in his speech in defence of Hadfield, for treason in shooting at the king at Drury-lane Theatre, thus argued :—' The law as it regards this most unfortunate infirmity of the human mind, like the law in all its branches, aims at the utmost degree of precision; but there are some subjects, and the present is one, upon which it is extremely difficult to be precise. The *general principle* is clear, but the *application* is most difficult. It is argued by all jurists, and is established by the law of this and every other country, that it is the *reason of man* which makes him accountable for his actions, and that the deprivation

* " See Erskine's Speeches, vol. v. 192, Mr. Erskine's observations. In a late instance of a profligate injury to a father by seduction and desertion of his daughter, the defendant insultingly sent the 1000*l.* damages awarded by the jury to the plaintiff by a livery servant, with his compliments, and he would with pleasure send him another 1000*l.* the next morning, if he would send his second daughter to him for the intervening night, and he found her agreeable."

of reason acquits him of crime. This principle is indisputable; yet so fearfully and wonderfully are we made, so infinitely subtle is the spiritual part of our being, so difficult is it to trace, with accuracy, the effect of the diseased intellect upon human action, that I may appeal to all who hear me, whether there are any causes more difficult, or which indeed so often confound the learning of the judges themselves, as when insanity, or the effects and consequences of insanity, become the subjects of legal consideration and judgment. I shall consider insanity, *first*, as it annuls a man's *dominion over property; secondly*, as it *dissolves his contracts* and other acts which otherwise would be binding; and *thirdly, as it takes away his responsibility for crimes.* If I could draw the line in a moment between these several views of the subject, I am sure the judges will do me the justice to believe that I would fairly and candidly do so; but great difficulties press upon my mind, which oblige me to take a different course. I agree that the law, in neither civil nor criminal cases, will measure the degrees of men's understandings, and that a *weak* man, however much below the ordinary standard of human intellect, is not only responsible for crimes, but is bound by his contracts, and may exercise dominion over his property. Sir Joseph Jekyll, in the *Duchess of Cleveland's case*, took the clear legal distinction, when he said, "*The law will not measure the sizes of men's capacities, so as they be compos mentis.*" And Lord Coke, in speaking of the expression *non compos mentis*, says, "Many times, as here, the Latin word expresses the true sense, and calleth him not *amens, demens, furiosus, lunaticus, fatuus, stultus*, or the like; for *non compos mentis* is the most sure and legal." He then says, "*Non compos mentis* is of four sorts, *first, ideota*, he who from his *nativity*, by a *perpetual* infirmity, is *non compos mentis; secondly*, he that by sickness, grief, or other accident, *wholly* loses his memory and understanding; *thirdly*, a *lunatic* that hath *sometimes* his understanding and sometimes not, *aliquando gaudet lucidis intervallis*, and therefore he is called *non compos mentis*, so long as he hath not understanding." But notwithstanding the precision with which this great author points out the different kinds of this unhappy malady, the nature of his work, in this part of it, did not open to any illustration which it can now be useful to consider. In his Fourth Institute he is more particular. But the admirable work of Lord Chief Justice Hale, in which he refers to Lord Coke's Pleas of the Crown, renders all other authorities unnecessary.

"'Lord Hale says, "There is a *partial* insanity of mind, and a *total* insanity. The former is either in respect to things *quoad hoc vel illud insanire.* Some persons that have a competent use of reason in respect of some subjects, are yet under a *particular dementia* in respect of some *particular* discourses, subjects, or applications, or else it is partial in respect of *degrees;* and this is the condition of very many, especially melancholy persons, who for the most part discover their defect in excessive fears and griefs, and yet are not wholly destitute of the use of reason; and this partial insanity seems not to excuse them in the committing any *offence* for its matter capital; for doubtless most persons that are felons of themselves, and others, are under a degree of partial insanity when they commit these offences. It is very difficult to define the invisible line that divides perfect and partial insanity, but it must rest upon *circumstances* duly to be weighed and considered, both by judge and jury, lest on the one side there be a kind of inhumanity towards the defects of human nature, or on the other side too great an indulgence given to crimes." Nothing can be more accurately nor more humanely expressed, but the *application* of the rule is often most difficult. I am bound, besides, to admit that *there is a wide distinction between civil and criminal cases.* If in the former a man appears, upon the evidence, to be *non compos mentis*, the law avoids his act, *though it cannot be traced or connected with the morbid imagination which constitutes his disease, and which may be extremely partial in its influence upon conduct;* but to deliver a man from responsibility for crimes, above all for crimes of great atrocity and wickedness, I am by no means prepared to apply this rule, however well established, when property only is concerned. In the very recent instance of Mr. Greenwood, the rule in civil cases was considered to be settled: that gentleman, whilst insane, took up an idea that a most affectionate brother had

administered poison to him. Indeed it was the prominent feature of his insanity. In a few months he recovered his senses. He returned to his profession as an advocate, was sound and eminent in his practice, and in all respects a most intelligent and useful member of society; but he could never dislodge from his mind the morbid delusion which disturbed it, and, under the pressure no doubt of that diseased prepossession, he disinherited his brother. The cause to avoid this will was tried here. We are not now upon the evidence, but upon the principle adopted as the law. The noble and learned judge who presides upon this trial, and who presided upon that, told the jury that if they believed Mr. Greenwood, when he made the will, to have been insane, the will could not be supported, *whether it had disinherited his brother or not;* that the act, no doubt, strongly confirmed the existence of the false idea, which, if believed by the jury to amount to *madness*, would equally have affected his testament, if the brother, instead of being disinherited, had been in his grave; and that on the other hand, if the unfounded notion did not amount to madness, its influence could not vacate the devise. This principle of the law appears to be sound and reasonable, as it applies to *civil* cases, from the extreme difficulty of tracing with precision the secret motions of mind deprived by disease of its soundness and strength. Whenever, therefore, a person may be considered *non compos mentis*, all his civil acts are void, whether they can be referred or not to the morbid impulse of his malady, or even though to all visible appearance totally separated from it; but I agree with Mr. Justice Tracy, that it is not every man of an idle frantic appearance and behaviour who is to be considered as a lunatic, either as it regards obligations or crimes, but that he must appear to the jury to be *non compos mentis* in the legal acceptation of the term, and that not at any anterior period, which can have no bearing upon any case whatsoever, but at the moment when the contract was entered into or the crime committed. The Attorney-General, standing undoubtedly upon the most revered authorities of the law, has laid it down, that to protect a man from criminal responsibility there must be a *total* deprivation of memory and understanding. I admit that this is the very expression used both by Lord Coke and by Lord Hale; but the true interpretation of it deserves the utmost attention and consideration of the court. If a *total* deprivation of memory was intended by these great lawyers to be taken in the literal sense of the words, if it was meant that to protect a man from punishment he must be in such a state of prostrated intellect as not to know his name nor his condition, nor his relation towards others; that, if a husband, he should not know he was married; or, if a father, could not remember that he had children; nor know the road to his house, nor his property in it: then no such madness ever existed in the world. It is idiotcy alone which places a man in *that* helpless condition, where, from an original malorganisation, there is the human *frame* alone without the human *capacity*, and which indeed meets the very definition of Lord Hale himself, when referring to Fitzherbert; he says, "Ideocy or fatuity, *à nativitate vel dementia naturalis*, is such a one as decribed by Fitzherbert, who knows not to tell twenty shillings, nor knows his own age, or who was his father." But in all the cases which have filled Westminster Hall with the most complicated considerations, the lunatics and other insane persons, who have been the subjects of them, have not only had memory *in my sense of the expression*, they have not only had the most perfect knowledge and recollection of all the relations they stood in towards others, and of the acts and circumstances of their lives, but have in general been remarkable for subtlety and acuteness. *Defects in their reasonings have seldom been traceable*, the disease consisting in the *delusive sources of thought;* all their deductions within the scope of the malady being founded upon the *immoveable* assumption of matters as *realities*, either without any foundation whatsoever, or so distorted and disfigured by fancy as to be almost nearly the same thing as their creation. It is true, indeed, that in some, perhaps in many, cases, the human mind is stormed in its citadel, and laid prostrate under the stroke of frenzy: these unhappy sufferers, however, are not so much considered by physicians as *maniacs*, but to be in a state of delirium, as from *fever*. There, indeed, all the ideas are overwhelmed, for reason is not merely disturbed, *but driven*

wholly from her seat. Such unhappy patients are unconscious, therefore, except at short intervals, even of *external objects*, or at least are wholly incapable of considering their relations. Such persons, *and such persons alone* (except idiots), are *wholly* deprived of their understandings, in the Attorney-General's seeming sense of that expression. But these cases are not only extremely rare, but never can become the subjects of judicial difficulty. There can be but one judgment concerning them. In other cases reason is not driven from her seat, but distraction sits down upon it along with her, holds her trembling upon it, and frightens her from her propriety. Such patients are victims to *delusion* of the most alarming description, which so overpowers the faculties, and usurps so firmly the place of realities, as not to be dislodged and shaken by the organs of perception and sense; in such cases the images frequently vary, but in the same subject are generally of the same terrific character. Here, too, no judicial difficulties can present themselves, for who could balance upon the judgment to be pronounced in cases of such extreme disease? Another class, branching out into almost infinite sub-divisions, under which, indeed, the former and every case of insanity may be classed, is where the *delusions* are not of that frightful character, but infinitely various, and often extremely circumscribed, yet where imagination (within the bounds of the malady) still holds the most uncontrollable dominion over reality and fact; and *these are cases which frequently mock the wisdom of the wisest in judicial trials*, because such persons often reason with a subtlety which puts in the shade the ordinary conceptions of mankind; their conclusions are just, and frequently profound; but the premises, from which they reason, when within the range of the malady, are uniformly false;—not false from any defect of knowledge or judgment, but because a *delusive image*, the inseparable companion of real insanity, is thrust upon the subjugated understanding, incapable of resistance, because unconscious of attack.

"'*Delusion*, therefore, where there is no frenzy or raving madness, is the true character of insanity; and where it cannot be predicated of a man standing for life or death for a crime, he ought not, in my opinion, to be acquitted; and if courts of law were to be governed by any other principle, every departure from sober rational conduct would be an emancipation from criminal justice. I shall place my claim to your verdict upon no such dangerous foundation. I must convince you not only that the unhappy prisoner was a lunatic within my own definition of lunacy, but that *the act in question was the immediate unqualified offspring of the disease.* In civil cases, as I have already said, the law avoids every act of the lunatic during the period of the lunacy, although the delusion may be extremely circumscribed, although the mind may be quite sound in all that is not within the shades of the very partial eclipse, and although the act to be avoided can in no way be connected with the influence of the insanity; but to deliver a lunatic from responsibility to criminal justice, above all in a case of such atrocity as the present, the relation between the disease and the act should be apparent. Where the connection is doubtful, the judgment should certainly be most indulgent, from the great difficulty of diving into the secret sources of a disordered mind; but still I think that, as a doctrine of law, *the delusion and the act should be connected.*

"'You perceive, therefore, gentlemen, that the prisoner, in naming me for his counsel, has not obtained the assistance of a person who is disposed to carry the doctrine of insanity in his defence, so far as even the books would warrant me in carrying it. Some of the cases, that of Lord Ferrers, for instance, which I shall consider hereafter, distinguished from the present, would not, in my mind, bear the shadow of an argument as a defence against an indictment for murder. I cannot allow the protection of insanity to a man who only exhibits *violent passions and malignant resentments*, acting upon *real* circumstances, who is impelled to evil from no morbid delusions, but who proceeds upon the *ordinary perceptions of the mind.* I cannot consider such a man as falling within the protection which the law gives, and is bound to give, to those whom it has pleased God, for mysterious causes, to visit with this most afflicting calamity. He alone can be so emancipated whose disease (call it what you will) consists not merely in seeing with a *prejudiced eye* or with *odd and absurd* particularities, differing in many respects from the contemplations of sober sense upon the

actual existence of things; but he only whose whole reasoning and corresponding conduct, though governed by the ordinary dictates of reason, proceed upon something which has *no foundation or existence.*' "

Here we must conclude our review of this work, and, in apology to our readers for so long an extract, remind them of the extreme difficulty they have to encounter in deciding on cases of mental imbecility, and the serious responsibility they incur, if they deprive a fellow-subject of his liberty, unless he really is of unsound mind, as we have proved in a recent number. We take leave of Mr. Chitty with high respect for the indefatigable industry and laborious research he has shown in the compilation of this part; and we entertain no doubt that if his second and last volume be as well executed, his work will not only be one of reference and authority, but one which will largely contribute to the improvement of the laws, and to the promotion of the happiness of mankind.

British Hospital Reports.

ST. THOMAS'S HOSPITAL.

Aneurism of the Axilla—Operation—Cure.

Martin Michael, aged 46, who has been employed in the gas works for the last fourteen years, and, during the time, was in the habit of carrying a hod on the right shoulder, was admitted on the 13th of March by Mr. Green into St. Thomas's Hospital. States that he has always enjoyed good health, and lived temperately. About six months since, on leaving his work, by accident he happened to place his hand on the upper part of his breast, where to his surprise, immediately below the clavicle, he discovered a tumour about the size of a pullet's egg, not in the least painful, but beating violently. Not finding any inconvenience from it, he took no notice of it, till about three months ago, though he had observed that it had somewhat increased in size. At this time he found that it rapidly enlarged, and extended further down towards the inferior edge of the great pectoral muscle; it was now painful, which was much increased when the arm was brought in contact with the side. Within the last three weeks its size has much augmented; the pain has been so violent, that he has had but little rest; he however continued his employment till six days ago. He then applied to a medical man for relief, who advised him to wash the part with salt and water, and gave him some blue ointment to rub on it. A few days afterwards he was recommended to the hospital, and taken in by Mr. Green. The tumour at this time was about the size of an orange, situated immediately beneath the outer half of the clavicle, extended into the axilla, at which part it was extremely painful when touched. Mr. Green decided at once upon putting a ligature around the subclavian artery, ordered ten ounces of blood to be extracted from the arm, and a dose of house medicine to be administered immediately.

On Friday (the next morning) at 1 o'clock, he was brought into the operating theatre; the tumour was again examined before a number of students, not the least doubt could for a moment be entertained as to its nature, and Mr. Green proceeded with the operation in the following manner:—

The patient was placed in a recumbent position on the table, the shoulder and arm slightly depressed. Mr. Green made a semi-elliptical incision commencing at the external edge of the sterno-mastoid muscle, about an inch and a half above the clavicle, carried the incision downwards, and then outwards towards the trapezius muscle; the platisma myoides and cervical fascia were next divided, the jugular vein pushed towards the median line, some cellular tissue was next removed, the omo-hyoid exposed, the fascia immediately behind this muscle was carefully lacerated with the point of the director, when the acromial edge of the scalenus muscle was felt by the operator's finger, and the pulsation of the artery distinguished. Before, however, the needle was passed around the artery, the operator found it necessary to enlarge the opening, for which some of the external fibres of the clavicular attachment of the sterno-mastoid muscle were divided, after which the needle was carefully passed from below, and before upwards and backwards, and the ligature secured. Pulsation in the tumour immediately ceased, the wound was brought together by means of adhesive plaster, and the patient carried to bed.

10 o'clock, P.M. Scarcely any constitutional excitement; feels quite comfortable; pulse 80; tongue clean; inclined to sleep.

The parts united by first intention; no unpleasant symptoms supervened. House medicine was given occasionally to obviate costiveness, and he is now perfectly recovered.

WESTMINSTER HOSPITAL.

Syphilitic Iritis.

Ellen Young, about 22 years of age, came into the hospital on 1st July with iritis. At first she denied having been afflicted with syphilis, but subsequently acknowledged it. Her eye has been affected for five weeks previous to her admission, and she described the pain as exceedingly acute.

On her admission she was ordered

Sub. mur. hydrarg. gr. v.
Ext. colocyn. gr. x.
Fiant pil. ii., capiat stat.

When her bowels were well open, she was put on a mercurial course, and ordered to take two grains and a half of blue pill four times a-day.

5th Mouth slightly affected. Continue the blue pill.

8th. The mercury has produced the most satisfactory effects. Her mouth is very sore, and the eye considerably better; can see distinctly. Pain greatly diminished, and in every way going on most favourably.

Pil. hydrarg. gr. v.
Capiat omni nocte.

Elephantiasis.

A middle aged woman was admitted, with her leg enlarged and tumefied to an immense extent. These symptoms have appeared without apparent cause, and rapidly progressed. Her leg has now almost returned to its natural condition, by the use of blue pill, of which she has taken five grains a-day; fomentations of poppy heads and camomile flowers have been appled to the limb.

On last Saturday Mr. Guthrie announced to the pupils, that, on Saturday, July 19th, he would give them the history of the case which fell under his care, in which he tied the common iliac artery. The lecture will be given in the operating theatre of the New Westminster Hospital.

REAPPEARANCE OF MALIGNANT CHOLERA.

We regret to state that a case of blue cholera was admitted into the Westminster Hospital on Tuesday last, and another occurred at the Western Dispensary, Charles-street, Westminster. The first patient was removed to a workhouse, and died in a few hours; the second was pulseless when we received our information on Wednesday, and has since died.

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification, Thursday, July 10th.

James Boulton . . . Staffordshire.
John Elliott Catley . . Cambridge.
George Frederick Codrington Dorsetshire.
James Slapp Garthon . . Norwich.
John Charles Rudkin . . Brigg.
Robert Wood Thacker . . Staffordshire.
John Moss Kirkman . . Manchester.

BOOKS.

A Series of Anatomical Plates in Lithography, with References and Physiological Comments, illustrating the Structures of the different Parts of the Human Body. Edited by JONES QUAIN, M.D., Professor of Anatomy in the University of London. Fasciculus XIV. John Taylor.

The Principles and Practice of Obstetric Medicine, in a series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children; illustrated by numerous Plates. By DAVID D. DAVIS, M.D., Professor of Midwifery in the University of London. Part XXXIII. John Taylor.

CORRESPONDENTS.

Alumnus.—The nitrate of mercury is prepared by boiling metallic mercury in weak nitric acid and crystallising the liquor. It is very much used both internally and externally at the Hôtel Dieu, Saint Louis, and other Parisian hospitals. It is used daily in cancerous ulcerations of the skin and neck of the uterus, and is a most powerful caustic.

METEOROLOGICAL JOURNAL.

MONTH. July, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
10		66	72	59	29·76	29·76	64	66	S.	S.S.W.	Fine	Fine	Fine
11		65	72	59	29·81	29·73	68	65	S.W.	S.S.W.	—	—	—
12		70	76	58	29·58	29·60	64	64	S.	S.W.	—	—	—
13	☽	66	73	62	29·61	29·66	64	63	W.	W.S.W.	—	—	—
14		67	76	61	29·72	29·78	63	62	S.W.	S.W.	—	—	—
15		70	76	65	29·92	29·94	62	63	W.S.W.	W.S.W.	—	—	—
16		70	76	67	29·94	29·87	65	63	S.W.	W.S.W.	—	—	—

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LECTURES

ON THE

PRINCIPLES, PRACTICE, & OPERATIONS OF SURGERY,

BY PROFESSOR SAMUEL COOPER.

Delivered at the University of London, Session 1832—1833.

LECTURE XCIX., DELIVERED MAY 1, 1833.

Gentlemen,—The last class of diseases, which it will be in my power to consider in the few evening lectures remaining to be delivered in this course, is one of the greatest importance to the practical surgeon, comprehending *certain disorders of the genital and urinary organs,* which have not yet engaged our attention. When I state to you, gentlemen, that these diseases are numerous, often very painful, invariably a source of extreme mental anxiety to the patient, and frequently a cause of urgent danger, you are only informed of what a very short opportunity of studying disease must already have demonstrated to you. We will begin, if you please, with *diseases of the genital organs,* and first with those of the testicle.

It is an observation made by Sir Astley Cooper, that the body of the testicle is less disposed to disease than the breast; but that its tunics and the spermatic cord are liable to a great variety of diseases. I believe myself, that the testicle is quite as frequently the seat of inflammation as the breast, and it is admitted by the eminent surgeon, whose authority is justly so much valued, that it is an organ that is very often diseased, owing, perhaps, as he suggests, to the slow manner in which the blood returns from it against its own gravity, the occasional immoderate distension of the seminiferous tubes, its exposure to injury from blows or pressure, its sympathy with morbid conditions of the urethra and prostate gland, and the changes which it almost naturally undergoes in old subjects.

The classification of the diseases of the testicle, adopted by Sir Astley Cooper, seems to me a very good one: he divides them, first, into those which are the result of common inflammation, acute, or chronic; secondly, into those which are of a specific nature, but not malignant; and, thirdly, he makes a class of others, which are both specific and malignant.

The first division comprises acute and chronic inflammation, and atrophy of the testicle. The second, embracing diseases, attended with specific but not malignant action, comprehends what Sir Astley Cooper names the hydatid, or encysted disease of the testicle, the irritable testicle, or neuralgia testis, the swelling of this organ frequently occurring in the disorder of the system termed *mumps,* ossific changes in the part, solid tumours of the epidydimis, or testis, the scrofulous testicle, and what has been occasionally denominated the venereal sarcocele. The third division of the classification, including specific and malignant affections, comprises fungus hæmatodes and scirrhus. But, gentlemen, besides the numerous varieties of disease now referred to, you should make yourselves acquainted with several diseases of the coats of the testicle and spermatic cord, for which your professional advice may often be requested. Now, if you do not pay attention to the subject, you will be likely to get into very serious scrapes in practice, by confounding one disease with another, mistaking diseases of the body of the testicle either for hernial swellings, or hydroceles, or these again for enlargements of the testicle itself, and varicose swellings of the spermatic veins for herniæ, or herniæ for varicoceles. I am continually meeting with patients who either have herniæ, and not being aware of the nature of their cases, do not wear trusses, or who are wearing trusses on the supposition of their having herniæ, when, in truth, they have no such complaint.

I presume, gentlemen, you know that *acute inflammation of the testicle,* when it arises from gonorrhœa, or some other kind of irritation in the urethra, is frequently, though very absurdly, termed *hernia humoralis.* It is often excited by disease in the latter passage, especially strictures, and still more frequently by the means ordinarily employed for their

cure, namely, bougies, the irritation of which becomes the cause of the affection of the testicle. When inflammation of the latter organ is thus excited by disease in the urethra, it is preceded by soreness or irritation about the membranous and prostatic portions of that canal; the spermatic cord becomes swollen and tender, and in particular the vas deferens, which seems much thickened, and is extremely painful when handled. When the case is still further advanced, the swelling extends to the whole of the testicle, and you will observe, that the hardest part of it is the epidydimis. So considerable is generally the enlargement of the organ in every severe case, that the scrotum is exceedingly distended, its rugæ are effaced, and its surface is completely smooth. Painful as the inflamed testicle is itself, a still greater degree of suffering is often experienced in the lumbar and inguinal regions, with great uneasiness about the hip and thigh. Sometimes the agony in the part affected seems to have paroxysms of increased severity, which are alleged to depend upon spasmodic contractions of the fibres of the cremaster. The scrotum, besides losing its naturally corrugated appearance, is also reddened. With these symptoms, gentlemen, you will notice an acceleration of the pulse, constipation, restlessness, thirst, heat and dryness of the skin, and other symptoms of inflammatory fever. The blood, taken away from the patient, is also found to be buffy. Sometimes the stomach is a good deal disordered sympathetically, and nausea and even repeated vomiting may occur. I once attended a man for an acute inflammation of the testicle, who at the same laboured under so obstinate a suppression of the stools, and such a repetition of vomiting, that a suspicion of strangulated hernia was created for a short time, but quickly abandoned on a careful examination of the swelling. In fact, a general enlargement of the testicle, like that from acute inflammation of the organ, is not at all likely to be mistaken for any kind of hernia, excepting the congenital, because in the case of bubonocele you are able to feel the testis at some point or another below the hernial tumour. I should say, then, that there would be no excuse for you, if you were to confound these affections; a mistake in the diagnosis could only proceed from gross ignorance or the most supine carelessness.

As already explained, gentlemen, inflammation of the testicle may arise from irritation in the urethra, which, in some shape or another, is its most frequent cause; it may also be the consequence of external violence, and is often purposely produced by various surgical proceedings, employed for the radical cure of the disease named *hydrocele*. Sometimes you find inflammation of the testicle brought on by the pressure of badly-constructed trusses; sometimes as one of the effects of the disorder of the system well known by the appellation of mumps.

When the testicle inflames and swells in gonorrhœa, the pain in making water and the discharge of matter are almost always suddenly diminished, or even suspended; a circumstance, ascribed by some pathologists to metastasis; and by others to sympathy between the urethra and the testicle. All that I can say upon this point is, that we seem to know little more than the fact itself, which is exemplified, I think, with remarkably frequency in patients, who, while they have a clap, take rough exercise, indulge in wine, and live altogether too freely. One thing, gentlemen, here merits your attention, and it is perhaps what you would not have expected, namely, that the swelling of the testicle does not always come on exactly at the period when the inflammation in the urethra is worst, but frequently when it is on the decline, or even nearly cured. Sometimes, be it likewise remembered, the inflammation of the testicle is not followed by any diminution or stoppage of the discharge, a fact clearly overturning the doctrine of metastasis, viewed as an essential thing in the explanation of the cause of the disease. A suspicion is entertained that the inflammation is sometimes propagated to the testicle from the mouth of the vas deferens. Mr. Hunter did not, however, adopt this view, because he found a swelling of the testicle to be as frequent in gonorrhœa, where the inflammation did not extend further than an inch or so from the orifice of the urethra, as where it reached to the neck of the bladder. Another idea is, that a swelling of the testicle is particularly disposed to come on when gonorrhœa is suddenly checked by the employment of copaiba, cubebs, or astringent injections; but, as far as I have been able to judge, the correctness of this opinion may be doubted, and many very experienced surgeons believe that they have seen an inflammation of the testicle arise as frequently under other modes of treatment as that now alluded to. At the same time, I feel it right to mention, that Sir Astley Cooper inclines to the belief that injections really have a tendency to bring on hernia humoralis, especially when they are made to pass far into the urethra. Notwithstanding what I have stated as Mr. Hunter's view, I would not have you suppose that inflammation may not sometimes extend to the testicle from the urethra, by the course of the vas deferens; and Sir Astley Cooper describes certain appearances noticed in the dissection of the urethra of a criminal who had been executed, which confirm the possibility of this occurrence. The man had a gonorrhœa at the time of his death, and when his urethra was cut open, although the inflammation was greatest in the first three inches of the canal, yet it extended also to the membranous portion of it, and even blood had been extravasated under its mucous membrane. Under such circumstances, the verumontanum, the termination of the duct of the vesiculæ seminales, and the vasa deferentia in the urethra,

participate in the inflammation, which may then extend along the vas deferens to the cord epidydimis, and testicle.

One fact, relative to this subject, is certain, which is, that the inflammation of the testicle rarely or never comes on in the early stage of gonorrhœa, but usually between the tenth day and the end of the third week. You will find, also, that when the pain and swelling of the testicle begin to abate, the running very commonly returns. Within the tunica vaginalis there is generally a quantity of serum effused, which, after the inflammation has abated, is absorbed again. We find likewise that coagulable lymph is thrown out within the same membrane in the form exhibited in the preparation, which I now pass round for examination. Lymph is also effused in the interstices of the glandular part of the testicle, occasioning considerable hardness, the remains of which will often continue a very long time after the inflammation has been cured.

The treatment of acute inflammation of the testicle must, of course, be antiphlogistic, comprehending quietude and even the horizontal posture in bed, if the case be a severe one. When the patient is young and robust, the swelling considerable, and the pain in the lumbar region violent, you should have recourse to venesection, and this pretty freely; and I may say, that, in all cases, leeches, saline purgatives, and low diet are absolutely necessary. If your patient cannot procure leeches, you may puncture the veins of the scrotum, whereby you will often succeed in obtaining a copious and beneficial discharge of blood. With respect to local applications, you may employ cold evaporating lotions, or, if the patient seem to derive most relief from emollient poultices and fomentations, these may be used. Perhaps, in very severe cases, the latter ought always to be preferred. But, gentlemen, nothing will lessen the patient's suffering more effectually, than the plan of taking off the weight of the testicle from the spermatic cord with a bag-truss or suspensory bandage; it has, indeed, the greatest effect in diminishing the pain experienced in the back and inguinal region, particularly when assisted by bleeding, saline purgative medicines, and the occasional exhibition of eight or ten grains of the compound powder of ipecacuanha. When the disease has arisen from the irritation of bougies, their employment must, of course, be suspended. One plan that has sometimes proved very expeditious in stopping the inflammation, and bringing down the swelling, is that of prescribing the tartarised antimony, so as to keep up a degree of nausea; but the practice is not commonly adopted, because patients submit more readily to the other means of relief which I have specified.

You will generally observe, gentlemen, that a considerable hardness of the testicle, and especially of the epidydimis, remains after the inflammation has been completely removed, sometimes during the rest of the patient's life; now Mr. Hunter suspected that, in some cases of this description, the canal of the epidydimis might be impervious, and the function of the testicle annihilated. However, this suspicion does not coincide with the examinations instituted by Sir Astley Cooper, who says, that, when the swelling is at the lower part of the epidydimis, it is seated in the cellular tissue of the vas deferens, where it forms its first convolutions, and is not an effusion within the cavity of the duct. The induration, according to his researches, frequently affects merely the tunics; and when situated in the upper part of the globus major, it arises either from lymph effused in the cellular substance between the coni vasculosi, or else from a sac filled with a viscid fluid.

For promoting the dispersion of the chronic induration, remaining after all acute inflammation is over, you may employ camphorated mercurial ointment, with or without two scruples or a drachm of the hydriodate of potash in each ounce of it. Or you may try poultices of vinegar and oatmeal, or the lotion of the muriate of ammonia, where friction cannot be borne. In some cases, good seems to be produced by internal alterative medicines, as the compound calomel pill, and sarsaparilla, or the tincture of iodine.

It is well known that acute inflammation of the testicle, taking place as a consequence of gonorrhœa, or irritation in the urethra, rarely suppurates; but when it is produced by external violence, the chance of an abscess is greater.

Sometimes, gentlemen, you will meet with examples of a *wasting away of the testicle;* a more or less complete absorption of it, technically termed *atrophy*. This may follow the subsidence of acute inflammation of the organ; but more frequently when such inflammation has been brought on by external violence, than when it originates as a consequence of gonorrhœa. No doubt, under these circumstances, the structure of the testicle has been irreparably damaged by the inflammatory process; and probably, in some instances, the atrophy may depend upon an obliteration of the vas deferens; for, in the museum of St. Thomas's Hospital, there used to be a testicle in this condition, the vas deferens of which could only be filled with quicksilver for about half an inch of its extent from the abdominal ring towards the testicle itself. This fact is reported in Sir Astley Cooper's work. An atrophy of the testicle sometimes takes place without any previous inflammation of it: the pressure of a truss on the spermatic cord will produce it; and you will find many curious cases recorded by Baron Larry, where sabre wounds about the occiput and nape of the neck were followed by atrophy of the testes.

The testicle is subject to a *chronic enlargement;* whether it should be called *chronic inflammation*, I cannot exactly say: it usually commences with hardness and swelling of the

epidydimis, at first attended with but moderate uneasiness, scarcely amounting to pain; at length, the glandular part of the organ becomes involved, and the testicle seems rather larger and more tender than that of the other side. If the disease arise from a blow, then it may begin in the body of the testicle, which may present a globular, instead of its natural oval form, and sometimes, though enlarged and altered in shape, it has no inequalities upon its surface. In other instances, however, it is at first unequal, so that knobs can be felt upon it; and this, according to Mr. Brodie, is usually the case in the beginning, a general uniform enlargement, without any knobs, being the more advanced state of the disease. The case is rarely so painful as to compel the patient to keep himself quiet, and refrain altogether from labour and exercise. In some cases, you will perceive, that a clear transparent serum is effused in the tunica vaginalis, constituting one of the forms of disease, to which the term *hydro-sarcocele* is vaguely applied. These two preparations, which I pass round, illustrate what is meant by the expression, namely,—a chronic enlargement of the testicle, joined with a collection of a serous fluid in the tunica vaginalis. In ordinary cases of this chronic enlargement of the testicle, the spermatic cord is not hardened, but its veins are somewhat enlarged; and when the disease has existed some considerable time, and has attained magnitude, the patient complains of pain and a sense of weight in the loins and thigh.

This chronic inflammation of the testicle, which has been well described by Mr. Brodie, leads to the production of a yellow tubercular substance in the texture of that organ; an unorganised yellow matter, collected at first in small masses, but afterwards in larger ones at certain parts of the testicle, while, in other places, you may observe the glandular structure quite healthy. In a later stage, the yellow matter, which he thinks is secreted within the tubuli testis and epidydimis, assumes a hard consistence, and is generally laminated. This is a disease which is met with in various unhealthy states of the constitution, whether connected with rheumatism, syphilis, or other causes. It is often met with in persons who have been scrofulous in their youth, or whose constitutions have been broken by the long use of mercury. What has been termed the *venereal varicocele* is only one variety of it. According to Sir Astley Cooper, when a solid effusion has taken place in the seminiferous tubes, or even in the substance of the testicle, or epidydimis, the disease may be cured by the strict observance of the recumbent posture, and the exhibition of three grs. of calomel and one of opium night and morning, so as to keep the gums affected for a month at least, with a black dose, and fifteen or twenty minims of the liquor antim. tart. every fourth morning. The topical treatment should consist of leeches twice a week, and a lotion composed of the liq. antim. tart. ℥ v. and one ounce of spirit of wine.

No doubt, gentlemen, you have all heard of *granular protrusions*, or *fungous growths* from the testicle. These may follow the formation and bursting of an abscess in the part; or they may occur in the advanced stages of chronic inflammation of it. At one point, the testicle adheres to the skin, inflames, and ulcerates; and then, through the ulcerated opening, a fungus of small size at first projects, but, gradually acquiring greater bulk, makes its way through openings, not only in the tunica vaginalis, but in all the investments of the scrotum.

Now, according to Mr. Brodie's investigations, you may trace on the surface of this fungus the same kind of yellow matter, found in the glandular portion of the testicle, which glandular texture itself likewise protrudes, until no part of the testicle is left within the scrotum, and the spermatic cord can be distinctly traced into the centre of the fungus. In a still more wasted condition of the glandular structure, the cord, in fact, terminates in a small tubercular mass, the only remains of the organ.

With respect to this kind of *fungous*, or *granular* protrusion of the testicle, I may also remark, that the height to which it rises prevents the skin from healing over it; but it may be reduced by the pressure of a dossil of lint fixed on it with adhesive plaster, or it may be got rid of with escharotic applications. However, the surest mode of cure is that of cutting away the protruding mass on a level with the inner reflexion of the tunica vaginalis, making two semicircular incisions, and afterwards bringing their edges together. This plan is not, however, approved of by Mr. Brodie, because, in doing it, you actually slice away the tubuli testis; and hence, he prefers sprinkling the fungus with red precipitate, and giving mercury. Then, as soon as healthy granulations form, he dresses the sore with a solution of the sulphate of copper in the camphor mixture. I believe it to be a very good practice, when abscesses of the testicle leave deep fistulous openings, to prescribe calomel and opium, in the manner directed by Sir Astley Cooper, and to inject into the fistulæ a lotion of the sulphate of copper, or oxymuriate of mercury.

Gentlemen,—I next invite your attention to what is termed the *irritable testicle*, or *neuralgia testis*; a case analogous to tic douloureux and neuralgia in other parts. It is a highly sensitive and painful state of the organ, often without any very obvious cause, the suffering produced by it being frequently of the most excruciating kind, and of long duration, though subject to occasional remissions. The part is but little, if at all, swollen; and, on dissection, no change of structure can be detected. One example, however, of this affection in a medical student, in which I was lately consulted, and in which Sir Astley Cooper

was also kind enough to give his advice, had been attended with repeated swelling of the testis, though mostly it remained with scarcely any perceptible change of size. The most successful treatment consists in giving large doses of the sulphate of quinine or carbonate of iron; or, when the disease assumes an intermittent type, you may prescribe the liquor arsenicalis. Opium, the acetate of morphia, the extract of conium, hyoscyamus, and other narcotics, may also be given. If the secretions of the skin and liver be defective, try calomel, opium, and antimony, in combination.

As local applications, I may recommend ice, or a plaster composed of one-third of the extract of belladonna and two-thirds of soap cerate. This is a disease in which the ointment of veratria deserves a trial.

In the case which I alluded to as having occurred in a medical gentleman, the belladonna plaster, with small doses of opium, ipecacuanha, and calomel, and his removal from London to a watering place, produced great relief for a time; but, when I last saw the patient, he was not entirely well. No doubt the neuralgia testis frequently depends upon some disorder of the system at large, the removal of which is an essential thing in the cure. That you may have severe pain in the testicle also, from sympathy between this organ and other parts, without any alteration of its structure, we see illustrated in cases where great agony in the testis is experienced on the descent of a calculus from the kidney into the ureter. You may notice, however, in particular instances, a degree of swelling of the part, a varicose fulness of the spermatic veins, or even some hardness or prominence about the epidydimis.

The next disease of the testicle meriting your consideration, gentlemen, is the *Scrofulous Testicle.* The secreting glands are rarely affected with scrofula; but this organ forms an exception. Even in young children it becomes enlarged and hardened, without pain, and remains in this indolent state for many weeks, months, or yea s, and then, as the health improves, gets well. More frequently the disease occurs towards puberty, preceded or accompanied by some other marks of scrofula, and sometimes it affects both testicles. Scrofulous disease of the testicle is remarkable for its indolent character, and the little pain attending it; you perceive a trivial swelling of some part of the organ, mostly the epidydimis; and afterwards a small superficial lump at another point. These little tumours increase, and by degrees create greater uneasiness in the part. The skin becomes adherent to them; they suppurate; the abscesses burst, but discharge only a scanty quantity of matter; and the openings, having little tendency to heal, remain fistulous. At length the testis sometimes diminishes and wastes away, until but a small portion of it is left; but more commonly the organ is not entirely destroyed, and a considerable portion of the glandular structure remains, as you observe in the preparation numbered 835, and which I now pass round for your inspection.

The treatment of the scrofulous testicle is to be conducted on the same principles as are applicable to other strumous forms of disease. You may prescribe rhubarb and carbonate of soda in equal proportions (ten grains of each), to be taken once or twice a-day. You may give the liquor potassæ, preparations of iodine, or tonics of various kinds, according to the circumstances of the case, and the effects which you observe to be produced by such means on the part and the whole system; or, in other words, the general health. With respect to iodine, I like the way in which it is prescribed by Lugol better, than the less diversified mode in which we employ it. But this is a subject, which I explained to you when we were considering the treatment of scrofula in general.

Another more serious affection of the testicle has gone under the names of *Cystic Sarcoma*, and *Hydatid Disease of the Testicle*, though the latter term seems to me objectionable, as conveying the erroneous notion that hydatids exist in the part. The morbid mass into which the organ is converted, is partly composed of a solid structure, and partly of cysts, varying in size from that of a large pin's head to that of a small marble; some of them containing a thin transparent yellow serum, and others a more turbid fluid. It is a disease that is seen chiefly between the ages of thirty and thirty-five, and is sometimes mistaken for hydrocele, though the shape of the tumour ought to serve as a criterion, for it is oval, and not pyriform, like that occasioned by a collection of fluid in the tunica vaginalis, for ascertaining which last case we have likewise other circumstances, which I shall hereafter notice. The particular character, however, of cystic sarcoma of the testicle cannot always be known with certainty previously to the examination of the part after its removal by operation. It is not malignant, as it never extends to other parts, though it may be conjoined with medullary sarcoma, which is itself malignant. No constitutional or local treatment is of any use; for, gentlemen, this disease is truly an organic one, accompanied by a total disorganisation of the testicle, and changes of structure, leaving no possibility of a return of the part to its healthy state again. The pain caused by the weight of the tumour on the spermatic cord, and the annoyance of its bulk, frequently compel the patient to submit to castration.

In the next lecture, gentlemen, I will make a few observations on malignant diseases of the testicle; those which we have now been contemplating, though attended with specific action, are not regarded as malignant, according to the meaning of this term as sometimes adopted.

LECTURES ON THE THEORY AND PRACTICE OF MEDICINE,

BY WILLIAM STOKES, M.D.,

Delivered at the Medical School, Park Street, Dublin.—Session 1833–34.

LECTURE XXVIII.

Recapitulation—Apoplexy—Occurring with various conditions of the Brain—Simple or Nervous Apoplexy without organic change—Its occurrence in other Diseases—Serous Apoplexy—Opinions of Abercrombie—Sanguineous Apoplexy—Comparative frequency of its situations—Absorption and Organisation of the Clot—Occurrence of Apoplexy at an early age.

GENTLEMEN,—We were occupied at our last meeting in considering some of the most prominent symptoms of meningeal inflammation; and I beg of you to recollect, that all these symptoms, with the exception of pain, are those which ordinarily characterise inflammation of the substance of the brain itself, and are to be explained by referring them to some lesion in the functions of that organ. It appears, then, that the symptoms of meningitis, with the exception of pain, are symptoms of an affection of the brain itself; and this is a point which you must always bear in mind, when you agitate the question as to the possibility of making a diagnosis between meningitis and encephalitis. We have a set of symptoms characterising meningeal inflammation, the majority of which belong to irritation of the brain itself; and we find that these may exist with or without any *perceptible* alteration in the cerebral substance. Now, in cases where you suppose the existence of meningeal inflammation, and find these symptoms present, it would be venturing too much to assert that there was no complication with organic disease of the brain; and therefore we must conclude that, in most cases, it is nearly impossible to distinguish between inflammation of the substance of the brain and of its membranes.

In speaking of the more important symptoms of cerebral inflammation, I alluded particularly to convulsions, and stated, that, as far as my observations went, this symptom, formidable as it may appear, is not in reality so unfavourable as it is generally thought to be. In fact, there are many cases of affections of the brain accompanied by convulsions, in which the danger is by no means so great as in others of a different description; and many of the worst cases are those in which convulsions are absent, or only trifling. I think we may look upon convulsions as being more or less a source of relief to the brain when labouring under the excitement of irritation or inflammatory disease. You are all aware, that one of the great functions of the brain is to regulate and control the motions of the muscular system. If a man exercises his limbs violently for some time he becomes tired and exhausted; he cannot pursue the same exercise any longer, for, in addition to whatever the muscular system may suffer, there has been a great expenditure of nervous energy; and if he should attempt to keep up the same exertions, such a degree of muscular and nervous debility is superinduced that syncope is the consequence. Now, the expenditure of energy produced by the supply of nervous power to the muscles seems to bear a strong analogy to the secretory discharges from other viscera. In the case of irritation or inflammatory affections of other organs, you are all aware that there is nothing which gives such speedy and effectual relief as supersecretion, or an increased action of the secreting vessels of the affected organ. Now, if we look upon the expenditure of nervous energy in the same light (and I see no reason why we should not), we can easily conceive why it is that convulsions relieve the irritation of an over-excited brain. I drew your attention strongly, at my last lecture, to the curious and important fact, that if we compare apoplexy and epilepsy, with respect to the danger and the chance of disorganisation attendant on each, we shall find the danger is infinitely greater, and the chances of organic change more numerous in the former than in the latter. In epilepsy, where the convulsions are violent, we seldom have a fatal termination of the fit, and there is rarely lesion of the substance of the brain, until the disease has lasted for a great length of time. This is not the case in apoplexy. Here, as I have already stated, we have two cases of active determination to the head: in one case there are no convulsions, and we frequently find the result to be death, or extravasation with paralysis and slow convalescence; in the other, we have violent convulsions, followed by rapid recovery and no disorganisation. From this it would seem reasonable to conclude, that convulsions are a mode of relieving the brain adopted by nature, and that their occurrence in hydrocephalus should not be looked upon as unfavourable. Now, if this be true, it must strike you, that nothing can be more dangerous and improper than to take any steps to control an attack of convulsion during the prevalence of hydrocephalic symptoms. The true mode of treating them is to adopt measures calculated to relieve irritation of the brain, and not hazard the patient's safety by following the ordinary but mischievous mode of attempting to control the salutary efforts of nature. I allude here particularly to the practice of administering opiates and antispasmodics, a practice which I firmly believe to be fraught with danger.

Gentlemen, we have to-day to consider another form of cerebral disease, scarcely less important than those with which we have been hitherto engaged. In all the former instances we find the determination of blood to the brain followed by that organic change which we term inflammation. But we may have accumulations of blood in the brain unaccom-

panied by inflammation, and this brings us to the consideration of apoplectic disease. The term apoplexy, as I suppose you all know, is derived from a Greek word, signifying a stroke or blow. It is a term which, in the present state of medicine, has been very frequently abused, or at least employed in very different senses, and hence the many erroneous opinions respecting it. The true meaning of the term expresses an alteration of the phenomena of the life of relation, that is of the functions of the cerebro-spinal system. In taking a view of the nature of this alteration, we find that the attack generally comes on in a sudden manner, and that the functions of the brain are partially, or completely suspended. You are aware that the manifest phenomena of the life of relation are those which belong to *sensation*, *muscular motion* and *the intellect*, and that the system of the life of relation is composed of the brain, spinal cord, and nerves. Now suppose, for example, that a man gets an attack of apoplexy, we find him paralytic—here is a lesion of the muscular function. We find him insensible to external stimulants, he feels no pain—here is a lesion of sensation. We may find his sight, hearing, taste, smell, and touch are injured. He lies in a state of insensibility, and is unconscious of every thing passing around him—here we have an example of interruption in the performance of the intellectual functions. All these phenomena exhibit the various lesions superinduced by an attack of apoplexy in the functions of those organs which subserve to the life of relation.

I have said that the term apoplexy is frequently abused in modern medicine. From the circumstance of most cases being accompanied by an effusion of blood on the surface, or into the substance of the brain, the term has been also applied to sanguineous effusions into other organs, and we hear every day of pulmonary and hepatic apoplexy; terms implying the extravasation of blood into the substance of the lung or liver. The analogy, however, in such cases will on examination be found to be coarse, and the application of the term loose and improper. Apoplexy, as a cerebral disease, may occur with or without effusion; in either case the disease, *quoad* the lesion of function, is the same; but to give the name of apoplexy to hæmorrhage into the lungs or liver is improper. The term apoplexy should be used only with reference to the brain, and applied to a particular train of lesions in the functions of the life of relation occurring *with or without an effusion of blood, or even congestion*. When we have effusions of blood into other viscera, we may have them unaccompanied by any apparent lesion in the functions of the organ affected (a circumstance rarely met with in the case of the brain,) and it would be much better to give some other name to those hæmorrhages into the substance of the liver and lungs, than to designate them by one drawn from a loose and imperfect analogy.

The suspension of the phenomena of the life of relation, complete or partial, which constitutes apoplexy, may be connected with any of the following pathological conditions. First, great congestion of the brain, in which the vascular system of that organ is overloaded but without extravasation of blood or serum; this is termed *the congestive apoplexy*. In the next place, we may have this congested state of the vessels of the brain with an extravasation of blood on its surface. To the latter form the *meningeal apoplexy* has been applied. Thirdly, with an effusion of blood into the substance of the brain, which is the most common case, and, lastly, we may have complete apoplexy without morbid appearance, or, if there be such, *quite insufficient to account for the phenomena*. A man will fall down suddenly, he will lie in a state of insensibility, with stertorous breathing, coma, and paralysis, he will die with all the symptoms of the worst form of apoplexy, and yet on dissection the brain may be found *to all appearance healthy*. This is what has been termed by the older authors the nervous or convulsive apoplexy, of the real nature of which we are still as ignorant as we are of the nature of tetanus, hydrophobia, and other nervous diseases unaccompanied by perceptible organic change.

This is the *simple apoplexy* of Dr. Abercrombie, of which he gives several most important cases, and refers to others related by the older authors. You will at once admit that it is not more extraordinary that apoplexy should exist without perceptible organic change, than mania, tetanus, hydrophobia, and other affections. Of the fact there is no doubt. Such cases indeed are rare, which in one sense may be looked on as a fortunate circumstance. But in the progress of other diseases, this nervous coma or apoplexy is by no means uncommon. Thus there is no symptom more common than coma in typhus, and yet if you examine the head after death, you generally either find no lesion at all, or such as will not be sufficient to account for the symptoms. The coma, which occurs in cases of painters' colic too, appears to be closely connected with this nervous apoplexy. You will recollect an interesting clinical experiment I made in the case of a patient with painters' colic who had profound coma. In this case I thought it probable that the condition of the brain bore no resemblance to sanguineous apoplexy, because the symptoms of painters' colic are seldom or never accompanied by hyperæmia of the nervous or other systems. Under this impression, I prescribed a full opiate, and this not only did not increase the coma, but, on the contrary, produced the very best effect, for the patient was amazingly improved the next morning. I do not so much mean to say, that opium is useful in nervous coma, as that in this instance, at least, the coma was not of the congestive kind. It is not unlikely, too, that the coma of jaundice is of the same description

and unconnected with any decided hyperæmia of the brain. I am aware that in jaundice the coma is supposed by some to depend upon a bilious condition of the blood circulating in the brain, but there are so many cases of persons who have laboured under jaundice for years without having coma, that we must seek for some other explanation. Now, so far as we know of the encephalon in persons who have died of jaundice, it appears that little or no congestion exists, and hence it seems probable that the coma of jaundice is similar to that of nervous apoplexy.

I shall now proceed to the consideration of those forms of apoplexy which are connected with changes more or less apparent in the circulation of the head, and with which we are consequently better acquainted. I have told you that simple congestion of the brain may be accompanied by symptoms of apoplexy, or that we may have the disease presenting in addition to this an effusion of blood into the substance, or on the surface of the brain. The simplest idea you can get of the condition of the brain in the congestive form, is to consider what its state is in persons who have been hanged. These persons have the vessels of the brain loaded with blood from the violent interruption of the venous circulation. Now, this increase in the quantity of blood circulating in the brain, may arise from two causes, one depending on the interruption of the venous circulation, the other produced by an increased action of the arterial system. Hence in certain cases of disease of the heart, where the blood is sent with great force to the head, there is a strong predisposition to apoplectic attacks. The kind of disease of the heart, however, which has been found most liable to produce this, is not, as you would suppose, Corvisart's active aneurism, but simple hypertrophy of the heart, where the cavity of the left ventricle continuing the same, its walls are increased in thickness and strength, so that on the natural quantity of fluid an increased impulse is exercised. Such at least is the result of Andral's researches, and there is every reason to place confidence in the accuracy of his conclusion.

About this congestive apoplexy there appears to have been a good deal of misapprehension. You have all heard of *the serous apoplexy*. In this form it has been supposed that the cause of the compression of the brain and all the other symptoms is an effusion of serum, just as an effusion of serum into the cavity of the pleura will produce compression of the lung and dyspnœa. The idea which has been generally entertained is, that the effusion of serum is the cause of *all* the symptoms, and, in consequence, the same active treatment has not been adopted as in the other forms of apoplexy. This opinion will be best refuted by the investigations of Dr. Abercrombie, and I cannot do better than read for you the opinions of this eminent writer on the subject, as given in his celebrated and admirable work, which I have no hesitation in saying constitutes one of the brightest ornaments of British medicine.

"The distinction, which has been proposed betwixt sanguineous and serous apoplexy, is not supported by observation. The former is said to be distinguished by flushing of the countenance and strong pulse, and by occurring to persons in the vigour of life; the latter by paleness of the countenance and weakness of the pulse, and by affecting the aged and infirm; and much importance has been attached to this distinction, upon the ground that the practice which is proper and necessary in the one case would be improper or injurious in the other. I submit that this distinction is not founded upon observation, for, in point of fact, it will be found that many of the cases, which terminate by serous effusion, exhibit in their early stages all the symptoms which have been assigned to the sanguineous apoplexy; while many of the cases, which are accompanied by paleness of the countenance and feebleness of the pulse, will be found to be purely sanguineous; and one modification of the disease in particular will be described, in which these symptoms are very strikingly exhibited, while the disease is found to be sanguineous apoplexy in its most hopeless form.

"Portal has described a series of cases which afford the same result; of three, which presented all the symptoms of serous apoplexy, one was saved by repeated bleeding, and in the other two, which were fatal, there was found extensive extravasation of blood. Case XCVI., lately described, forms a remarkable addition to these observations. If any case could be confidently considered as serous apoplexy, this was such. Dropsical effusion had existed in the body for months, and in defiance of every remedy it had been progressively gaining ground. There were symptoms indicating its existence, both in the thorax and in the abdomen; the patient then became comatose with pale countenance, and died; but though dropsy was found in the other cavities none could be detected in the brain.

"In other parts of the body serous effusion is very seldom a primary disease; it arises as a result either of inflammatory action, or of impeded circulation, and takes place slowly, not accumulating at once in such quantity as to induce urgent symptoms. It is therefore in the highest degree improbable, that it should occur in the brain as a primary disease, and accumulate with such rapidity as to produce the symptoms of an apoplectic attack.

"The quantity of fluid effused bears no proportion to the degree of the apoplectic symptoms. We find it in small quantity though the apoplectic symptoms had been strongly marked and long continued; we find it in large quantity when the symptoms have been slight; and, finally, we find most extensive effusion in the brain where there have been no apoplectic symptoms at all. The direct

inference from these facts is, that, in the cases of apoplexy with effusion, the presence of the fluid cannot be considered as the cause of the apoplectic symptoms."

The same error has been committed with respect to hydrothorax, a disease almost never primary, but the result of either pleuritic inflammation, obstruction of the heart or lungs, or some analogous cause. The cause of the symptoms is not the mere effusion of fluid, but some pre-existing disease which has given rise to a serous effusion. In Dr. Abercrombie's work you will find the remarkable fact stated, that there may be a copious effusion of serum in the head without producing apoplectic symptoms. The following case, mentioned by Dr. Abercrombie, furnishes a remarkable illustration :—A patient, who had laboured under hypochondriasis for upwards of thirty years, began to decline rapidly in health. He was extremely feeble, his bowels costive, his sleep disturbed, and his appetite gone. This state continued for some time, and he began to sink, but he never complained of headach, giddiness, convulsions, or paralysis, and his mental powers remained unimpaired until a very short time before death. Yet, on opening the head, there was an exceedingly copious effusion of serum found under the arachnoid, and in some places this was so great as to give the arachnoid the appearance of small bladders filled with water. The ventricles were distended with fluid. Dr. Abercrombie gives another case, where the quantity amounted to eight ounces, and notices a case, mentioned by Dr. Marshall, of a maniac who died of mortification of the feet; a few hours before death he became perfectly rational, yet effusion was found both on the surface of the brain and in the ventricles, amounting to more than a pound.

All these facts go to prove, that what has been termed serous apoplexy is only an apoplectic attack depending on congestion of the brain, that in some cases we may have this congestion accompanied by serous effusion, in others not; that the effusion is secondary and by no means of constant occurrence, and that altering our practice and pursuing a less active plan of treatment in such cases would be improper. The same treatment should be adopted in the serous as in the congestive form of the disease, for where the nature of the affection is the same the same curative means should be employed. Why it is that effusion takes place in one case and not in another we cannot tell; such changes are connected with laws of organisation, of which we are present ignorant. We know as little why this should occur as why inflammation of the liver in one case is followed by enlargement, in another by the secretion of pus, in a third by cancer, or in a fourth by hydatids.

We now come to the consideration of apoplexy with extravasation of blood. This is the form of the disease to which the term apoplexy has been restricted by one of the last writers on the subject, M. Rochoux. In this affection the extravasation of blood, which constitutes the principal pathological feature of the disease, is found to exhibit a remarkable variety as to its seat and extent. In some cases the blood is effused on the surface of the brain, in others into its substance, and in a few cases into the ventricles. De Haen gives some cases of apoplexy produced by rupture of the choroid plexus, but in the great majority of cases, where blood is found in the ventricles, the extravasation has taken place in one hemisphere, and, tearing through the substance of the brain, has made its way into their cavities. Of the three varieties of apoplectic effusions the ventricular is the rarest; the next to this is the meningeal, or that in which blood is poured out on the surface of the brain, and the most common is where it is effused into the substance. It has been also found that certain parts of the brain are much more liable to sanguineous effusions than others; of the reason of this, as of many other phenomena connected with the circulation of the brain, we are still in ignorance. The following table, which you should bear in mind, exhibits a remarkable preponderance in the liability to sanguineous effusions of certain parts of the brain. It has been taken from the Precis d'Anatomie Pathologique of Andral. The following is a summary of the results of 386 cases of apoplexy.

In 202 cases, the effusion took place into the substance of the hemispheres of the brain, in that part which is on a level with the corpora striata and optic thalami. The portions of the brain next most liable to effusions are the corpora striata; and here we have 61 cases. Next to this are the optic thalami, in which we have 35 cases. In that portion of the hemispheres above the centrum ovale, 27 cases. Lateral lobes of the cerebellum, a proportion of 16 cases. In those portions of the brain anterior to the corpus striatum, 10 cases. In the mesocephalon, 9. Spinal cord, 8. Posterior lobes of the brain, 7. Middle lobe of the cerebellum, 5. Peduncles of the brain, 3. Olivary bodies, peduncles of the cerebellum, and pituitary gland, 1 in each, making 3.—Total 386. Out of these, we find 325 cases occurring in the hemispheres of the brain, corpus striatum, and optic thalamus.

In the number and size of these effusions we find the greatest varieties. In some cases an enormous effusion takes place, and many ounces are extravasated into the substance of the brain; in others, the quantity is trifling, being sometimes as small as a pea, or even less. It has been observed that in cases where numerous extravasations were discovered, they were generally found to be in different states, as if they had occurred at intervals, and not simultaneously. This leads us to the knowledge of one of the most important facts in pathology, that in many cases of apoplexy, after a clot has been formed, nature commences at an early period a process of

cure. The change, which takes place in cases where a patient recovers, seems to be the following:—It becomes at first somewhat gelatinous, it is next observed to be more consistent, and it loses its red colour, and takes on a whitish or yellow appearance. The clot is gradually removed, and along with the absorption of the clot there is a process of isolation going on. A fine membranous cyst, furnished with vessels, is formed round the clot. In some cases the clot is replaced by a quantity of serous or gelatinous fluid; but in the majority of instances this does not occur, and the cyst has been found empty. This is a fact which has been established by numerous observations.

There is the greatest possible difference as to the period at which the absorption of the clot is completed; but we may safely assert, from the number of cases in which, after paralysis, a recovery takes place, that this process is of very common occurrence. In several cases, where apoplexy followed by paralysis has happened several times during the lifetime of the patient, a number of those cysts, corresponding with the number of attacks, and presenting various appearances according to the date of their formation, have been found. It appears then that the cure of apoplexy depends solely on the absorption of the clot; and that, as long as this remains unabsorbed, the patient is in danger. In some cases absorption does not take place at all, the clot becomes organised; and in this way it is supposed that some of the tumours found in the brain are formed. There are several circumstances which favour the absorption of the clot, but nothing so powerfully as a healthy condition of the whole cerebral circulation. This leads us to the consideration of the importance of paying attention to the head long after an attack of apoplexy. It inculcates the necessity of avoiding every thing calculated to add to the existing congestion, and shows that, in the paralytic or after-stage of an apoplectic attack, we should not neglect to deplete the head from time to time. The great point is to keep the head perfectly free from irritation; for it has been found, that, where a cure appeared to be going on, any new irritation applied to the brain has had the effect of arresting the absorption of the clot, and marring the process of cure.

I regret I cannot dwell longer on this subject, as I wish to conclude the pathology of apoplexy to-day. There are, however, two more observations to be made before I close the subject. The source of an apoplectic effusion is very hard to be discovered: it appears generally to come from a number of minute vessels, for we are seldom or never able to trace it to the rupture of a vessel of any size. The age at which persons are most subject to apoplexy appears to be from fifty to seventy. You should, however, be aware that apoplexy with sanguineous effusion is by no means uncommon, even in persons of a tender age. Billard details an instance of this in a child soon after birth. There are also several cases mentioned as occurring in children during the first three or four years. Andral gives the case of a boy of nine years of age, who died of apoplexy, with a vast effusion of blood. One of the most remarkable cases of this kind I ever witnessed, occurred in a child who had been just weaned. This child had been labouring for some time under symptoms resembling incipient hydrocephalus, and then suddenly got an attack of convulsions, followed by coma and paralysis of one side. From a careful study of the symptoms, I ventured to make the diagnosis of apoplectic effusion, and on examining the brain after death there were nearly three ounces of blood found effused in the base of the brain.

I shall resume this subject, gentlemen, at our next meeting.

ON THE RESTORATION OF THE PERINÆUM, IN CASES OF ITS DIVISION OR COMPLETE LACERATION IN THE FEMALE.

Read before the Académie des Sciences, January 6, 1834.

BY BARON ROUX.

Gentlemen,—Rupture of the perinæum is most commonly owing to the effect of a badly managed parturition, which frequently takes place in the first labour, and also from an unmethodical application of the forceps. Other circumstances also occasion its complete or incomplete destruction; such as an accidental wound, though the region occupied by the external organs of generation in the female, and the surrounding parts, are but little exposed to injury from external violence. Gangrenous ulceration, or gangrene properly so called, such as is developed in other parts, can produce likewise this accident. Can it not also proceed from a voluntary, criminal, or maniacal action? I have some recollection, though I cannot exactly remember where, this fact has been recorded, that in one instance this mutilation was the result of an atrocious vengeance exercised by a husband on his wife, whom he knew to be faithless. Even art itself may occasion, in certain cases, a similar affection. In one female, of whom I shall speak more particularly hereafter, a most complete division of the perinæum succeeded to an operation undertaken, ineffectually, to cure a simple fistula.

The congenital division of this part is not comprised in this etiological review. In fact, there is not a single case known, I believe, where the external parts of generation in the female, and the anus, were confounded by a primordial disposition. The perinæum appears to escape this vice of conformation, which so frequently occurs in other points of the

median line, as in the superior lips, velum palati, sternum, linea alba, &c., &c.

In whatever way the laceration of the perinæum is produced (I comprise the recto-vaginal septum in this region), it has not always the same appearance or the same extent. It is a very remarkable circumstance, that sometimes the recto-vaginal partition is alone ruptured, and nature occasionally effects the cure; but, in general, the perinæum remains affected. There sometimes exists an extensive perforation or central laceration, through which the entire infant has been seen to pass; in this case, also, it suffices to allow nature to take her course in the re-union of the divided parts. At other times there occurs a more or less extensive rupture of the anterior portion of the perinæum, the anus and its sphincter retaining their integrity. This case, though it appears less serious than the preceding, is, however, much more so in reality. In fact, the re-union produced by nature is always imperfect, and the inconvenience remains, especially in young females, the vulva remaining very far prolonged posteriorly, and deprived of all contractility. There exists, at other times, a rupture of the entire perinæum —a complete laceration of this part—which may extend through a portion of the recto-vaginal partition. I shall conclude with this case, which is incontestably the most severe of all.

In truth, a re-union produced by the resources of nature alone has never been observed: in every case the edges of the wound cicatrise separately, consequently the perinæum entirely disappears; the vulva and the anus form only one canal, one common slit, a deep sinus presenting margins either smooth or irregularly indurated, and lined by a mucous tissue. If this division extend slightly into the recto-vaginal septum, the inferior part of the rectum and vagina form a true cloaca.

The condition of a female in this state is truly deplorable; it is not that she cannot any longer conceive, and even be delivered more easily than another. A lady, of whom I shall speak hereafter, labouring under a complete laceration of the perinæum, gave birth to a second child a short time before I had recourse to the suture. I knew an English lady who had experienced the same accident at the time of her first accouchement, and who had subsequently become the mother of twelve children. I am sure that a great number of similar cases exist, but perhaps by dint of dexterity, and various means of deception, with which I am unacquainted, females succeed in concealing an infirmity so adapted to inspire disgust.

For the partial loss of their natural charms is not alone concerned in this instance: an inconvenience as frightful as an artificial anus is subjoined. The sphincter of the anus being lacerated nothing can oppose the escape of the intestinal gases through the rectum, and the continual, or at least frequently repeated and almost involuntary exit of fæcal matter. The latter may, however, sojourn for a long time in the rectum, if it possess a certain degree of consistence; but if liquid, the desire to evacuate is excited, it escapes involuntarily, and deluges the vagina and surrounding parts. Hence the patient is compelled to live in a state of solitude unnatural to her age, sex, and accustomed habits. She sinks into a state of profound grief; her health is almost invariably impaired; and her complexion loses its fresh and blooming appearance.

The honour of the first attempt at remedying this infirmity is due to French surgery. Guillemeau, pupil, rival, and contemporary of Ambrose Paré, recorded the first facts relative to the suture of the perinæum. He employed the interrupted suture, and the operation succeeded. Independent of the great confidence which this celebrated surgeon inspires, the circumstances which accompany the relation of this case are calculated to guarantee its authenticity. I cannot say so much for another example of success, attributed to an obscure surgeon, and noticed in the Ephémérides des Curieux de la Nature, a publication which has not always possessed a sufficient reputation for truth.

At a later period Mauriceau, Lamotte, and Smellie appear to have thought it possible to undertake the restoration of the perinæum, and recommend the uninterrupted suture to be adopted for this purpose, but without saying whether they had ever employed it themselves. The operation remained a long time afterwards in oblivion; but, towards the close of the last century, two French surgeons, MM. Noel de Rheims et Saucerotte de Luneville, performed it on two separate patients, and succeeded by employing the twisted suture. These two facts constitute an epoch in science, and during a long time they were alone known, alone quoted, and formed the sole base of the brief considerations to be found in our classic works on the restoration of the perinæum.

The celebrated surgeon, who was my preceptor before I was connected to his family by matrimonial ties, and of whom death has recently deprived the Academy, had never, in the course of his long career, performed the suture of the perinæum, and limits himself, in his excellent work on surgery, to the non-disapproval of the trials which may hereafter be attempted. His cotemporary in age, and his equal in renown, M. Dubois, has performed it in one case, but without success. M. Paul Dubois, his son, has attempted it once also at the Hôpital de la Maternité, and the result was equally unfavourable. Both followed the method of Noel and Saucerotte; after that my numerous cases of success had recalled the attention of the medical public to this subject, mention has been made of a cure, performed by M. Dupuytren, twelve or fifteen years since, to which he attached but little importance.

The Revue Médicale also relates a case of suture of the perinæum, performed at about the same time, with an equally favourable termination, by M. Montain, junior, one of the most expert surgeons at Lyons. I must confess that a part of this operation resembles the method, the first idea of which I thought to have belonged exclusively to myself, since it is only lately that I have become acquainted with this fact. English surgery, so eminent in many respects, has proved completely sterile on this subject. Since the commencement of the present century some German practitioners have attempted the revival of the perinæal suture, and have published elaborate discussions on the period, the most opportune for the performance of this operation. Mursinna, Mentzel, Osiander, and more especially Dieffenbach, of Berlin, have paid particular attention to this subject, some of whom have proposed the uninterrupted and interrupted suture, and others the twisted, but none of these distinguished writers has ever suggested the employment of the quilled suture. According to Dieffenbach, there exists but little chance of success without making two parallel incisions on the sides of the vulva and perinæum; thus preventing the traction and the too forcible extension of the parts to be embraced by the threads, or transfixed by the needles. This method was adopted by the celebrated surgeon of Berlin, but his efforts were only twice crowned with success. Osiander, however, obtained a propitious result, without having recourse to the lateral incisions.

The recent attempt of the German surgeons were known, and the success obtained by them was universally admitted, but not however without credulity; these cases being regarded as exceptions.

It was considered impossible, in France especially, to discover a method applicable to every case, in which the restoration of the perinæum was required, and presenting sufficient probabilities of success, even when performed by the most expert practitioner;—this operation then was abandoned as being, if not too difficult in its execution, at least too uncertain and hazardous in its results. I myself, four years since, even participated in this general prejudice, until the following case was presented to my notice, which changed my ideas, and will signalise, I am convinced, a beneficial progress in surgery, and the first consolidated step towards permanent conquest.

Case I.—A young lady, from Normandy, came to Paris in the month of December, 1831; she was 22 years of age, and married at 19 to a medical man residing at Valognes; impregnation having almost immediately succeeded this epoch, delivery ensued when she had scarcely attained her twentieth year. The parturition having been laborious, recourse was had to the forceps, which produced a complete laceration of the perinæum, which was prolonged nearly half an inch into the recto-vaginal septum. Nature had done nothing towards the reparation of this accident when the patient presented herself to me, two years from the period of her misfortune. I found, on examination, that the laceration followed precisely the median line, its edges were completely cicatrised, but supple, flexible, and unindurated, or without the slightest degree of callus, so that congenital division might have been suspected, the anus and the vulva forming only one and the same aperture, and it was necessary to separate the edges, in order to perceive the limits of the recto-vaginal partition.

All the inconveniences before enumerated existed in the highest degree, and the patient had fallen into the most profound melancholy. In order to render the necessity of going to the water-closet less frequent, or to avoid the involuntary escape of fæcal matter, she had been accustomed to have recourse to the preparations of opium, whose astringent properties she experienced in a most remarkable degree, and which procured at pleasure a more or less protracted constipation.

Notwithstanding this artificial command over the intestinal action, she had judiciously reduced her meals to the quantity absolutely necessary for the support of life; and, from fear of being surprised by a sudden and imperious escape of flatulent or fæcal matter, she lived in comparative seclusion from the world.

Yielding to the earnest intreaties of her husband, I consented to hazard an operation, which was only known to me by the observations of Noël and Saucerotte, with the exception of the more recent attempt of Dieffenbach. I had no hopes of success. Nevertheless, the regular aspect presented by the solution of continuity, the ardent desire which the patient manifested to be emancipated from her pitiable condition, the patience and courage which she felt capable of sustaining, her age, the perfect health she enjoyed in spite of the melancholy; and, although her *embonpoint* was in some measure lessened, every thing seemed to concur in authorising this undertaking.

I ought also to have considered as a favourable circumstance, the facility required of supporting, during a long time, a rigid diet, and of procuring, by means of opium, a greater or less prolonged constipation. Hence, in fact, I had reason to hope the suspension of alvine dejections for the time necessary to the consolidation of the perinæum, and the removal of the greatest obstacle opposed to the success of the operation.

The operation was first performed in the month of January 1832; and, as I did not possess any experience as regards the laceration of the perinæum I thought it advisable to pursue the plan already traced. For this purpose, I constructed several long and strong silver needles, terminated by an immoveable steel point. I commenced by removing from either side an extremely thin portion, which

was nearly quadrilateral, and from an inch and a half to about two inches in length, taking care to encroach slightly on the skin and parietes of the vagina, and sufficiently to prolong the flaps of the anus towards the external labia, so as to render the vulva rather a little too narrow than too wide after the suture was made, and the operation finished; I wished to approximate as extensive surfaces as possible, and thus increase the chances of success.

In the second place, I incised separately the two margins of the small cleft which extended into the recto-vaginal septum, and included them in a common suture. This being done, I proceeded to apply the twisted suture on the external soft parts or perinæum. Four needles which penetrated the whole thickness of this part, even as far as the parietes of the vagina, were successively introduced at about half an inch from each other, and the points of entrance and exit were distant an inch from each margin. The stricture exercised by the threads was moderated; and, although the parts of the perinæum which remained exposed appeared slightly stretched, there was no reason to fear the laceration of the portions embraced by the needles. I therefore dispensed with, and it was really useless to make the lateral incisions so greatly recommended by Dieffenbach. I afterwards applied several pieces of linen to preserve the skin from any painful pressure, after which I sought the means of retaining the thighs in exact approximation, and to prevent their involuntary separation during sleep. The most judicious attentions were bestowed on the patient by her husband, an able medical practitioner; and, at the commencement, every thing went on favourably, not the slightest untoward symptom supervened, the inflammation, as far as could be judged, was developed to a suitable degree, the patient complained only of slight pain in the vicinity of the wound itself; a catheter was introduced every time the necessity of urinating was experienced, and a severe abstinence from aliment sufficed to arrest the alvine evacuations, which were only re-established after the complete union of the parts.

Six days having elapsed since the operation, I determined on extracting the needles, and withdrawing the thread. You might have supposed, that at this epoch reunion was effected; the two parts of the perinæum were retained in immediate contact, but this reunion was only apparent, being maintained by a glutinous substance. Two days afterwards it was broken through, and the parts resumed their primitive aspects.

In spite of this unfortunate result, it was decided to renew the attempt. The condition of the parts was absolutely the same as before the operation, since the paring of the margins having produced so trifling a loss of substance, it ought not to be brought into account. The patient was, however, debilitated from lying in bed, from abstinence, and from the grief occasioned by the want of success; in addition to which, it was in the middle of winter, and hence the necessity of retarding the operation. Lastly, the arrival of the cholera added to this delay, so that the operation could not be performed until the month of May.

I had deliberately reflected on the circumstances which produced a failure in the first instance, and was convinced that I ought to attribute it to the form of suture which I employed. The twisted suture, acting with all its force, exerts its influence only on the superficies, and is unable to produce an exact approximation of the deep seated parts. Thus the wound remaining open towards the vagina, its internal edges were continually moistened with mucosities, which flow in greater abundance from this canal since it participates in the perinæal inflammation. This idea induced me to reflect, if the quilled suture would not be preferable, and I ultimately decided on its employment. I pared the cicatrised parts as in the first operation, and applied four ligatures, causing the curved needles which conducted the thread to act on the one side from without to within, and on the other from within to without. I took care to encroach a little on the parietes of the vagina, sufficient only, however, to make a slight traction on them, so as to enable me to approximate the two wounds throughout their whole extent. The ligatures being introduced, I employed as cylinders two moderately strong pieces of an elastic gum catheter, one of which was placed in the loops which the double threads formed on one side, and on the other between their separate ends, and finished by making with the latter, in the first place, a very strong single knot, and afterwards a bow upon the second cylinder. I did not fear to press the edges of the wound rather firmly together. I must not forget to mention, that, from the manner in which the quilled suture acts, it produces an eversion of the edges of the wound, and thus the adaptation is never so perfect externally as might be desired; but I had previously thought of the means best adapted to prevent this effect, and to bring the skin in contact with itself. I succeeded, by the aid of small ligatures, introduced at different points between the principal sutures, and which served as so many stitches of the common suture, being, however, but slightly drawn together. I had foreseen, calculated, and so well devised every thing before hand, all went on as well as I could desire, and I have performed few operations in surgery which have given me so much satisfaction in their execution. The suture being terminated, the parts were not more stretched than after the first operation, and I therefore dispensed with making the lateral incisions recommended by M. Dieffenbach. The same attentions were bestowed on the patient as after the first operation. I did nothing to provoke evacuations, hoping to be aided by the habitual

constipation, which, in fact, persisted until the twenty-second day.

At the commencement of the seventh day I removed the cylinders, and withdrew the ligatures; at this epoch the perinæum presented an appearance of reunion, differing altogether from simple agglutination; its two sides were already united, and would have required a certain effort to separate them. The cicatrix insensibly acquired force and solidity, and in a short time the consolidation of the perinæum was perfect. The first evacuation took place on the twenty-second day, at which time the anus was rather too narrow than too wide, and the expulsion of the fæcal matter, which formed a rather considerable mass, and of great consistence, was not accomplished without difficulty, and it was even necessary to assist nature by pressure exercised from above downwards by means of the finger introduced into the vagina. But the union was at this epoch so intimate and solid, that a dejection still more laborious would not have caused its rupture.

The perinæum thus reunited did not differ in any respect from a perinæum in its natural state, especially in a female whose sexual organs have not as yet been exercised. It was two inches in length, and divided by a lineal raphe in two symmetrical halves; on examining it either by the vagina or anus, it felt thick, solid, and even vigorously constituted. This state of the parts was attested in my presence by the celebrated accoucheur M. Deneux. This lady left Paris towards the latter end of June. There still existed at this time in the recto-vaginal septum, immediately above the perinæum, a very small opening, communicating with the rectum and vagina, which allowed only the occasional escape of gas, the passage of fæcal matter being altogether impossible; since this, however, it has become completely closed.

From this time I permitted the female and her husband to resume their conjugal habits, and at first some difficulty presented itself, arising from the narrowness of the vulva. I would rather have wished that this young person had not again exposed herself to pregnancy, at least so soon after the operation. I was even inclined to desire on her account, that she would never return to this condition; this, however, was not the case, she conceived at the termination of the same year, and has now been confined three months. The accouchement was favourable, and terminated naturally, after a few hours' suffering, and although the perinæum was exposed during a considerable time to the effects of an active parturition, it did not experience any laceration, either complete or incomplete, not even the slightest traction.

It is easy to conceive the advantages afforded by the quilled suture over all others, especially when twisted. As it is with curved needles that the thread is introduced, you can cut more deeply, and embrace with the ligatures (which ought to be very strong) more of the parts than with the straight needles; the threads, although stretched from the tension to which they are submitted, do not assume a degree of tension, or especially a rigidity similar to those applied by the straight ones. Hence the prompt division of the parts, with which they are in immediate contact, is less to be feared, and moreover the cylinders exercise on the whole length of the margin of the wound an equal and uniform compression. The result is a more perfect adaptation, which acts as much and even more on the deep-seated than on the superficial parts, so that all passage of fluids between the approximated surfaces is rendered impossible. In addition there neither exists torsion nor constriction of the edges of the wound, and these are only attracted through the medium of distant parts, pressed one against the other, and altogether free externally, there is less susceptibility of being cut or lacerated by the sutures, which it may be necessary to leave for a time, more or less long. Such were the reasons that induced me to employ this suture, and the event has fully confirmed my choice.

A fact so complete, and so decisive as much in favour of the suture of the perinæum, as of the method I followed, was naturally attended with publicity. In fact, four cases of chronic laceration of this part have presented themselves to my notice this year, and on which I operated after the same manner, three of these were cured. I should abuse the attention, which the Society of the Academy so readily grants me, were I to give to their history the extent that my first observation required, it will suffice to indicate the circumstances peculiar to each.

Case II.—The subject of the first was a young girl, 21 years of age, who became a mother at 19; her delivery was effected by the sole efforts of nature, but produced a complete rupture of the perinæum; she was named Josephine Erard, and was discharged from the venereal hospital, where she had undergone an anti-syphilitic treatment, when I received her into my ward at the Hôpital de la Charité at the commencement of March, 1833. Before the operation it was only necessary, for the space of a few days, to put her on moderate diet, to retard, as much as possible, the necessity of alvine evacuations. The operation was publicly performed before numerous students and practitioners. The method was exactly the same as that employed in the case of the young lady residing at Valognes; but I did not rely on the beneficial influence of a constipation, prolonged until the entire consolidation of the parts. On the evening previous to the removal of the ligatures, which was the sixth after the operation, I solicited liquid evacuations by the administration of a laxative. The same precaution was frequently renewed at appropriate intervals. Three weeks sufficed to produce the perfect restoration of the vulva

and anus to their natural condition. A small aperture, occupying the most deep-seated part of the recto-vaginal partition, and which allowed a partial passage to the intestinal gases from the rectum into the vagina, persisted a few days, but it was reduced to the smallest dimensions when the patient quitted the hospital about the termination of the month of May.

I have since learnt that this girl promptly yielded to her *penchant* for the life of a concubine, to the risk of becoming pregnant. In truth, I fear less on her account the hazard and perils of a renewed accouchement, since I have been encouraged by the safe delivery of my patient at Valognes. As to the precautions which I have taken in all my other operations, of diluting the excrement by the means of laxatives, I lay it down as an important rule of practice for the assurance of success.

Case III.—In October last I received into the Hôpital de la Charité Madame Claye from the environs of Compiègne, aged 29, who was sent to me by M. Donné. This female from the age of 18 had been delivered four times safely, and at the usual period, and it was not until her fifth accouchement (which is rather remarkable) that the application of the forceps was required, and a rupture of the perinæum occurred, which was as complete as any of those which I have as yet observed, and likewise included a small portion of the recto-vaginal partition. M. Jacobson of Copenhagen was then in Paris, and I was able to render him witness of the operation, and before his departure this celebrated surgeon had thus an opportunity of appreciating this newly-invented method. It was difficult to see a more perfect restoration of the anus, vulva, and perinæum to their natural condition, than that which occurred in this female, who was visited by a number of Parisian practitioners, and especially accoucheurs.

Case IV.—My last case of success was in that of a lady, whose name and rank in society I am obliged to conceal, who, until the moment that I saw her, had carefully concealed her horrible infirmity. M. Maygrier, having delivered her only three months before the operation, was alone confided with the nature of the accident, which had already been of two years' date. I performed the operation the last month, with the assistance of two of my dressers and M. Maygrier; although this lady had arrived to her thirty-fifth year, the success was as complete as in the preceding cases. An event might have deceived our hopes, for a short time after the operation, this lady lost her last born infant, which caused her excessive grief. But the stitches had been already removed, the parts had contracted a certain degree of union, and in spite of the disturbances supervened in the whole economy, the ulterior consolidation of the parts was not retarded.

The only reverse, which I have experienced in performing this suture, is of recent date, in an operation of this description performed at the latter part of last December, since in this case the woman died.

Case V.—The female was forty years of age, the destruction of the perinæum was of eighteen months' standing, and not the result of a laborious accouchement, but of an operation performed in order to cure a fistula in ano, communicating, without doubt, with the rectum at the inferior part of the vagina. In addition to the general and unfortunate results of the division of the entire perinæum, there was a complete prolapsus of the rectum. On standing, however short a time, and especially if in this position she coughed, sneezed, or laughed, the intestine protruded through the enormous cleft in this part, and formed externally a tumour as voluminous as the fist, which was with difficulty reduced, and reappeared almost instantaneously. Lastly, when this female entered my ward, which was about the middle of the month of November, she suffered greatly from simple continued fever, accompanied with violent diarrhœa, and she complained of an uneasiness of the abdomen; all these symptoms denoted latent inflammation of the intestinal tube, evidently owing to the frequent exposure to the air of an extensive portion of the mucous membrane of the rectum.

I was obliged, in the first place, to consider the most suitable means of removing this complication, although the operation appeared, and was in fact, more indispensable in this than in any of the other cases. During three or four weeks the patient was submitted to repose, to an appropriate diet, and to every thing which could moderate the irritation of the intestines and the profuse evacuations; at length, her position being wonderfully ameliorated, I yielded to her entreaties, and performed the operation; but, from the third day, a considerable diarrhœa came on, and fever supervened. The abdomen now became painful to the touch, and the patient lost her strength and energy. As regards the wound, the parts included between the sutures did not experience that tumefaction, that inflammatory swelling, that brisk, healthy, and legitimate determination, which prepare the immediate adhesion: they were, on the contrary, sensibly diminished. The ligatures themselves were ulcerated, and those which communicated with the interior of the rectum allowed the escape of a small quantity of liquid fæcal matter. At the commencement of the seventh day I removed the cylinders, and withdrew the threads. There appeared to exist an incipient union; the edges of the wound were slightly glued together, but the next morning their disunion was complete, and two days afterwards the patient expired.

In this case, the operation presented this particularity, that, on account of the enlarge-

ment, which the repeated prolapsus of the rectum had caused the parts to experience, I was obliged to make four stitches, whilst three had sufficed in the preceding operations, and ought to suffice in the majority of cases. These points of suture ought to act, and have acted as much, or even more, on the intestines than on the vagina, a circumstance which might have occurred in the prompt return and rapid progress of these symptoms which caused the death of the patient. Perhaps, also, I did not retard the operation a sufficient length of time; influenced no doubt by the hope and desire to witness promptly another success added to those which I had already obtained. It was, moreover, the most disadvantageous case which could be encountered; and although success was not altogether improbable, it would have been more remarkable than in the preceding; a diseased state, very unpropitious in itself, complicated the deformity, and it was the rapid progress of this complication which caused the death of the patient much more than the operation itself.

It has been seen, that in all these cases a complete division of the perinæum had taken place, the borders of which were for a long time cicatrised; and it is probable that it will be always necessary to restore this part under these circumstances, rather than in recent lacerations, as these are not always detected in the first instance, and the others are frequently susceptible of a spontaneous cure. It is certain that those cases where nature should be deemed important, when the solution of continuity is recent, are not adapted to the operation. This is at least true in the majority of instances, and particularly in those where a complete laceration is the result of laborious parturition. In fact, the recently ruptured parts have experienced the greatest violence; they have been submitted to an extraordinary distension, and are about to be seized in a short time with considerable tumefaction. The slightest cause is sufficient to produce the most violent inflammation, which may assume a very unfavourable character; they will also shortly afterwards be deluged with the lochia, and it would be doubtless more difficult to return the edges of the wound in exact apposition, and prevent them from being moistened by the fluids, which must necessarily flow in abundance from the vagina; doubtless every case is not favourable to the success of the perinæal suture, and moreover is the treatment, which ought to follow the operation, compatible with that which the nature of the diseases succeeding an accouchement may require? besides, would it be prudent to submit, to a protracted and painful operation, a female lately delivered, a being become momentarily so nervous, so susceptible of impressions, in whom the slightest emotions might cause the most untoward consequences, and to whom it would be necessary to explain a misfortune, of the nature of which she is entirely ignorant, without being able to promise the efficacy of the means employed in its remedium?—Assuredly not; it is better to procrastinate and postpone the attempts of cure to a time when the health of the female is re-established, the edges of the wound covered by a cicatrix, and the surrounding parts restored to their natural condition.

Were it only to prepare the materials for a more perfect account of the restoration of the perinæum, an operation which will become, I make not the slightest doubt, familiar to surgery, I would not forget to mention certain circumstances, which occurred in all those cases where I have performed it. Inflammation supervened in the parts themselves, only to a degree strictly necessary to produce their re-union; it never assumed a serious character, and no untoward symptom of any description ever declared itself. Nevertheless it is right to bear in mind that the vagina is always attacked with a purulent discharge in comparative abundance. I moderated its effects, and prevented the stagnation of the mucosities, by frequently repeated injections of emollients. It is a circumstance rather remarkable, that in every case either by the exact approximation of the thighs, or, what is more likely, on account of the discharge being distended over the whole of the vulva, and from the swelling of the parts surrounding the meatus urinarius, or of this aperture itself, there existed during many days an impossibility to urinate, and it was necessary to have recourse to catheterism.

Perhaps it would be right to adopt, as a general rule of practice, to place a catheter permanently in the bladder, or to introduce it at suitable intervals during the first few days, even when retention of urine does not exist, in order to prevent the flow of this fluid on the inflamed parts.

In every case, also, after the removal of the sutures, and a short time before the consolidation ought to have been accomplished, the edges of the division were disunited, or rather separated, in the vicinity of the anus, at which point the wound was slightly gaping, and there existed a small slit, similar to that which might have resulted from the operation of fistula in ano. But this little cleft constantly disappeared, and the anus, into which I took care to place a small mesh besmeared with cerate, resumed promptly its natural disposition.

Lastly, in spite of the care which I constantly took to pare the little margins of the spur-like process of the recto-vaginal septum, which I traversed with a ligature in order to effect its approximation of the parts belonging to the perinæum, properly so called, it required a sufficiently long time to obstruct all communication between the rectum and vagina.

Intestinal gases and fæcal matter (only, in fact, when liquid) always escaped through the vagina; and this took place even when the perinæum was firmly consolidated; but

the aperture in the septum insensibly contracted, and terminated either by total abolition, or by becoming so narrow, that it allowed occasional passage only to a small quantity of gas.

These, gentlemen, were the important facts which I had to communicate to the Academy. Four times in less than eighteen months, and in three instances during the year which has just elapsed, I succeeded by this method in re-establishing the lacerated perinæum, thus rendering to four females the attributes of their sex. It was a simple, but, perhaps, I may be permitted to say, a happy idea which conducted me to its adoption. I am free to confess, that I have invented, that I have conceived—nothing: I have only applied a method already known, having submitted it, however, to some modifications, which the situation of the parts required. I make no doubt but that, in a short time, the same thing will occur in the suture of the perinæum as in the staphyloraphia, an operation which did not exist in surgery fifteen years since, which I imagined and performed for the first time in 1819, which has since been adopted by every surgeon, and which, a few weeks ago, I again performed for the sixty-fifth time.

Foreign Medicine.

SOCIETE ANATOMIQUE.

Ramollissement of the Bones in a Subject attacked with Syphilis.

Case I.—A woman, treated for paraplegia, died with a gangrenous eschar on the sacrum. On the post mortem examination the neck of each femur was found completely destroyed, (the head of the bones resting on the great trochanters;) all the bones were softened, and on the least effort became fractured, on the evening of her death, fracture of the thigh-bone occurred; the whole of them were as cartilage, and easily divided by the scalpel. The osseous tissue, as well as the medullary membrane, were extremely vascular; the marrow of the bones was soft, pulpy, and reddish; some syphilitic vegetations existed in the vagina. There was not the least trace of cancerous deposition; the body was not emaciated.

Case II.—*Varicose Aneurism—Amputation.*—A patient, who was bled, became affected with varicose aneurism at the bend of the arm. A ligature was applied above the tumour, which disappeared, but still there remained aneurismal varicoses of the fore-arm. A year afterwards M. Roux thought it necessary to perform a second operation, but the ligature, which he had desired to place below the point of communication with the artery and vein, was applied above, and compressed the median nerve. In consequence of a consecutive hæmorrhage, from a third attempt at an operation, amputation became necessary. The amputated portion showed a communication established between the brachial artery, near its termination, and the deep veins of the fore arm. As to the median basilic, the vein that was opened, no trace of it on the divided limb could be detected. This is an interesting case, as it is rare that a varicose aneurism requires amputation, and demonstrates that in all cases the method adopted by Hunter should not be employed.

Case III.—*Abscess of the Uterus.*—The woman affected by this disease had not during life any symptom to point out its existence. After death there was discovered an obliteration of the neck of the uterus, and the dilated cavity of this organ contained a pint of pus.

Case IV.—*Contusion of the Brain.*—In consequence of a fall a man, 50 years of age, was brought to the Hôtel Dieu in a state of commotion. In 24 hours the comatose symptoms, owing to the cerebral commotion, were partly dissipated; but, after remaining in a satisfactory condition for two days, comatose symptoms again supervened, with great prostration: an icteric disease ensued, accompanied by a frequent pulse, &c., resulting this time from compression of the brain. This condition might be attributed in part to the inflammatory condition of the contused part of the brain, and to an effusion of blood from fracture of the base of the skull, not recognised during life; the attention of the surgeon being detracted by several inflammatory symptoms of the elbow, arising from a deep lacerated wound. The following are the lesions found after death, which took place 20 days after the accident:—fracture of the occipital, parietal, and petrous portion of the temporal bones, effusion of blood under the dura mater, and in the cavity of the arachnoid; traces of contusion of the posterior right lobe of the brain, and at the anterior extremities of each hemisphere, in many parts of the cortical substance, and of the pia mater; the vessels

were much injected; slight metastatic abscesses were found in the lungs; the other viscera were healthy.

A new Method for the Extraction of large Calculi from the Bladder by the Perinæum. Memoire read at the Medico-Chirurgical Academy of Naples,

BY M. MARIANO PANTALEO, OF NICOSIE IN SICILY.

The author, in the first place, establishes as a fact, that the lateral operation, by incising the neck of the bladder, is the one most generally adopted by all practitioners, and the advantages, resulting from it, are much superior to those of the other forms of the operation. The only objection, he says, that can be made to it, is the difficulty or impossibility of extracting large calculi; and the danger resulting from the attempts made for their extraction he has endeavoured to lessen. He performs it by a double incision of the prostate, but makes the direction of the incision, in a sense, different to that which has been proposed by M. Dupuytren and M. Senn,—thus the left half of this incision, taking the direction of the ischium, as in the simple lateral operation, the right half passing obliquely upwards and to the right, so that the incision of the prostate forms a simple diameter, oblique from right to left, and from above to below.

According to M. Pantaleo, the superior part of the prostate opposes a strong resistance to the dilatation of the neck of the bladder, when the inferior incision is alone made, and consequently he believes it rational to destroy this obstacle. It is this, he believes, that caused M. Martineau to be so successful in his operations, and to lose only two subjects out of eighty-four. To wait the difficulties before making this second incision would only be rendering the operation more difficult and dangerous; finally, even if the calculus be small, the advantages obtained from the double incision are greater, without adding any inconvenience to the operation.

All the followers of the bilateral operation have already reasoned on this subject; but the following are the objections, made to the ordinary proceedings, by M. Pantaleo. The incision recommended by Dupuytren, particularly in adults and old people, exposes the bulb of the urethra to great danger; or, if in order to avoid it, the incision is carried nearer the anus, there is great risk in perforating the rectum. By the incision of Beclard, the bulb may be more easily escaped, but the danger is still greater of wounding the rectum, and, by making the internal incisions parallel with the external, exposes both sides to urinal infiltrations. Lastly, the two incisions, recommended by Dupuytren, unite at an angle, and leave untouched the superior middle of the prostate gland, which is a great obstacle in dilatation. Although many of the objections made by the author might be replied to, certainly his method destroys a great number of inconveniences, and renders the operation, in cases of large calculi, less dangerous.

The instrument made use of by the author is a double lithotome, the blades of which expand in opposite directions to a certain extent, as in the ordinary instrument. The external incision made in the perinæum is of the common extent, and in the oblique direction, as in the ordinary lateral operation; the membranous portion of the urethra is incised to the extent of three or four lines; the lithotome is then directed into the bladder, along the groove in the catheter, the size of the stone is ascertained, and, according to its volume, the blades of the lithotome are separated. The lithotome introduced in the direction of the external incision, its handle is depressed, and the instrument is withdrawn, with proper precaution, with the blades open. From this manœuvre, there results an incision on the left inferiorly, and another on the right superiorly; and if the first incision has the depth of six lines, the second will have neatly divided the superior part of the prostate. The superior wound has a great tendency to unite by the first intention, in consequence of the declivity and size of the inferior, offering a greater facility than the former to the discharge of urine. The wound, thus formed in the prostate, is of the most regular form, parallel to that of the integuments, needing only simple dilatation for the extraction of the stone.—*Osservatore Medico.*

Curious Case of Apparent Death, which lasted Twenty Days.

Hufeland, who has written so much on the danger of hastened inhumations, and on the uncertainty of the signs of death, has just

published a very curious fact, which we extract from the Journ. des Pract. Heilkunde.

In the hospital of Paderborn, a young man laid apparently dead for twenty days, before any preparations were made to bury him, in consequence of the non-evident signs of death; he had been recently cured of tertian ague, and came into the hospital for phthisis pulmonalis. The day of his last expiration, he suddenly opened his eyes, and for a few minutes pulsation at the wrist could be felt, but the beats were irregular and very feeble. The eschars, which were made, if possible, to restore animation, suppurated till the fourth day; on the fifth there was movement of the right hand, which became closed; from the sixth to the ninth there was a vesicular eruption on the region of the back. The limbs remained flexed; on the eighteenth day there was still redness of the lips; for nine days the skin appeared folded on the forehead, and the countenance presented a non-cadaverous aspect. The body, which was kept for nine days in a warm room, became not the least putrid or shrivelled; on the twentieth, signs of putrefaction commenced, after which period it was buried.

THE PREPARATIONS OF COLCHICUM.

The bulbs, and sometimes the seeds, of colchicum (colchicum autumnale) form the basis of various medicinal compositions, which are sufficiently efficacious to call forth the attention of all persons who employ them. It is well known that these bulbs, when mixed with alcohol (two parts of fresh bulbs and four parts of alcohol), form *l'eau médicinale d' Husson*, so extolled for many years. Unfortunately the various forms for preparing the preparations of colchicum, both in the old and new Pharmacopœias, and various other works, agree so little, that it renders the use of these compounds both uncertain and very variable; besides, the bulbs of colchicum are very liable to differ in their properties, owing to the season in which they are gathered*. It is difficult to say which is the most favourable season for gathering the bulbs; common report states it should be about the month of August, when the bulb is in its full luxuriance. According to the last publications of MM. Geiger and Lesse, who trace the principles of colchicum to a substance liable to crystallise, and rather different from veratine, which they called *colchicine*, one would be, at least in this case, tempted to substitute the preparations of colchicum for fixed quantities of this organic substance (when its medical properties are well e tablished), mixed or not with some gummy or other substance, capable of imitating those which are found in the plant. We certainly adopt, in most cases, the judicious opinions of M. Polydore Boullay, on the danger of changing pharmaceutical formularies, and these opinions are stated in too liberal a spirit not to be universally appreciated; we, however, think that the use of certain active principles, separated from vegetable active substances, offers, on the other hand, very great advantages, for they generally contain the most essential properties of the substances from which they have been extracted, and it is very easy to modify or attenuate their effects by mixed ingredients. We shall at least be sure of acting upon precise quantities and identical compounds, which seldom takes place, not only with colchicum, but with a great many other roots, barks, seeds, &c., the composition or proportions of which may vary according to the time of gathering, the year, and the adulterations of the trade, which are not always easily detected. Finally, the manner of administering this medicine is still favourable in these cases, by the facility of concentrating in a very small volume the active principles which form the basis of a pharmaceutical preparation.—*Journal de Pharmacie, June*, 1834.

* This doubtless applies to other bulbs equally in use.

DISEASES OF BOKHARA.

Extracted from "Travels into Bokhara," &c.

BY LIEUT. ALEX. BURNES, F.R.S.

Vol. II. p. 180. Murray, London, 1834.

"Among the diseases of Bokhara the most distressing is the guinea-worm or *dracunculus*, here called 'rishtu:' it is confined to the city. The inhabitants believe that the disease arises from drinking the water of the cisterns in summer when they become fetid and infested with animalculæ. Travellers suffer as much as the inhabitants; but the disease does not

show itself till the year following that on which they have drunk the water. Many of the Afghans are attacked after returning from Cabool; and, whatever be the cause, it assuredly originates from something peculiar to Bokhara, since all other parts of the country are free from it. It is supposed that one-fourth of the whole population of Bokhara are annually attacked with guinea-worm. This prevalence of the complaint has given the natives a dexterity of extracting them, quite unknown in other countries. So soon as it is discovered that one has formed, and before any swelling has taken place, they pass a needle under the middle of the worm, and, rubbing the part, draw it out at once. They are generally successful; but if the worm breaks the wound festers, the pain is excessive, and few recover under three months. If the animal be coiled in one place the extraction is simple; if deep in the flesh, more difficult. If the swelling has commenced, they do not attempt the operation, but allow it to take its course, and endeavour to draw it out by degrees, as in India. These worms vary in length from three to four spans. It is said that guinea-worm is most common among people of a cold temperament, but it does not attack any particular class. The better orders of people, attributing it to the water, send to the river for their supply, and never drink that of the cisterns till it is boiled. It is not to be supposed that I can give any solution of the cause of this disease; the doctors of Toorkistan believe it to be a worm generated from the causes above-mentioned, nor can I credit its arising from the animalculæ of the water.

"Another disease of the country is the 'mukkom' or 'kolee,' a kind of leprosy. Those afflicted with it are considered unclean: it does not cover the body with spots as in common leprosy; but the skin becomes dry and shrivelled; the hair of the body falls off, the nails and teeth tumble out, and the whole body assumes a horrible and unseemly appearance. The disease is believed to be hereditary, and to originate from food. It is fearfully prevalent in the districts of Samarcand and Meeankal; also in the neighbouring states of Shuhrsubz and Hissar, all of which are rice country. Some state it to be caused by the use of the intoxicating spirit called 'boozu,' which is distilled from black barley; but that liquor and mares' milk are not used in Bokhara. The disease affects the general health, and is incurable. The most humane people will tell you it is a curse from God, and drive the unfortunate sufferer from them. A separate quarter of the city is assigned for those who are afflicted, as was the case among the Jews.

"That scourge the cholera morbus has been felt in all these countries. It appears to have taken the route of the caravans, and advanced from India step by step into Eastern Europe. It raged for a year in Cabool; it then crossed Hindoo Koosh, on the following season, and desolated Balkh and Koondooz. For a year it fluctuated between the valley of the Oxus and Herat; it then attacked Bokhara, Kokan, and the other Usbek states; and, after devastating the country, passed on to Khiva, Orenburg, and Astrakhan. The faculty have discovered no remedy for the cholera morbus.

"The inhabitants of Toorkistan are subject to a constant dryness of the skin; many of them lose their eyelashes and eyebrows, and their skin becomes wrinkled and tawny. Whether the diet or dryness of the climate causes these appearances I know not. The Usbeks seldom eat horse-flesh, though it is believed that they live upon it. It is considered heating food, and is besides expensive. Mutton is preferred, and none but the lower orders eat beef. A sheep is killed, and the entire tail, however large and fat, is melted up with the meat and cooked in a single boiler. They are fond of every thing oily, and also use much cheese and sour milk. Ophthalmia is a very common complaint in Toorkistan: fevers are rare: in Balkh, rheumatism is prevalent. In the city of Bokhara rickets are common, and the children have generally a puny and unhealthy appearance, which is not observable in the grown up people of the country. Among their medicines I heard of an oil extracted from the dung of sheep, which is considered a specific for the sprains, bruises, and hurts of cattle, it is very pungent, and the flies shun the parts rubbed with it. I have been assured of the bone spavins of a horse being reduced by an application of this oil. They procure it by a distilling process."

A CASE OF UNUNITED PARTURIENT LACERATION OF THE RECTO-VAGINAL SEPTUM, SUCCESSFULLY TREATED WITH METALLIC LIGATURES.

BY JOHN P. METTAUER, M.D., OF PRINCE EDWARD COUNTY, VIRGINIA.

THE lady, whose case forms the subject of the following communication, was about thirty years of age when the accident occurred. Her health and constitution, as far as I could learn, had been good down to the time of her confinement, which took place some time during the month of October, 1831. The pregnancy, which resulted in the laceration, was her first, and from its history must have been more fortunate than usually follows late conceptions. Her labour was protracted and very tedious, having continued more than three days, but was marked by no other important event save the accident. Six months after the laceration took place I was consulted, and my opinion and advice requested. The history furnished at this time induced me to regard it as a case of ununited laceration; and I feared that the surfaces had healed, so far, at least, as to require denudations by art, before a reunion was likely to take place between them. An opinion to this effect was expressed to the husband of the lady, an intelligent and highly respectable gentleman of a neighbouring county; I also informed him, that it was more than probable ligatures would be required before a complete cure could be effected. Some five or six weeks after this interview, the lady was conveyed to my neighbourhood, and placed under my immediate management, having resolved to waive all considerations of delicacy, a sacrifice indeed, if she could only obtain partial relief from her most loathsome and health-destroying infirmity.

In assuming the weighty responsibility of such a case, I am free to own, that I felt much embarrassment, the more so, as I was called upon to act in a matter of great delicacy, to say nothing of its intrinsic difficulties, without having had time to avail myself of the advice of some of my experienced brethren, or to think much upon the subject. The anxiety and determined purpose of my patient did not permit me long to doubt and fear, and, without further delay, I was summoned to examine into the nature of the infirmity.

The examination disclosed a complete disunion of the recto-vaginal wall, from the verge of the anus three inches up the rectum, and, as was feared, the divided surfaces had healed in every part of them. The cleft terminated superiorly in an angle somewhat obtuse, and the rectum had contracted upon itself, so as to render its several teguments a mere band of the width of five-eighths of an inch. On each margin of this band a whitish line was to be perceived, commencing in the angle above, and continuing down to the verge. These were doubtless cicatrices, and pointed out the margin of the divided rectum. The retaining faculty of the sphincter was completely destroyed, and the unfortunate lady from that cause had been compelled to submit to constant confinement, in a recumbent posture, to prevent the loathsome accident of involuntary dejections. Long-continued irritation of the wound had induced, in the gastro-intestinal organs, a morbid susceptibility, which subjected the lady to frequent attacks of colic and diarrhœa from the slightest errors in diet. To remedy so afflictive an infirmity, it was necessary, not only to repair the breach of the rectum, but also to restore the tubular form of the rectum, and contractile power of its sphincter muscle. These ends were accomplished in the following manner:—The patient was placed very nearly as in the position for lithotomy, with the knees held apart, and exposed to the direct light of a window: the cleft was readily brought into view, by separating the vulvæ and anterior parietes of the vagina. Denudations, three-fourths of an inch in width, extending from the angle down to the verge on each side, were now effected along the cicatrical lines, and a little exterior to them, by the aid of hooks, scissors curved on their flat sides, and scalpels, using them according to circumstances. As soon as the wounded surfaces ceased to bleed, they were approximated, and for this purpose leaden ligatures were employed. These were introduced from within, and in succession, from the angle down to the verge, at the distance of one-fourth of an inch apart; care was taken to give them good hold: they were made to include at the same

time a belt of undenuded substance on each side. Needles very much curved were employed, with a noose of twisted and waxed silk in the eye of each, upon which to hang the loops of the metallic ligature previously formed. Dr. Physick's forceps were used for the introduction of the needles, which was found a very handy and convenient instrument. As the ligatures were applied they were tightened, so as to bring the abraded surfaces in contact, and then their ends were twisted together and cut off of convenient length. About twelve ligatures were required to close the breach. From time to time the ligatures were tightened by twisting them, and the vaginal margins of the laceration cauterised with nit. argent. to favour the formation of granulations, which it was judged would greatly strengthen the union in this part. The patient was confined to the recumbent posture in bed, with the knees tied together, to prevent, as far as possible, any disturbance of the wound. A diet of liquids was directed, as least likely to distend the lower bowels, or to elicit alvine evacuations. For four days the bowels reposed; and, as a proof that the ligatures held the surfaces securely and perfectly in contact, the evacuation which now took place did not derange the parts, or inflict much pain; and it was now, for the first time since the accident occurred, that the propensity to deject could be resisted. In six weeks the ligatures were cut away, the parts having united perfectly. Leaden ligatures were preferred in the management of the foregoing case, as experience had proved them not only less irritating and liable to cut out when tightly drawn than any other material with which I am acquainted, but infinitely more convenient and effective in maintaining a uniform and perfect apposition by the ready facility of simply twisting them, and as a proof that the leaden ligature may act forcibly for a long time without cutting out, when they were removed in the present instance, it could not be perceived that any material encroachment had been made upon the margins of the cleft. The lady is now perfectly restored, thirteen months since the operation was performed, as the following extract from the husband's letter to me will evince:— * * * "and can now with pleasure and most grateful acknowledgments to your skill and management have it to say that she feels no inconvenience from the injury sustained at the time she had her child; and she further says that if her condition was similar to the one she was placed in before you operated, she would freely and willingly submit to it again, if she could only believe the same degree of benefit and relief was to be the result."—*American Journal of the Medical Sciences.*

DESCRIPTION OF THE CALCULO-FRACTOR FOR PULVERISING THE CALCULUS IN THE BLADDER.

BY FRANCIS L'ESTRANGE, A.M., M.R.C.S.I.,
Dawson-street.

From the earliest ages it appears to have been a desideratum in surgery to discover some means whereby the dangerous operation of lithotomy might be rendered unnecessary; thus we find various preparations at different times tried and extolled for their supposed solvent powers. It does not seem, however, that the grand object in view was destined to be attained until modern invention should contrive the expedient of breaking up the calculus in the bladder, and having the detritus subsequently washed out through the urethra. It would be quite superfluous to draw a comparison here between lithotrity and lithotomy, that has already been ably done by the different gentlemen who have written on the former operation *. Still it must be admitted, that however good the principle, yet in practice this operation has been found to labour under many defects. For example, with Baron Heurteloup's "Percuteur," which, taken altogether, appears to be the most perfect of the instruments as yet used for this purpose, there is almost a certainty of the instrument, or stone held by it, or both, being driven by the hammering against the sides of the bladder, and thus causing incalculable mischief. So great a defect has this been found, that to obviate it a bed has been constructed, and the patient being fixed thereon, the percuteur is introduced and fastened to an iron bar placed in front for that purpose; the staff is thus certainly rendered almost immoveable, but as the

* Vide Lithotrity, Lancet, 1829, 30, 31; Lithotrity and Lithotomy compared. T. King, M.D., 1832.

patient cannot be equally well secured, and as the slightest motion on his part might cause as great or even greater mischief, the object seems to be as far as ever from being accomplished. Nothing is here advanced against the inconvenient unwieldiness and great expense of such a complicated system of instruments, beds, &c. Again, the detritus of the calculus, by lodging between the curved blades of the instrument, prevents their closing, and thus increases, in some instances, considerably, its diameter; this, in all cases, must cause extreme pain on the withdrawal of the instrument, and has in particular instances produced laceration of the parts and hæmorrhage. To do away with these and other objections, the instrument, of which sketches and a description accompany these remarks, has been invented. Its advantages are *extreme simplicity;* it being acted on by a screw of such power as to pulverise any calculus found within the bladder, thus doing away with the dangers of percussion; a stilette, which passes in a groove between its blades, by which the detritus lodged there can be at once removed; a claw fastened on a pivot to the screw, so as to allow of its being fixed at will to the upper blade of the instrument, which can then, by turning the screw backwards, be separated *without the slightest shock* from the inferior one, should these have become agglutinated by the broken down calculus and its animal mucus. Finally, should any case occur, or any individual still prefer the operation with the hammer, by removing the vice this can be performed as heretofore, the operator enjoying the additional advantage of the stilette. There are many other desirable qualities that might be enumerated as possessed by this instrument; but it is not intended to trespass at present any further on the reader's time; suffice it to say, in conclusion, that there are but two cases requiring the operation of lithotomy to which it is not applicable, namely, a calculus contained in a pouch, or a bullet in the bladder.

Explanation of the Plate.*

Fig. 1. Represents the instrument as in the act of being closed by the power of the vice, the point of the screw playing in a socket at the extremity of the handle, which causes direct pressure downwards, without producing any rotation whatsoever at that portion of the instrument in the bladder, and thereby preventing any injury being done to the mucous membrane of that organ.

Fig. 2. The vice, having a screw, with a double thread. The weight of this portion of the instrument is an advantage to the operator, by enabling him the better to keep steady the instrument, while this part is grasped in his left hand, which is to be supported on his left knee, the foot being placed on a low stool in the position for operating.

Fig. 3. The claws of the instrument open their wedge-like teeth well adapted for splitting, also the detritus rod scraping the bottom groove, so as to remove all particles of the broken stone that always remain preventing the claw from being closed, and thereby causing great laceration of the urethra and hæmorrhage.

Fig. 4. The box of the instrument, the handle of the upper claw in which the socket to play in is placed, also the canal for the detritus rod.—*Dublin Journal of Medical and Chemical Science.*

* The Medal of the Royal Dublin Society was awarded for the instrument. The operation with the Calculo Fractor was performed this day (June 4th), with complete success, by the Surgeon-General, (there were present also Surgeons Adams, Hargrave, and Smyly,) the peculiar advantages of this instrument having been exemplified in a remarkable manner.

ROYAL COLLEGE OF SURGEONS IN LONDON.

[*Circular.*]

Royal College of Surgeons in London, July 2nd, 1834.

Gentlemen,—In consequence of occasional irregularities that have taken place in the certificates, transmitted to the Court of Examiners of this College, I am directed by the Council to acquaint you, that it is their anxious wish to have some plan devised and adopted by the lecturers at the various medical schools of the United Kingdom, whereby the regular attendance of the students on the lectures at such schools may be enforced and registered, so as to entitle the students to

receive, and to justify the lecturers in giving, certificates of attendance, the accuracy of which may be relied upon by this College, and which the greatest vigilance and circumspection on the part of the lecturers cannot at all times secure under the present system, where there is a want of some such check and registry.

The Council will consider themselves obliged by your attention to their wishes, and will thankfully receive any suggestions you may be pleased to offer on the means which, in the opinion of yourselves and your colleagues, may be best adapted to effect this important object.

I have the honour to be, Gentlemen,
Your most obedient humble servant,
EDMUND BELFOUR, *Secretary.*

Regulations of the Council respecting the Professional Education of Candidates for the Diploma.

1. Candidates will be required to bring proof:
   1. Of being twenty-two years of age.
   2. Of having been engaged five years in the acquirement of professional knowledge.
   3. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during two anatomical seasons*.
   4. Of having attended at least two courses of lectures on surgery, delivered in two distinct periods or seasons, each course to comprise not less than sixty lectures.
   5. Of having attended lectures on the practice of physic, on chemistry, and on midwifery, during six months; comprising not less than 60 lectures respectively, and on botany and materia medica during three months.
   6. Of having attended during twelve months the surgical practice of a recognised hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or for six months in any one of such hospitals, and twelve months in any recognised provincial hospital.

II. Members and licentiates in surgery of any legally constituted College of Surgeons in the United Kingdom, and graduates in surgery of any university requiring residence to obtain degrees, will be admitted for examination on producing their diploma, license or degree, together with proofs of being twenty-two years of age, and of having been occupied five years in the acquirement of professional knowledge.

N.B. Certificates will not be recognised from any hospital unless the surgeons thereto, or a majority of them, be members of one of the legally constituted Colleges of Surgeons in the United Kingdom; nor from any school of anatomy, physiology, surgery, or midwifery, unless the respective teachers be members of some legally constituted College of Physicians or Surgeons in the United Kingdom.

Certificates will not be received on more than two branches of science from one and the same lecturer, but anatomy and physiology, demonstrations and dissections, materia medica and botany, will be respectively considered as one branch of science.

In the certificates of attendance on hospital practice, and on lectures, the dates of commencement and termination are to be inserted in words at full length.

All the required certificates are to be delivered at the College ten days before the candidate can be admitted to examination.

By order of the Council,
10*th July*, 1834. EDMUND BELFOUR, *Sec.*

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* An anatomical season is understood to extend from October to April inclusive, and to comprise at least 140 lectures on anatomy and physiology, occupying not less than one hour each, given on separate days; and at least 100 demonstrations of the like duration, given in a similar manner; exclusive of dissections, of which distinct certificates are required.

IMPROVED METHOD OF ADMINISTERING EPSOM SALTS.

DR. JAMES HENRY, of Dublin, recommends the sulphate of magnesia, given according to the following formula, as an agreeable, safe, and efficacious purgative. Saturate any quantity of cold water with sulphate of magnesia; filter through paper, and add to every seven ounces of the solution one ounce of the *dilute* sulphuric acid of the Dublin or Edinburgh Pharmacopœias.—*Amer. Journ., May*, 1834.

THE
London Medical & Surgical Journal
Saturday, July 26, 1834.

MORISON'S PILLS.

The Trial at York.—Verdict "Manslaughter."

A FORTNIGHT ago we published a full account of an inquest at York upon a young man, whose death was alleged to have been hastened by large and repeated doses of Morison's Pills, during an attack of small-pox. One Webb, a publican, and an agent for the sale of the pills, was the medical practitioner upon the occasion, and was in consequence put upon his trial for having ignorantly tampered with the life of a human creature. We have now to record the result of the trial. After a patient investigation before one of the ablest judges of Westminster Hall, he was found guilty of "Manslaughter." Upon examination we find the evidence at the inquest includes all the material facts elicited at the trial, which it is unnecessary therefore to repeat. The analysis of the pills seems, however, to have been more accurately given on the latter occasion. Mr. West, a respectable chemist, stated the results of his investigation:—

"The pills No. 1. averaged two and a quarter grains each pill, and were composed of aloes and colocynth, together one grain, but in what proportion he could not ascertain; gamboge half a grain, and cream of tartar three quarters of a grain. There was also a very small portion of ginger. The pills No. 2 averaged three grains each, and contained of aloes and colocynth one grain, gamboge one grain and a half, cream of tartar half a grain, and ginger as before."

The counsel for the prosecution referred to the case cited by the coroner on the inquest, and to another case at the last assizes, before Mr. Baron Alderson, when a sailor was convicted of manslaughter, for having rashly and ignorantly occasioned the death of a man by giving him a large dose of opium, because his own wife was in the habit of taking it. The learned counsel dwelt forcibly upon the criminality of persons unskilled in medicines and diseases, attempting to tamper with them, where there are so many medical establishments and regularly educated practitioners spread over the country. The same point was insisted upon by the learned judge, in his address to the jury, although he admitted, as the counsel for the prisoner contended, that the statutes for licensing medical and surgical practitioners did not, and could not, make the distinction to permit one man to escape a conviction for felony, and to convict another for the same offence; in fact, it applied to both, and if either acted ignorantly, in administering strong and improper medicines, the law could reach them both. But in estimating the ignorance and rashness of the accused, it was no slight consideration that he undertook, whether gratuitously or for gain it mattered not, a duty which is appropriated by common sense to a numerous and educated profession.

The trial of St. John Long for the murder of Miss Cashin was cited for the prisoner,—and if Morison, or Moat, or both, stood at the bar in lieu of their agent, the analogy would have been complete,— Morison and St. John Long might both have produced corresponding lists of wonderful cures, and the ardour of the old fool, who swore he sold his Bible to purchase Morison's Pills, and would sell another Bible if he had it for the same purpose, might be paralleled by

the enthusiasm of equally ignorant lords and ladies.

It is to be deplored, that the miserable agent of the supreme quack should have to bear the whole consequence of this audacious quackery, while the fellow, who drives his carriage on the profit of his infamous impositions, escapes unscathed. We intreat, we implore the attention of Mr. Warburton to this intolerable nuisance of quack medicines and quack doctors. It seems almost useless to appeal to the public press not to lend its aid in advertising their base practices. The most respectable newspapers contain daily a number of impudent medical advertisements, direct impositions upon the ignorant and credulous. An operative in Warren's blacking manufacture once observed, "We keeps a poet." Every regular quack, in like manner, *keeps* a newspaper or a magazine for his sole use, and it is notorious, that the expences incurred by such persons in advertising are enormous. The nuisance has now risen to that height that the interference of the legislature is necessary for the protection of the public health.

THE PARLIAMENTARY COMMITTEE.

A COTEMPORARY is much enraged at the lengthened inquiries of the Parliamentary Committee, and notifies that a hint was given from the proper quarter to wind up the investigation. We are not surprised at our cotemporary's vexation: it is perfectly consistent in him to maintain that the whole business should have concluded with the examination of the magnates, upon whose opinions the legislature should have proceeded to re-edify the profession. The sources of his information are quite unknown to us or to any one else; and we apprehend Mr. Warburton is not the man to be interfered with in the discharge of a public duty. We are ourselves most anxious to see the conclusion; and we hope before the session terminates we shall have the pleasure of examining the evidence. All we can say at present is, that the Committee never was more actively engaged than at the present moment; and when we add that the officers of the Irish Medical Corporations are this week in course of examination, our readers will admit the inquiry is of a rather important nature.

LORD BROUGHAM ON HOSPITALS AND DISPENSARIES.

"HE was well aware that he was speaking on the unpopular side of the subject, but the truth must be told. The only safe kind of charity—the only species of charity that was not liable to abuse—was an hospital for accidents. Accidents were things that no man could calculate upon or provide against; and of this they might be certain, that the existence of such an hospital would in no way tend to increase the number of accidents. The next charity in point of safety was that of dispensaries. He would pause, however, before he would go so far as to say that that was a safe species of charity not liable to abuse. He had been of such an opinion some years back; but, upon consideration, he had altered it. Every one should look forward to and provide against that sickness, those ailments to which the lives of all were necessarily exposed. Though he did not go to the extent of objecting to dispensaries, therefore, he doubted much that their establishment was in accordance with sound principle."—(Speech on the Poor Laws.)

We are really surprised to find sentiments like the above entertained by Lord

Brougham, as they clearly show that his Lordship knows very little about the incalculable value of hospitals and dispensaries to the poor. According to his views, such hospitals as St. Bartholomew's, Guy's, St. Thomas's, &c., are useful so far as they are open to accidents; but the advantage they afford of admitting persons labouring under fever, inflammations of the lungs and bowels, dropsies, &c., are valueless. We agree with the noble Lord in the opinion that few men will break their legs and necks to obtain admission into a hospital; and therefore it is most true, that the existence of such hospitals in no way tends to increase the number of accidents!!

But, we apprehend, that it is exacting too much from humanity, to expect the daily labourer, who is the object of the poor laws, should have a store in reserve for proper medical assistance in cases of severe illness, which are as little to be calculated upon as accidents. A man may have a fever, or pleurisy, from a hard day's work, as well as a broken leg. The little that this class of persons can afford to pay for medical assistance would never procure for them proper advice, and they would become the prey of quacks of all sorts. In fact, one of the objects of dispensaries was, to put down the trade of the mountebank quack. There is, however, a class not the proper objects of charitable dispensaries, who avail themselves of their gratuitous humanity, though they are able pay for medical attendance. This is a to nuisance: it diminishes the reasonable remuneration of a liberal and expensive profession; and, as the labourer is worthy of his hire, we should be delighted to see this fraud put down.

NEW REGULATIONS OF THE ROYAL COLLEGE OF SURGEONS.

We beg to direct the notice of our junior readers to the new regulations issued by the Royal College of Surgeons, and also to the circular sent to the different Lecturers. It behoves medical students to consider these documents maturely.

IMPORTANT TO LUNATIC ASYLUM KEEPERS.

This morning (Thursday) an application was made by counsel, on the part of Mr. Joseph Taylor, who kept a lunatic asylum, called The Retreat, at Cottingham, near Hull, stating that Mr. Bethell, M.P., and two other visiting magistrates, had withdrawn his licence. The magistrates had simply represented to his Lordship what they had done. Affidavits were read in explanation of some circumstances supposed to have influenced the magistrates. This was the first application of the kind. His Lordship doubted whether he had any judicial authority, it appeared to him to be simply executive. However, he directed the affidavits to be filed, and his Lordship added he would show them to the magistrates, and ask them whether their opinion would be altered upon the statements therein contained.

SABRE WOUNDS OF THE KNEE, COMMUNICATING WITH THE JOINT.

Dennis Fogerty, æt. 17, a maker of bricks, was admitted into No. 3 Ward, on the 27th of March, with five incised wounds of the left leg, from one and a half to three inches in length. One is situated just above the head of the fibula, and communicates with the knee joint; another is situated immediately below the patella. From both these openings issue synovial fluid. He was supposed to be a house-breaker, and the wounds were inflicted

by a gentleman with a sword. The wound dressed with adhesive plaster, and bandaged.

28th. Mr. Banner visited the patient this morning, and considering the knee required dressing, removed the bandage, &c. From the opening below the patella there was a discharge of serum, and on it were distinctly seen globules of synovia. The wounds were dressed with adhesive plaster and compresses, and spirit lotion ordered to be applied constantly.

The lad passed a quiet night, and is quite free from pain; the bowels are constipated, and the pulse full and quick. He was ordered the senna draught, and sixteen ounces of blood to be taken from the arm.

This case continued to do well until the 4th of April, when there was observed a puffiness of the knee, and a slight increase of frequency in the pulse. The puffiness continued to increase until the 9th, when, on removing the dressing, there was observed a substance projecting through the upper wound at the side of the joint, perfectly transparent, and not unlike the humours of the eye in appearance. This was punctured, and about one ounce of fluid escaped, which was perfectly transparent, and of an oily, sticky nature; occasionally, also, small particles of lymph escaped. He has never experienced the slightest pain since receiving the injury, and his health has been good. It was ascertained that he had left his bed for two days previous to this. The wounds were dressed simply, and slight pressure made.

11th. There was a second escape of about an ounce of the same kind of fluid, which was now clearly ascertained to come from the joint, as the opening whence it issued had become very perceptible. Mr. Banner introduced a probe, which passed easily through the joint. From a careful examination the fluid was considered to be pure synovia. The patient is quite free from bad symptoms; he is easy, sleeps and eats well. This discharge escaped for two days longer, when it entirely ceased.

24th. The wounds are nearly healed, and the boy healthy.

30th. He was made an out-patient.—*Liverpool Med. Journ.*

SYPHILIDE TUBERCULEUSE.

E. F., æt. 30, a married woman, applied on the 8th of April, to Dr. Duncan. The face and forehead were covered with coppery tubercles, of six weeks' duration; and there was a painful node on each tibia. She had contracted syphilis from her husband more than once, the last time about three years previously, since which period she had taken no mercury.

℞. Hydrarg. ioduret. gr. x.
Dec. sars. co. Oj. S.
Sumt. cyath. vinos. ter de die.

On the 10th the mouth was sore; and when seen, two or three days afterwards, the eruption had begun to decline. She afterwards continued the sarsaparilla alone, and in a short time hardly any traces of the tubercles remained.

L. S., æt. 27, a sailor's wife, applied some time ago with an eruption of a similar character, occupying the face and arms. The ioduret of mercury, given as above, having affected the mouth in a few days, the following was substituted.

℞. Potass. hydriod. ℈j.
Aq. distil. ℥ x. S.
Sumt. ℥ j. ter de die.

The eruption, which improved rapidly from the time the first medicine was ordered, had quite disappeared at the end of a fortnight. About a month afterwards, however, it returned, after exposure to cold; and it again disappeared, but more slowly than before, under the use of blue pill and decoction of sarsaparilla.

SYPHILIDE SERPENTEUSE.

Three or four months ago, a woman, about 35 years old, (the particulars of whose case we are unable, at this moment, to refer to) applied to Dr. Duncan, at the Dispensary. A line of ulceration (formed by the coalescence of tubercles in groups of five or six, afterwards ulcerating at the top) extended from the lower dorsal vertebræ to the top of the right shoulder. After using, for a short time, the protiodide of mercury internally, and externally in the proportion of a scruple to an ounce of lard, the ulceration healed, leaving

an irregular depressed copper-coloured cicatrix.

In the two cases first mentioned, a smaller dose than usual of the protiodide of mercury affected the mouth; but in most cases of this kind, in which the medicine has been given at the rate of 2 grs. three times a day, Dr D. has found it very speedily produce salivation, and, generally, exert a beneficial influence on the disease. It is much used in the Hôpital St. Louis, by Biett, who says it is very successful after iodine and an interval of rest. When carried far, it produces considerable irritation.—*Liverpool Med. Journal.*

British Hospital Reports.

ST. THOMAS'S HOSPITAL.

Diseases of the Membranes of the Brain.

The diagnosis of diseases of the different membranes and the substance of the brain is at all times exceedingly difficult; and, although many nice distinctions have been laid down by nosologists, and diseases of the contents of the cranium divided into a considerable number of distinct species, such as phrenitis, paraphrenitis, phrenismus, sideratis, siriasis, sphacelismus, typhomania, calentura, and a host of others, it is at all times difficult at the bed-side, when the symptoms are severe, to recognise the particular portion of the brain, or its meninges, which is affected, these parts being so intimately connected one with the other, that disease of the one, whether it commences in the encephalic substance or its membranes, frequently produces an affection of the other. Yet, as the disease advances, whether it be confined to the membranes, parenchymatous structure of the brain, or both, the particular parts affected may in general be distinguished.

To give, however, an accurate diagnosis of such diseases, every pathognomonic sign should be understood, the course of every nervous filament ascertained, and the connexion of every filament with the other parts of the body considered. These are, at first sight, insurmountable difficulties, and they will doubtless for a long time remain undiscovered. If, however, different portions of the brain perform separate functions, and, according to the functions, the external actions are controlled, nothing can be more simple than to discover what are the impaired actions manifested, which at once would lead to a suspicion of the part diseased. But some difficulties here present themselves, and which require much attention to overcome; that is, to get an exact history of the mental powers previous to its occurrence, to discover which faculty in the first instance is impaired, and the regular progression of the disease. By ascertaining exactly these facts, the seat and extent of disease would at all times be detected, and the treatment must be regulated according to the severity of the symptoms. Again, we may have each of the membranes of the brain separately affected, whence some pathologists have set down arachnitis as a sub-variety of the meningic form; yet the pathognomonic signs are so obscure, and the diagnosis of such little utility, that no benefit can result from such nice distinction; moreover, in nine times out of ten, the pia mater is at the same time affected, and the treatment indicated is always similar.

The symptoms of membranous affections also vary in different parts: for example, disease of the superior and lateral parts produce delirium and coma, whilst a morbid state of the membranes at the base of the cranium affects the different organs supplied by that portion of the brain situated above the seat of disease, in consequence of the thickened state of the membranes, or from effusion caused by the meningic affection. It has been stated by many writers, that symptoms are frequently mistaken for causes, and the former combated by treatment, whilst the latter continue to increase; and such, we may say, is too frequently the case. The symptoms of disease, especially of the nervous system, from its intimate connexion with every portion of the body, are exceedingly various, and from inaccuracy of previous history difficult to define. The following case will illustrate the symptoms of this disease in the first instance, though, in fact, before admission into the hospital, it was treated for disease of the alimentary canal.

Case I.—John Burchett, a child, aged four years, who had previously enjoyed good health, was admitted, Nov. 30th, into Jacob's Ward, under the care of Dr. Elliotson. His friends stated, for two weeks previously he was attacked with occasional sickness, and his bowels remained in a state of costiveness, for which they had administered aperient medicines, and given mercury prescribed by a medical man. At the time of admission, he had severe pains in the head; countenance flushed; eyes slightly suffused; skin hot, particularly the scalp; tongue coated with a whitish mucus; occasional vomiting; costiveness; pulse varying from 71 to 80, neither full nor sharp.

Injections and purgatives were administered to obviate costiveness; the bowels remained confined; sickness continued; and all symptoms remained unchanged; and in the evening it was found necessary to give castor oil, and he was put in a tepid bath. In spite of these precautions the symptoms became more aggravated, his eyes appeared dull, pupils dilated, and pulse remained much the same. The next morning a slight evacuation from the bowels was obtained; the symptoms still continued the same. A mustard poultice was

applied to the abdomen, and Prussic acid given in an effervescing draught every six hours to check the sickness. Nevertheless, the child continued in great torture; pupils remained continually dilated, and contracted but feebly on the approach of a candle; pulse full, with a degree of sharpness; much pain in the head. Turpentine enemata were ordered, head to be shaved, and three grains of the hydrargyrum cum cretâ were prescribed three times a-day. Leeches also were applied to the head.

The costiveness still remained obstinate, and not till a drop of croton oil was administered could a copious evacuation be obtained. In consequence of much pain in the course of the longitudinal sinus, leeches were applied over that part. After their application the child appeared somewhat better; but at this time the mouth again became tender, from the hydrargyrum cum cretâ, and he took some notice of what was passing around him. These favourable symptoms only lasted for a short time, coma supervened, and strabismus ensued: pulse 120, very sharp. The pupil was now perfectly insensible to light, and the child continued restless. The next morning strabismus had disappeared; his cries became feeble; fingers and toes were contracted; legs bent on the abdomen; slight muscular twitches observed on the left side of the face; pupils remained dilated; urine passed involuntarily. Mercurial ointment was now rubbed on the head with camphor liniment: the next morning no muscular contractions were perceived; leeches were again applied to the head; croton oil was again administered to obviate the continued costiveness: about two hours afterwards his eyes were open, and motionless convulsions ensued, and about 11 o'clock death terminated his sufferings.

On the autopsy much serum was discovered between the dura mater and arachnoid, the latter membrane was exceedingly vascular. The lateral ventricles were distended with effusion; immediately behind the optic commissures a deposition of lymph was observed. Medullary substance softer than natural; abdominal and thoracic viscera were healthy.

In this case, the first symptom observed was obstinate costiveness, nausea and vomiting ensued, and continued for fourteen days before any decided cerebral affection was detected. The symptoms were slightly palliated by treatment; the cause left untouched continued to make progress, and when the child was admitted into the hospital, from the increase of the real seat of disease, other signs ensued, and the forerunning symptoms became more obstinate. At this time, from the advanced state of the affection, though rigorous and proper treatment was adopted, even the primary symptoms could be scarcely mitigated, and the extent of disease continued to impair the mental faculties, all of which were observed, in the progress of the case, to be deranged.

Case II.—*Cephalalgia.*—W. B., a tailor, aged 64, who had always enjoyed good health, of robust habit, was admitted October 24th into Jacob's ward under Dr. Elliotson. States about a week since was attacked with difficulty of discharging his urine, which in a few days afterwards was succeeded by giddiness and lancinating pains in the head, dimness of sight, and the appearance of objects before his eyes; also felt a dull aching pain about the region of his loins. His fingers became numb, which sensation extended up the arms; when admitted the symptoms remained much as he had described; countenance dull; bowels rather confined; tongue coated with mucus; motion of the pupils natural; action of the heart regular; pulse rather full. Bloodletting was immediately had recourse to; a large blister was applied on the back of the neck, and two grains of the pilul. hydrarg. were prescribed twice a day. In about four days his mouth became affected by the mercury; the blood that was taken from the arm was buffed and cupped; discharge of urine was more copious, and every symptom became much alleviated. His bowels were relieved by purgative medicines; by the 2nd of November the numbness had entirely vanished; small doses of mercury were continued, every symptom disappeared, and on the 26th of November he was discharged cured.

Case III.—James Kirk, aged 38, was admitted 27th of February, 1834, under the care of Dr. Roots. States that he is employed in wine vaults, and till within the last two years had indulged in drinking. Three months ago was attacked with violent throbbing pain in the temples, giddiness, and shooting pains in the occiput; he is quite free from pain at times; vision impaired; eyes sore; slight suffusion of the conjunctiva; does not complain of numbness in any part of the body; nights restless, and sleep disturbed by frightful dreams; scalp hot, action of carotids more powerful than natural; pupils rather dilated; tongue slightly tremulous; pulse 108, small but firm; bowels confined. Dr. Roots combated the cerebral symptoms, by means of bloodletting, blistering and calomel. By the 1st of March all symptoms were much decreased; slept better, and vision became more perfect. At this time his mouth was slightly affected; the action of the mercury was kept up by smaller doses repeated at longer intervals; leeches were employed occasionally, in spite of which the symptoms continued, and he was unable to look into a book. Two grains of the sulphate of quinine were now prescribed every six hours, another blister was applied on the back of the neck, under which treatment his vision much improved, all encephalic symptoms ceased, and the 16th of March, by his own desire, he was made an out patient.

Case IV.—Samuel Scott, aged 28, was also admitted, under Dr. Roots, into Luke's Ward, March 6th. For nine months he had

suffered from dull heavy pain in the head; much worse when in the recumbent position. About two months since he attempted suicide. Does not complain of any symptom in any other part of the body. Appears continually in low spirits. States that until within the last nine months he had been in the habit of drinking spirits freely, which he discontinued, in consequence of his sleep being disturbed by the appearance of phantoms. Eyes dull, pupils slightly dilated; bowels confined; pulse 92, small, and yields to pressure. Blood was extracted by means of cupping-glasses from the mastoid processes; five grains of blue pill were given twice a day, and the compound senna mixture occasionally, to keep up regular action of the bowels.

The symptoms were not much alleviated at first from this treatment; on the 14th of March he complained of a singing sound in the left ear; his mouth became affected by mercury, the action of which was kept up by smaller doses; the giddiness became more intense after the application of leeches, in consequence of which Dr. Roots desired they should be discontinued. The pain still continued; some tartar emetic ointment was applied to the scalp, which after frequent applications produced much irritation. The pain now diminished in urgency; bowels were open twice a day; alvine dejections of a light colour. The part was kept in a state of irritation for some days, by degrees the symptoms subsided, and he was discharged from the hospital quite cured.

(*To be continued.*)

WESTMINSTER HOSPITAL.

Ligature of the Common Iliac Artery.

Last Saturday Mr. Guthrie delivered a lecture at the New Westminster Hospital, on the case in which he tied the common iliac artery, and which has excited so general an interest in the surgical world.

The subject of this great operation was a lady, a native of Scotland, who had been liable to rheumatic pains in the hip, and one day happened to press her side violently against a table, to which accident she was always inclined to attribute the original cause of her disease. Some time after, a swelling made its appearance on the right buttock, which gradually increased in dimensions, and became very inconvenient, as she could not lie on that side, or even on her back. These symptoms becoming exceedingly aggravated, she was induced to come up to London, with a view to consult Mr. Guthrie, and other eminent surgeons of the metropolis, as to the most desirable mode of proceeding under her very distressing circumstances. So very inconvenient was the tumour, and so uncomfortable her situation on arriving in London from the ship which had conveyed her from Scotland, that she was obliged to remain at Wapping, not being able to undergo a conveyance by a coach. Mr. Guthrie visited her at that place, and made a careful examination of the tumour. He subsequently requested Sir Astley Cooper, Mr. Thomas, and Mr. Keate, to examine the swelling, and give their individual opinions as to its nature. Mr. Keate was one of those who were inclined to doubt its being aneurismal. It was however ultimately decided on, with the concurrence of all parties, and under circumstances which imperatively demanded some operation, to cut down on the internal iliac artery, and put a ligature around it.

For this purpose the lady was advised to come into the Ophthalmic Hospital, as it was necessary that after the operation she should be constantly under the eye of the surgeon. Accordingly a suite of rooms were provided for her in the above-mentioned establishment, and on the 24th of August 1833 Mr. Guthrie determined to perform the operation.

Mr. G. here detailed the particulars of the operation, during the progress of which many difficulties presented themselves, and it was found proper to put a ligature around the common iliac artery. The peritoneum was found to be exceedingly thin, not being of more density than common silver paper. On the ligature being passed round the common iliac, pulsation immediately ceased in the tumour. Several sutures were passed through the external wound lest any sudden movement of the patient might cause the internal parts to burst out. Mr. Guthrie remarked in his lecture, that this was a formidable operation, not by reason of the hæmorrhage, but because the external incision was not sufficiently large to admit his two hands. This rendered the operation most difficult. In a case for which he had operated at the Westminster Hospital two years ago, this difficulty did not exist, and the artery was easily exposed and tied. Mr. G. said that in any future attempt to tie the aorta the steps of the operation should be exactly similar to those which he had taken in tying this common iliac artery. He tied the artery within an inch of the aorta, and could have thrown a ligature round the latter with perfect ease, and without any additional trouble.

No inflammation supervened until Sunday evening, August 25th (the day after the operation). The pulse was at that time 120. She was bled to fourteen ounces, and again on the following day to a similar extent. No appearances of mortification in the leg ensued. This Mr. Guthrie attributed to the means employed to prevent such event, and which he particularly recommended. The treatment consisted in the limb being constantly rubbed by two females for several days after the operation. Hot bricks were also occasionally applied. An eminent foreign surgeon, who happened to be in London at the time, expressed great surprise at this treatment, and said that in such cases he was accustomed to sprinkle the limb

with *cold* water. Mr. Guthrie said he mentioned this, in order to show what difference of opinion existed between surgeons.

Enemata were not given till four days after the operation, when some sulphate of magnesia was administered. The patient soon evinced a change for the better. The tumour diminished in size, and the symptoms of inconvenience very considerably lessened. So improved was she, that she was able to return to Scotland in a coach, and appeared in every respect considerably more comfortable than she had been previous to the operation. These good symptoms did not, however, continue, and she died (worn out by exhaustion consequent on her disease) on the 30th April, 1834, having survived eight months and seven days after the common iliac artery had been tied.

Mr. Guthrie said he was desirous that all mankind should be made acquainted with this operation; and in order that the public might obtain genuine plates of the artery and parts involved in this operation, he has engaged Hummandell, the engraver of Marlborough-street, to strike off a large number of impressions. He himself was at the expense of the stone, and was to receive 500 copies. Every one could thus be supplied with an impression on paying the mere price of the copy.

We shall publish a verbatim report of Mr. Guthrie's lecture in our next.

GUY'S HOSPITAL.

On Tuesday Mr. Aston Key performed three operations. The first was the removal of a steatomatous tumour from the shoulder of a female. Having made a longitudinal incision over the seat of the tumour, he made two or three cuts around the roots of the tumour, and quickly disengaged it from the surrounding parts.

The next operation was the amputation of a leg below the knee, for disease of the ankle-joint. The flap operation was performed on this occasion.

The last and most important operation was the removal of a large portion of the supermaxillary bone, for a malignant disease commencing in the alveoli and extending to the antrum. Mr. Key commenced by making an incision from the right angle of the mouth to the right temple. Then raising up the integument he was enabled to have a full view of the parts. With a forceps he removed several small portions of diseased bone from the lower plate of the right orbit, from the antrum, &c., and, after considerable exertions, succeeded in drawing away a large portion of the supermaxillary bone. The operation lasted about forty minutes, during which time the patient bore his sufferings with the greatest fortitude. The hæmorrhage was excessive, and about six branches of arteries were tied. The operation was considerably impeded by the patient's mouth constantly filling with blood. When all the diseased portions of bone were extirpated, the edges of the two first incision were approximated by five sutures and adhesive plaster. A sponge was introduced into the mouth to absorb the blood, and the patient removed to bed. On visiting him after the operation, we found him lying very tranquil and in every way as favourable as could be expected after such a severe and lengthened state of suffering. Pulse slow. Strong hopes are entertained of the success of the operation, which was the only chance whereby his life might be prolonged.

APOTHECARIES' HALL.

NAMES of gentlemen to each of whom the Court of Examiners granted Certificates of Qualification, Thursday, July 17th.

William Edward Atkins	Kimbrigde, near Rumsey.
Henry Calvert Medcalf	North Cave.
William Angel Silke	Norwich.
Robert Stevens	Maidenhead.

METEOROLOGICAL JOURNAL.

MONTH. July, 1834.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations.		
17		71	82	67	29·83	29·73	63	65	W.S.W.	E.N.E.	Fine	Fine	Fine
18		74	76	63	29·53	29·33	65	90	N.E.	S.E.	——	Cloudy	——
19		66	66	61	29·22	29·48	90	87	S.W.	S.S.W.	Showy.	Rain	Cloudy
20	○	64	67	58	29·45	29·47	84	80	W.	S.S.W.	Cloudy	Showy.	Rain
21		63	67	58	29·47	29·53	79	80	S.E.	S.E.	Showy	Cloudy	Fine
22		67	72	65	29·63	29·74	82	78	S.E.	N.N.E.	Cloudy	Fine	Cloudy
23		68	73	63	29·74	29·75	75	74	N.N.E.	S.S.E.	Fine	——	Fine

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