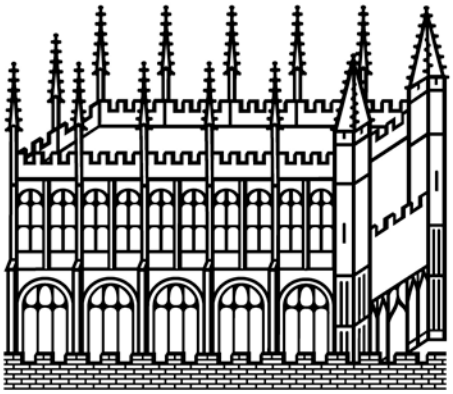

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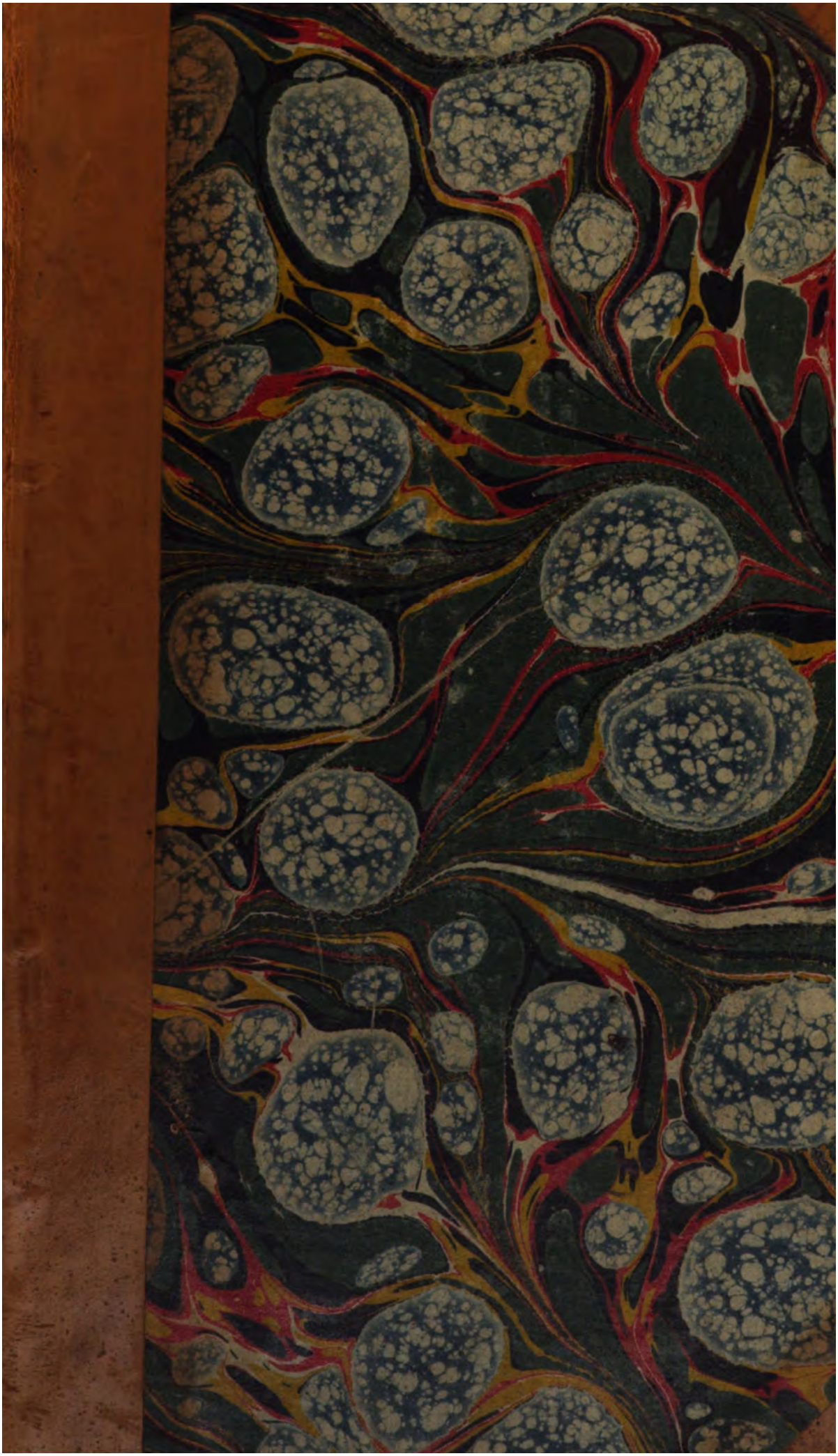

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THE

LONDON MEDICAL

REPOSITORY

AND

REVIEW.



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No. 139. JULY 1, 1825. Vol. XXIV.

No. I.——NEW SERIES.——Vol. I.

PART I.

REVIEW.

I.

THE ART OF DETECTING DISEASES.[*]

[First Article.]

There is no profession or pursuit which calls for such unremitting mental activity as the profession of medicine. In other professions, or pursuits, there are stated periods, or days, or hours of exertion, with certain alternations of repose and relaxation; the circumstances in which men are called upon to act are either similar to such as have occurred before, or resolvable into distinct questions referrible to some fixed standard, or settled by some previous decision: the reputation acquires a growing greatness and stability from

[*] An Essay on the Symptoms and History of Diseases, considered chiefly in their relation to Diagnosis. By Marshall Hall, M.D., F.R.S.E., and formerly President of the Royal Medical Society of Edinburgh. London, 1822.

Symptomatology; or the Art of Detecting Disease: a Lecture occasionally read to the Pupils at the Westminster Hospital, and published according to their request. By Alex. P. Buchan, M.D., F.L.S., late Senior Physician to that Institution, and Member of the Royal College of Physicians, London. To which are added, Tables of Symptoms. London, 1824.

Novus Thesaurus Semiotices Pathologicæ, quem collegit atque edidit Mauritius Hasper, Medic. Chirurg. atque Philosoph. Doctor in Universitate Literarum Lipsiensi, &c. &c. &c. Vol. I. Lipsiæ, 1825.

Manuel de Clinique, ou des Méthodes d'Exploration en Médecine, et des Signes Diagnostiques des Maladies; contenant un Précis d'Anatomie Pathologique. Par L. Martinet. Paris, 1825.

Séméiologie Générale, ou Traité des Signes et de leur Valeur dans les Maladies. Par F. J. Double. 5 tomes. Paris, 1811—1825.

every successive exertion of industry, until it can scarcely suffer diminution from subsequent indolence, or even from subsequent mistake. But the medical man has no period, no day, no hour of assured leisure; his occupations are either continual or confined to no particular time, and the cases which require his attention are never wholly like any which required it before. At the moment when, after some previous exertion, he considers himself free, at least for a few hours, from all engagements, and justified in indulging in some recreation of his intellectual and physical powers, he may be called upon to act in circumstances of novel combination, and of unusual danger, requiring the prompt and determined, yet cool and considerate, exercise of every faculty of his mind; so that the slightest imprudence may lead, in some unguarded hour, to results destructive of that fame which it has been the business of years to build up, as well as of that peace of mind which it is every man's interest, and every honest man's wish, to preserve. Among the habits which have arisen out of this uncertain kind of life, may be considered that habitual temperance by which, notwithstanding occasional exceptions, the faculty are remarkably distinguished: they may be considered as men who, like gamesters, but with far different motives, find it necessary to keep the mind at all times in the fittest state for exertions which must be, at the same time, characterised by caution and by boldness.

It is true that, with a very moderate, and even an occasional, attention to what is continually coming before him in practice, certain habits of acting are soon acquired, which enable the practitioner to satisfy those who seek his aid: but this does not always bring along with it that kind of satisfaction, without which all the praise of all the world is insufficient to produce happiness—self-satisfaction. Leading symptoms may soon become associated with modes of practice not attended by such marked want of success as to alarm the patient, or to rouse an indolent and unreflecting man. There must be a proneness to be deluded, against which we require to be strongly and frequently warned, when we learn from Fordyce that he 'has heard Dr. Fothergill and others state, in a serious harangue, their inspiration, not only in the knowledge of diseases, without inquiring into their external appearances, but that prescriptions have flowed from their pen, without any previous composition in their mind.' Few men who are in the habit of writing prescriptions will be at a loss to understand how the latter part of this apparent boast might be verified, without any great compliment to the alertness of the individual. But, as

regards the former part, it is most charitable, and, indeed, most reasonable, to suppose that the persons in question were mistaken. It is seldom very easy to retrace the steps of reasoning by which we have been conducted to an opinion concerning any particular case before us, and perhaps it is sometimes impossible: whence, among other consequences, an idea has obtained that good practice may be based on bad theory, or rather that the practice may be very good, whilst the reasoning which leads to it is very bad. The rapidity of mental operations is in these instances too great for words and expression. Particular symptoms may so repeatedly have presented themselves to the observation, in conjunction with certain morbid processes or changes, requiring and being relieved by peculiar modes of practice, that the connexion between the symptoms and the disease, and the association of both with the practice, is so quickly and easily formed, as to seem independent of the reasoning which first led to the association, and which is repeated whenever the association is renewed. This may be convenient enough for general purposes; but we must be strangely intoxicated with success, or strangely fearless of consequences, if we do not meet with cases in which the operations of our minds are the very reverse of rapid, and in which the successive steps of our reasoning, as they are deliberately taken, are readily retraced. An impartial review of the easy and complacent efforts of Dr. Fothergill and the other practitioners alluded to, would have shewn them that their efforts were in reality little concerned in the favourable result; and it would be to turn the good of such convictions into deadliest wrong, if, instead of using them as arguments for redoubling our watchfulness, we allowed them to lull us into indolence and irremediable mental carelessness.

Besides the vigilant observation which we have said is required from the practitioner concerning the general principles of his profession, and a continual holding of himself in readiness to apply them to practice, it is not unfrequently his duty to make particular examples of disease the subject of separate and especial reflection. If the barrister devotes his most serious attention to individual cases involving pecuniary interests, the physician ought surely to do no less where the comfort, the health, or the life of an individual is concerned.

The difficulty which the mind has in comprehending and arranging all the symptoms and circumstances connected with every case of disease, in order that the means of cure may be exactly adapted to each, constitutes, indeed, almost all that is difficult in the science of medicine. However

lightly such a task may be thought of by some, or however mechanically performed by others, it calls for the best exercise of the intellectual faculties, and often in situations and in states of feeling not at all favourable to the tranquil performance of the operations of the mind. No error can be more fatal to a young practitioner than too light an estimation of its performance; and no stronger proof of indolence or of incapacity can be given by an old practitioner than not to be more skilful in this particular than the beginner. In the acquisition of this faculty, increasing as it must do in power and facility of exercise with every successive year, consists nearly all the benefit of experience; for experience without observation and reflection teaches no wisdom, and a man may be old in years and young in hours (to reverse an expression of Lord Bacon's), young and unpractised in the art of distinguishing the seats, stages, and forms of disease. If the knowledge of disease was easy — if every case presented a combination of signs so precise as to cause it to be easily recognised, and referred, without reservation, to a particular class, or understood by a name applied to a certain collection of morbid phenomena — and the practice of physic consisted merely in the administration of medicines of known powers to cure such diseases, — there would be nothing in the duty of the physician which any man or any woman of tolerable memory might not learn in a year — no distinction between the well-intentioned quackery of ladies and clergymen and the well-directed practice of the first professional man in the kingdom. But as in extra-professional practice there is ever this insurmountable difficulty, that good medicines are given in states of disease to which they are not adapted, and kill or cure at the mercy of chance, so, in regular practice, the shades of distinction between one practitioner and another take their colour from the superior discernment of actual states of disease, and the felicity with which, out of an immense choice of materials, he selects those which are best adapted to the exact combination of symptoms before him — a combination which may vary, and does vary, in the cases daily seen by him, as widely and as endlessly as the features of the countenance in the individuals composing the crowd of mankind.

The wide range of facts presented to the inquiring practitioner concerning every separate case — the delusive resemblances between cases — the points in which they differ — the distinguishing peculiarities to be set against the agreement found in the principal characters of complaints — the erroneous evidence ignorantly or studiously given — the valuable information accidentally imparted, and which is to

be seized on and remembered even to the exclusion of apparently more prominent circumstances, — call for so accurate an attention, so careful a comparison, so faithful a memory, for an imagination so happily tempered, (suggesting all useful probabilities, without leading away the mind from reality); and, to crown the whole, for so sober and enlightened a judgment, as to justify the warm expression of Baglivi, who calls the power of diagnosis and prognosis, which is the result of these attributes — *penè divinum*. Though no system of education can create these faculties, the prescribed studies of the physician are well calculated to improve them; and if it were merely for the exercise of the *senses*, called for by many of the studies which are collateral or preparatory, and which men of impatient character are apt to consider as too remotely connected with practice to be worth attention, such pursuits would yet be a highly valuable part of a professional education; 'itaque ista quoque naturæ rerum contemplatio, quamvis non faciat medicum, aptiorem tamen medicinæ reddit.' No reasonable doubt can be entertained of the original diversity of men's capacities; but it can as little be doubted, that many men continue stupid for want of mental exercise — mere wastes of intellect, of which culture alone could shew the value. The capabilities of the mind, like those of the voice, may often be called out into very unsuspected power by a skilful master; and long habits of indolence create a disease of thought, in which its powers, like the limbs of a hypochondriac, become contracted from the mere want of exertion.

No doubt physic may be practised, and is practised daily, with credit and success, by men possessing either a part only of the above-enumerated mental attributes, or all of them, in a degree inferior to that which is here supposed necessary; but the nearer the practitioner approaches to this standard, the better will he practise, and the more extensively will he be useful to those around him. And though of all descriptions of merit this may be the most difficult for the public, or even for any individual, to appreciate justly — because no physician can be traced through the whole of his practice so as to disclose accurately and truly even its general results — and though the grossest mistakes often pass unnoticed, and the brightest exertions of medical talent may be often unknown to those who have profited by them, — yet, taking a general view of the progress and success of different members of the profession, we are inclined to think that great eminence and public estimation are, upon the whole, distributed with considerable justice, and are more generally the reward and the effect of this one qualification

(that of distinguishing diseases, united with rational practice,) than of any single qualification that can be named. We see the possession of this gift often atoning with the public for the want of learning, of science, of manners, or even of the common habits of polite life; and now and then find the bold pretension of possessing it alone elevating the most ignorant men into temporary notice; — so strangely sometimes do people give their belief to the tricks of a charlatan and to affected intuition, forgetting that where this knowledge is truly possessed it is perhaps never boasted of, and assuredly never theatrically displayed. Seeing, then, that the possession of this gift, or power, or knowledge, this *tact*, which no precept can teach, and no eloquence can impart, when possessed in a high degree, is attended with so many benefits, with great power to do good, and with that fame for which all men are panting; and seeing that no man who is naturally unable to acquire it, or is too indolent, too careless, or too grossly ignorant to wish for it, can ever, by any patronage or vantage ground of fortune, attain distinction in medicine, or command to any extent, and permanently, the confidence of the public, — every worldly consideration combines with every higher motive of duty to persuade physicians to pay deep and earnest attention to this matter, and to think no pains, no patience, no labour, no study, too painful or too great to acquire it.

> 'Qui studet optatam cursu contingere metam,
> Multa tulit fecitque puer, sudavit et alsit.'

We have been led into these considerations by the inspection of several modern productions in our own and in other languages, the object of all of which is apparently to facilitate the acquisition of the important knowledge of which we have spoken. It seems to have been very early, or rather it must have been invariably felt, that the student's attention to his profession might have been very great, his attendance on the sick diligent, his observation of his seniors exact, and his habits industrious in the highest degree, and yet, when he began to practise for himself, he found, as every practitioner had found before him, that there were many truths, and many facts, and a thousand forms of disease and danger, which no previous study had shewn, no observation of another's practice could teach, and no system of physic could reveal to him; and an important branch of knowledge yet to be acquired, which had never yet been communicated by speech, and could never be conveyed in words from one intelligent being to another. In almost all the ancient medical writings we find laboured chapters on the value and

importance of separate symptoms, most of which were either transcripts from, or comments upon, the works of Hippocrates, the first writer in this department both in point of date and talent. Much space continued to be devoted, in many learned works, to commentaries on the aphorisms containing these supposed words of wisdom, until the close of the seventeenth century, or rather later. Within the last twenty years, the same feeling yet continuing to prevail, the same uncertainty, and the same longing after something like security, several works have appeared, in this and in neighbouring countries, in the same department of inquiry. If there was any advantage in mere enumeration, it would be easy to make a very long list. The work of M. Landré Beauvais, and the more recent and, perhaps, better-arranged one of M. Double on Semeiology, have had many readers in this country: the latter may confidently be referred to as valuable both for the matter and the style. In our language, a work on Diagnosis, by Dr. Hall, is well and favourably known to the profession, the first part of which has subsequently appeared in the form of a distinct Essay on the Symptoms and History of Diseases. Dr. Hasper, of Leipsic, has published the first volume of a collection of inaugural dissertations, under the title of Novus Thesaurus Semiotices Pathologicæ, each dissertation being confined to the consideration of a particular class of symptoms. M. Martinet has just put forth a very useful little Manuel de Clinique, which may be classed among those relating to the subject. A small work published anonymously by Highley in 1822; and, lastly, Dr. Buchan's Lecture on Symptomatology, to which is appended a Table of Symptoms, chiefly copied from Berkenhout, nearly complete the catalogue up to the present day.

From our previous remarks, it will be collected that we believe all these able authors to have aimed at the performance of impossibilities: but although we may withhold the praise of any great practical utility from their works, we are very far from saying that they can be read without interest or without advantage. Being composed of many parts, and calculated rather for occasional consultation than for regular and attentive perusal, they scarcely admit of any thing like analysis. It is this peculiarity which, admitting the merits of the works to be equal, would lead to a preference of that of which the arrangement was the most lucid, and which could consequently be referred to with the greatest readiness. Nothing but labour seems required to collect from ancient and modern tomes an overwhelming collection of *observations* and aphorisms; but the selection and the ar-

rangement of them is a far more important and far more difficult task. There are but two modes in which such works promise to be useful — either as helps to the acquirement of a knowledge of disease in general, or as resources when cases of difficulty occur. Whatever advantage might be derived from the first mode of application will probably always be impeded by the more regular modes of study which must primarily be pursued, and which cannot be followed without advancing the student beyond the mere threshold of semeiology; the second application may be made by men of all ages and degrees of experience, since the varieties of disease continue to present something new to the latest day of the observer's life. With a view to this application, some space may, perhaps, be usefully devoted to a consideration of the different works at the head of this article, following that arrangement which, upon the whole, appears attended with the fewest inconveniences.

The best method of attaining a perfect understanding of obscure and difficult cases is not very easily determined; for though such must occur to every practitioner, and in numerous instances to those who are beginning to practise, there is no particular source to which a practitioner thus situated can be referred for comfort and counsel: even the laboured works on semeiology leave the direction of the inquirer very incomplete; and there is always considerable hazard that a pursuit commenced in anxiety and pursued unadvisedly may be hastily abandoned, without leading to any happy results.

All authorities agree in recommending very careful inquiries concerning various circumstances connected with the patient before visiting the sick-room. Foreign writers are tediously and unnecessarily minute on these points. But speaking as persons not at liberty to pursue the matter wholly as a study, but whose duty it is to act with regard to other members of the society in which we move, our first object, as a matter of established convention and courtesy, must be to obtain from the friends of the patient, and from the practitioner who may have been in attendance, a correct detail of the symptoms from the commencement of the malady. If we seem here to speak more exclusively with reference to the physician, it is to be recollected that the physician's early exertions are generally called for in despairing, or, at least, in very bad cases; and his continual duty, even in more advanced life, is not so much to attack disease in its onset and first assault, as to confront it when it has acquired boldness from partial conquest, and virulence by neglect. But all details to be gained in this way, and

more particularly those to be gathered from unprofessional persons, are generally so confused and incorrect, as not only to be of no service, but to interfere with that unprejudiced examination of the patient which must be made by ourselves. The information which may be imparted to the physician by an intelligent apothecary, both regarding the series of symptoms observed previous to his being called in, and the predisposition and habits of the patient, is often valuable, and such as we should not only do very ill without, but should vainly seek to obtain from other sources. But the order of many particulars has often been forgotten, and many have not been exactly noted, because at one time there was no expectation of such a report being called for; and thus it happens that even, from a very competent medical witness, the detail of the case produces a less distinct impression than that made by the patient himself, with which, at the same time, it seldom fails to become mixed and interwoven to our disadvantage. Having procured, then, a very brief account of the duration and general character of the disease which we are called to treat, and of the measures that have already been pursued, going a little more into historical detail where the case is chronic, the best plan is at once to see the patient, and, making a very diligent use of our own senses, to put such questions to him in a quiet and orderly manner, as may, without effort, draw from him an account of his sufferings and his sensations. We must not forget the allowance necessary to be made for the exaggerations of a sick-bed and a state of uneasiness, nor the caution with which it is necessary to receive the hints and interpolations of the by-standers, which are often inconceivably erroneous. When the disease has existed some time, our task is to investigate as far as we can the original character of it, and we shall frequently find symptoms important in a medical point of view have excited little attention, and have been very imperfectly described, if mentioned at all. It is unnecessary to dwell on the perplexities of causes and effects in complicated diseases, and how important it is to distinguish one from the other. In the course of these interrogatories, more or less prolonged according to the nature of the case, we are to employ our eyes and our hands, our senses of sight and feeling, and in many cases of hearing, also, to procure additional evidence; and where any secretions or excretions are described as peculiar, or suspected to be so, we must provide at our first visit for completing the body of evidence at the second, deferring our final estimation of the case and the plan of treatment until such visit. This may often be impracticable, and we must submit to circumstances; but

where such impracticability exists, our chance of practising with self-satisfaction and with success is materially diminished.

With respect to the examination of patients, different physicians follow different methods. The order of the several subjects of our examination is perhaps of little importance, provided the questions themselves are put in the order which must result from directness of intention. A physician, with a patient before him, is not likely to think of, or care much for, the arbitrary and not very intelligible division of functions into vital, natural, and animal; but the plainest understanding can trace the circumstances which attend the food in its passage through the organs of digestion and assimilation, beginning with the appearance of the tongue; and it is easy to imagine a convenient method of investigating the state of the intellectual, the nervous, the respiratory, and the muscular functions. It is, in short, useless, and almost absurd, to lay down pedantic laws in a matter in which every man of tolerable talent soon makes rules, or forms habits which have all the effect of rules, for himself. Supposing that the medical visitor allows, as he ought, the patient to tell his own story without interruption, he cannot fail, during the narration, regardless of all "the rules of the schools," to deduce some inferences from the general appearance of the invalid, from his countenance, his position or attitude, from his *embonpoint* or emaciation, or from his manner of speaking. Whether the patient is in bed, or sitting in a chair, or walks into the room to us, we all collect certain data at once, and without premeditation, referring to the state of his external senses, his moving powers, and even concerning the general condition of his body and mind. Illness soon traces its characters in the lines of the countenance; several disorders produce very striking alterations in the colour of the whole or of parts of the face; certain kinds of pain are relieved by peculiar attitudes. The state of the respiration, also, is often manifest at a glance; and the sound of the cough, as the patient comes along the passage, often reveals to us at once that fatal knowledge which scarcely requires support from further evidence. The great advantage of all the information derived in this manner is, that it is so little open to fallacy.

Declining, then, for our own parts, any attempt to lay down precise rules for the *order* of our examination, or, at least, before obtruding on the reader such as might appear to us the simplest and the best, we shall endeavour to condense the directions and the information contained in the works before us, as a subject of liberal and not unprofitable discussion.

Without going into the minute particulars which some of the continental writers consider necessary as matters for diligent inquiry, previous to examination of the case itself, and which particulars could only lead to a great deal of useless *gossip*, to the great comfort and satisfaction, perhaps, of the nurses, but to the great weariness and confusion of the physician — leaving, in short, much of this to the common sense of practitioners — we find Dr. Buchan advising us to begin by inquiring whether any pain is felt, and Dr. Hall preferring that the first inquiry should be concerning the duration of the disease. Both modes may now and then be the best; but sometimes others may be preferable to either, and no general rule can be given, or, if given, could be complied with. The mode of investigation adopted by each individual will be found to vary in proportion to his knowledge; and very few men can be supposed to be such creatures of habit, as to put their questions to all patients and in all circumstances in the same form. Every question has an object, and the nature of the object must always determine the character and the order of the questions. After a few interrogatories, any previous arrangement must be modified by the answers they have elicited. A man of experience will put them in one order; an inexperienced man in another; a theorist will pursue his own visions; an impartial investigator will have a manner of his own. Still, as we have already remarked, unless there is order of some kind, all questioning will be vain and fruitless; and there are some practitioners who, to the end of their lives, never seem clearly to comprehend this order. The besetting error of what is called the study of symptomatology is, that it makes the mind prone to fall into the easy fault, so welcome to indolence, and so agreeable to the impatient, of resting too much on some single symptoms, as on the state of the pulse, which, taken alone, is, even more perhaps than any other isolated phenomenon, what it was pronounced to be two thousand years ago, *fallacissima res.* We think Dr. Buchan has erred in this respect on the subject of pain. Singular exceptions to the importance of this symptom, even when severe, are sometimes presented to us; cases in which it may almost be called unimportant, and in which *local* attention to it would be absolutely mischievous. Thus we have seen excruciating pain in the region of the liver, instantaneously and permanently relieved by freely laying open a carbuncle in the back. On the other hand, cases, in which the pain is by no means a prominent sign, are often of the most serious character, of which Dr. Buchan has himself

accidentally furnished a sufficiently strong, but by no means a solitary example, when treating on another subject.

'A man had for many months been affected with dyspepsia, or rather complete loss of appetite, accompanied with extreme extenuation. He continued, however, to take small quantities of food till the time of his death. On examination of the body, a large portion of the stomach was found converted into a hard scirrhous mass, interspersed with dark-coloured tubercles, presenting altogether the character of cancer. In other parts of the stomach there were a number of apertures, which, during life, must have been connected by adhesive inflammation with the neighbouring viscera, by which the escape of the contents of the stomach into the abdominal cavity was prevented. Notwithstanding the existence of this mass of disease, the patient never made any other complaint than of a dull burning pain at the pit of the stomach.'—P. 38.

Again, we cannot give a better instance of the inconvenience of speaking separately of symptoms, and of drawing conclusions from them detached from the group of appearances of which they must always form a part, than by observing the manner in which the author just quoted has treated this simple preliminary question of pain. He observes, first, that —

'Pain in the front of the head generally indicates fulness of blood; in the occiput, or hind head, exhaustion or nervous debility, frequently consequent to fatigue. The former is relieved by blood-letting and other evacuations; the latter requires repose, cordials, and gentle opiates.'

How satisfactory such a plain distinction appears! yet we are surely warranted in saying that nothing can be more delusive. Does not daily experience shew us cases of determination to the head, in which the vertebral arteries seem chiefly concerned? Do we not continually find the nervous and the weak, the sensitive and the dissipated, afflicted with pains in the forehead, which are aggravated almost beyond endurance by 'blood-letting and other evacuations?' Imagine a student fortified with this dogma of symptomatology, and say how many mistakes it would require to deliver him from an error so unfortunate for his patients! The dogma is even inconsistent with the very sentence which follows it.

'Fixed pain seated over one of the eyes, which has been termed clavus hystericus, indicates torpor or debility of the stomach, generally removable by warm, bitter eccoprotics.'

We do not mean to deny this altogether, though we undoubtedly object to its being adopted as a maxim. The symptom is a very common one, and sometimes yields readily enough to tonics and valerian; but it is sometimes a part of

other complaints, occurs in violent paroxysms, and is not, by any means, so tractable. In short, it is not the truth of the axioms, but their general application and their distinct value, which we dispute. Thus, separately taken, we cannot see the value of such observations as, ' Pain of the small of the back is the precursor of fevers;'—' Acute pain of the bowels indicates inflammation, diarrhœa, dysentery,' &c.;—' Aching of the knee is symptomatic of disease of the hip-joint;' with many others of a like kind. Pain of the back may be felt a thousand times, and from a thousand causes, without being the precursor of a fever, and so of the rest. The symptoms are only valuable when considered in conjunction with others. But it is unnecessary to pursue this subject any farther.

To revert, then, to the subject of our observation of the patient, it is evident that our means of doing this will be amplified in proportion to the perfection of our external senses, and to their vigilant exercise, as of the touch, sometimes by pressure, sometimes by percussion, sometimes as our only means of ascertaining the form and nature of morbid growths which cannot be subjected to view; of the hearing, during percussion and in what is called mediate auscultation; of the sight, both in general observation and minute examination. ' Of all the qualities,' says M. Martinet, ' with which a physician should be gifted, there is none more essential, and more important towards the value of his observations, than that of delicate and faithful senses, which will become still more perfect by being exercised. He should possess penetration, without too great subtilty, a wise discernment, and, above all, a great deal of patience.' It is, we fear, from some want of the last-named precious every-day quality, that the accurate diagnosis afforded by the stethoscope has yet, comparatively speaking, been profited by among practitioners so little: but there is no denying, that the neglect of that valuable instrument is in part attributable to the circumstance of its exclusive information being confined to states of disease not admitting of cure. Elevating as may be the sentiment of pursuing medical researches as a pure study, ' not of this noisy world,' it is impossible to secure the practitioner from moments of responsibility in which he feels, wrongly perhaps and ignorantly, but yet strongly, that he would sacrifice all his boasted science for a possible extension of his practical resources, and accuses himself of having missed the latter in his pursuit of the former: and it is the remembrance and the dread of these self-accusing moments, which makes all medical men so eager after practical knowledge, and often negligent of the right way to its acquirement from over-eagerness to find the shortest. One advan-

tage arising from the use of the stethoscope, a subordinate and adventitious one, but yet of great value, is, that by revealing to us the *exact* state of disease in maladies of one part of the body, it makes us dissatisfied with such *general* ideas of the affections of other parts as are frequently conveyed by phrases in common use, with very little meaning attached to them. How often we are told that a patient has 'a liver complaint,' or, with a greater appearance of wisdom, that the disorder is 'entirely in the digestive organs!' In these cases, we should not dissemble with ourselves, or cloke our ignorance under such vague and hollow expressions, but carefully examine what ideas we really possess concerning the existing state of the disease, and our reasons for entertaining them: we should ask ourselves what is the nature of the disease, what structure or part of the body, or of any organ of the body, is the seat of it, and what is the present state and stage of it. If we cannot answer these questions, it becomes us to be humble, and to seek for further information; for by this process of mental exertion alone is it that

—— 'old experience can attain
To something like prophetic strain.'

But of all the means of acquiring a knowledge of the condition of the patient, independent of direct question, *observation* of the patient is perhaps the most important: there may be much difference of opinion respecting the extent to which this may be useful, for few people have sufficiently cultivated their powers of observation to be fully aware of their extraordinary capabilities. The *visus eruditus* is not a peculiar gift of nature, bestowed on one or two individuals among many: the organs of sense may, it is true, be more highly finished in one individual than in another, but in a general way the superiority of an observer over other observers consists less in his having abler faculties, than in his making a better use of them. On this subject M. Double expresses himself very strongly; he says—

'It is from this source (observation of the attitude and general appearance of the patient), more than from any other, that the physician obtains certain information relating to the character, the period, and the danger of the malady: I would give up the practice of medicine if I must be deprived of this kind of examination, on the experience of which are chiefly founded the promptness and certainty of medical tact.'—Vol. I. p. 122.

Dr. Buchan's testimony is to the same effect:—

'Doubtless there exists a pathological physiognomy well worth the attentive study of the industrious practitioner. Every internal disease of a serious nature imprints upon the countenance of the patient a certain cast, or air, from which the attentive physician

may derive an important diagnostic. It is related of the celebrated Dr. Stoll of Vienna, that he could distinguish the trade of every artisan who applied to him for advice, by the peculiarity of his manner. I am myself acquainted with an individual who possesses a considerable share of this peculiar discriminative faculty. Let us reflect, that the veterinary practitioner, and those persons who make infantile diseases the chief object of their attention, have no other means of guiding their judgment than attentive observation. The possession of this discriminative faculty in perfection constitutes what has been termed the scientific tact, and forms, perhaps, the ultimate perfection of medical talent.'—P. 20.

Dr. Hall says—

'I have had repeated opportunity of observing an eminent physician, on approaching a patient, and that even during sleep, express his opinion respecting the nature of the morbid affection, the justice of which time and the event have verified. This circumstance first convinced me that there was something in the *general* aspect and appearance of diseases, on which the experienced physician founds a diagnosis, and which it would be of the greatest utility to analyse and describe.'—P. 11.

The appearances which have formed the basis of all the above remarks have been repeatedly detailed, or at least repeated attempts have been made in every age to convey ideas of appearances which can scarcely be described in words. The graphic descriptions of the face and attitude in Hippocrates, Celsus, and many other eminent writers, are familiar to every classical reader, and many of them have been verified by all subsequent experience. That much more is to be learnt in this way, is very evident from the above quotations; and, for this purpose, we may advantageously exercise our discrimination in attempts to surmise the complaints of persons presenting themselves before us previous to their commencing the statement of their diseases: such a practice can be attended with no inconvenience, and will be found creative of an eventual discernment, which cannot fail to prove of singular utility on many occasions. The chief object of all this care is to avoid what it may be feared is no very uncommon fault,—that of deciding at our first visit on the particular nature of a disease, and subsequently suspecting the soundness of the decision without having the courage to reverse it.

We shall now proceed to offer a few remarks on the different divisions of this extensive subject, under the various heads into which it is naturally divided, beginning with

THE FACE AND ATTITUDE.—Among the dissertations contained in Hasper's *Thesaurus Semioticus*, is one by Dr. Benstius of Berlin, exclusively on the subject of the appear-

ances of the face in health and in different diseases, containing remarks and quotations collected from various sources, not only from medical writers, but from divers ancient and modern authors, ethical, metaphysical, and poetical; from painters, from professors of dancing and *ballets*, from devisers of pantomimes and mimicry, Greek, Roman, French, English, and German. We rather admire the patient labour of this gentleman, than acknowledge the advantage of all this to medicine, or even of the abstraction from general descriptions of diseases those parts only which relate to the face. A few extracts, with the notes belonging to them, selected chiefly for their brevity, will, however, best shew the nature of this work, and the degree in which it admits of useful application.

'HEPATITIS.—The face has a dirty and yellowish appearance, and is sometimes suddenly jaundiced: many writers have noticed a deeper redness of the right cheek than of the left. (Stoll. Aphorismi. Schmalze; Diagnostische Tabellen.) If the disease goes on to gangrene, the dirty hue of the face is much increased, and it looks much aged. (Stoll. Aphorismi.) If dropsy supervenes, the face becomes paler, with a leucophlegmatic swelling of the inferior palpebræ. Induration of the liver is betrayed by a cachectic and abdominal, or, as some term it, a hepatic face. (Stahl, Diss. de Facie, morbor. indice. Baglivi; Praxis, Med. lib. i.)

'ENTERITIS.—In no other abdominal inflammation is the countenance so timid, dejected, and collapsed: (whence many physicians have written much at length on the appearance of the face in this disease: particularly Morgagni, Frank, Stoll, Richter, V. Swieten.) As the disease is often of a malignant character, and more dangerous than other inflammations of this class, therefore when the face is much affected, we have to apprehend gangrene.

'HÆMORRHOIS.—It can scarcely be denied that there is something peculiar in the face of persons who labour under this complaint: but it is more easily recognised than described. I should say that the lineaments of the face were more deeply carved, so as more acutely to express the affections of the mind. It is, besides, almost always of a deeper colour; having a somewhat dirty green appearance, and the abdominal (hepatic) character. ("Et pluribus quidem emorroidas habentibus adest color proprius eis, et est citrinitas declinans ad viriditatem." Avicenna, Lib. Canonis—Lib. iii. Fer. xxii. cap. ii. fol. 265. pag. 1.)

'PHTHISIS NERVOSA.—(Tabes dorsalis.) Pale, cachectic face; often a remarkable lividity of the lower eyelid. The eyes are languid, dull, hollow, glassy, wandering, and avoid a direct gaze.'

We have only to add, that all the references are given with the utmost minuteness.

Practitioners are very often consulted in an early stage of the exanthemata, when the eruption has not yet appeared so

distinctly as to be an indication of the kind of disease which is coming on; and it is often highly desirable, and always highly creditable to the person consulted, to relieve the anxiety of parents in these circumstances. The measles are often tardy in appearing, but 'the eyelids are frequently red and swollen, and the eyes injected, *before* the appearance of the rash, and there is usually catarrhal affection; the rash *begins* in spots on the face; and there are sneezing, intolerance of light, &c.' (Hall, p. 20.) Dr. Benstius adds, that a livid or greenish redness of the cheeks at the period of desquamation, shews that there will be troublesome secondary pneumonia; an observation which, if well founded, may be valuable.

In all cases in which the conjunctivæ are observed to be yellow, it has been much the custom to accuse *bile* of being the cause of it, and to fly to blue pill or calomel, 'followed up by a dose of salts to carry it off.' We have long suspected the soundness both of this theory and practice, and are sorry to find the theoretical part sanctioned by Dr. Buchan (p. 81), and by so close an observer as Dr. Hall (p. 16). There is assuredly considerable difference between the large injected yellow streaks in the eyes of a weak dyspeptic patient, and the general saffron injection of the conjunctivæ of a patient in jaundice: and we believe that blue pill and calomel will be as useless in the first affection, as, properly administered, they may be serviceable in the second. Another aphorism, however, of Dr. H. points to the correction of an error quite as general. Speaking of dyspepsia, Dr. Hall says, 'A state of sallowness of complexion, unaccompanied with the appearances just described, usually attends the more *chronic form* of this affection, denominated *dyspepsia*.'—(P. 21.) The error to which we allude is that very general one of calling every sallow face *hepatic*, and treating it as such: the term abdominal, which is used by some of the continental authors, would be preferable, but the last is too vague to be useful, and the former is too precisely erroneous to be safe.

Many physicians have remarked the obscurity often attending the existence of phrenitis; and dangerous as true phrenitis is, and forcible in its characters, we have more than once seen it exquisitely simulated. Its physiognomy is thus noticed by Dr. Hall:—

'In inflammation of the brain, there is generally an expression of pain or uneasiness, manifested usually by knitting of the eyebrows, with delirium or coma; the pupils, from being contracted, become dilated, there are strabismus, grinding of the teeth, spasms or distortions of the muscles of the face, &c. with profound coma, and without the appearances observed in idiopathic fever.'—P. 26.

Corvisart observes, that several diseases of the heart are only cognisable by the appearance of the countenance, but we find nothing pathognomonic in those which are described. When the pulmonary circulation is not affected, the face is said to be often more florid than usual, and when the respiration is impeded, to be generally blue; but neither of these characters is peculiar to diseases of the heart, nor can we conceive a case in which the practitioner would be driven to rely upon them. If peculiarities in the structure of the heart exist, which shew themselves by no symptoms except an altered countenance, they can scarcely be called diseases—but we suspect the truth of the observation itself.

'In general,' says Dr. H. (p. 31), 'it may be observed, that the *brow* is contracted by pain within the head, the *nostrils* are drawn acutely upwards by pain of the chest, and the *upper lip* is raised and stretched over the gums or teeth in painful affections of the abdomen.'

A dark blue or cerulean appearance of the cornea, is remarked by Dr. Buchan to be 'pathognomonic of diseased spleen.' He had opportunities of verifying this observation, by examination of the bodies of many of the men who died after the expedition to Walcheren. The following observation is much less certain, we conceive:—'I have been enabled to detect a secret attachment to the use of opium, a habit daily gaining ground in this country, from a peculiar, flaccid, greasy state of the skin, and a singular intolerance of light.' The last-mentioned symptom is by no means an uncommon attendant on persons of delicate fibre, who are prone to the lighter forms of struma: and, as the ground of Dr. B.'s suspicion would be productive of as much injustice to the reputation of individuals, as another conclusion which he seems to approve of, that when a patient dislikes tea, he is fond of something stronger, we must reject it altogether. We really question whether the belief of the use of opium being daily becoming more general in this country, has any better foundation than the eloquent visions of the 'Opium-Eater.'

The *attitude* of a sick person in bed is generally indicative of the degree of his muscular power, and of the kind of pain which he wishes to relieve. It is, however, to be remembered, that a patient is not necessarily very ill because he keeps his bed, and that his sitting up may be only a consequence of the extremity of his suffering and danger; as in the instance of hydrothorax, and some diseases of the heart and lungs. The malady may have increased until the patient could not bear the supine posture, and his debility may have so advanced as to prevent his leaving his bed, and we shall then observe him first requiring his head to be sup-

ported very high, then sitting up in his bed, or leaning forwards on his knees, and these latter attitudes are in general soon followed by death. Most persons who lie down in health lie on the side, and on the right or left indifferently, a posture which is maintained by a continual muscular exertion: when weakness gains upon the invalid, he is not able to continue this degree of exertion, and therefore lies helpless on his back. The habits of different persons vary much in these particulars, and it is not unusual to find people who can never, or do never, lie on either side to go to sleep, without any disease; so that we must bear in mind the remark of Hippocrates, who seems to have remarked nearly all that can be said on this subject: 'Optimi autem sunt decubitus qui sanorum decubitibus similes existunt.' When a patient lies on his back with his knees raised, he may be considered as illustrating the utmost prostration of strength, and we may frequently observe this attitude in the worst cases of typhus. To use the words of Celsus, 'Gravis morbi periculum est, ubi supinus æger jacet, porrectis manibus et cruribus:'—'mors denuntiatur, ubi æger supinus cubat, eique genua contracta sunt,' &c.—Lib. ii. c. 3 and 4. We more rarely find the patient lying on his face, an attitude indicative, according to Hippocrates, of colic or of delirium. In the most acute case of inflammation within the sheath of the medulla spinalis, which ever came within our observation, this attitude was invariably preserved, the head being drawn strongly up from the pillow. It may be useful to remember, that the constant elevation of the knees by a patient in an *acute* disease, often denotes a distended bladder with retention of urine.—(Hall, Sect. 143.) In all cases, a return to the usual position of the patient is considered a favourable symptom. The description given by Dr. Hall of the attitude of patients affected with inflammation of the bowels, a disease which, when ascertained to exist, warrants such bold practice as should not be resorted to but on the surest grounds, is as follows:—

Sect. 135.—'*In inflammation in the abdomen with acute pain*, a certain position of the body is chosen and retained, and all muscular exertion, motion, or change of position, is carefully avoided:—the patient lies on the back with the thighs raised, or he is supported in a somewhat elevated posture by means of pillows placed under the head and shoulders, or he lies on the side with the thorax and the thighs in a state of gentle flexion on the abdomen; if he be desired to raise the head by muscular effort, an expression of aggravated pain is immediately visible in the countenance; the hands, and perhaps the bed-clothes, are carefully removed from pressing on the abdomen; the arms are put out, and the knees

raised or depressed with great caution; the manner is soft, and the voice low and plaintive, with moaning, and a suppressed kind of complaining.'—P. 45.

Lunatics are, we believe, frequently averse to the horizontal position, and seem to suffer if compelled to lie down. M. Double observes, that in some affections of the head the patients instinctively seek relief by sitting in a chair.

Diseases of the kidneys are often obscurely known during life. Dr. Hall describes the patient, in an inflammatory disease of those organs, as inclining somewhat to the side affected and a little forward, especially in walking; and, in a painful state of the affection, as walking with unusual precaution.—(Sect. 143.) Dr. Buchan has an interesting observation relating to this subject:—'Some years ago,' he says, 'I attended an officer possessed of great firmness of mind. His complaint was supposed to be a disease of the kidney. While he slept I had frequently observed his lower lip to become suddenly pale, accompanied with slight convulsive motion in a lateral direction. After death, one of his kidneys was found converted into a bag of pus. On consulting Morgagni, I found this peculiar appearance mentioned as a diagnostic symptom of diseased kidney. Hence may be inferred the advantage of paying a minute attention to the science of symptomatology.'—P. 85.

Hence, we should rather say, may be inferred the importance of that daily and nightly study of Morgagni, which used so forcibly to be recommended by Dr. Gregory. But we shall have to refer to this hereafter.

The interesting nature of these inquiries, their almost boundless extent, and, we believe we may add, the little familiarity which practitioners in general have with treatises exclusively relating to them, induce us to prolong the examination of the other divisions; but the remainder of our examination must necessarily be deferred to another Number.

II.

REVIEW OF MEDICAL THEORIES.

Article I.—History of the Theory of Stahl.*

It has often struck us, that it would neither be uninstructive nor unentertaining to give a detailed history of the different medical theories which have from time to time been published

* Commentarius de Differentiâ inter Hoffmanni Doctrinam Mechanicam et Georgii Ernesti Stahlii Medico-Organicam. A Frederico Hoffman.

to the world, and we had determined to draw up, in a short space (as at the time we thought this might be done), a general view of such doctrines. A somewhat more intimate acquaintance, however, with the subject, has appeared to render this plan incompatible with such a detail of the respective systems, as would not make us liable to the imputation of occasional partiality. We have, therefore, preferred to lay before our readers separate papers upon the principal theories, not in any regular order, but as our own inclinations, our opportunities of procuring materials, or any other circumstances, may render convenient. Whether or not hereafter we may endeavour to form these into a regular whole, we have not yet determined; but we do not consider ourselves precluded from following this course, because we may have already published the component parts. Pursuant, therefore, to this scheme, we purpose, in the present paper, to give an exposition of the doctrines of Stahl and Hoffman, or at least of the former; and in doing this, we shall shew some very extraordinary coincidences between the doctrines of Stahl and those of the late Dr. Caleb Hillier Parry. We have, however, no invidious intention in shewing this agreement; nor can any thing be farther from our thoughts than to insinuate, that Dr. Parry has made any unfair use of Stahl's writings. Our own conviction would be, that if Dr. Parry had ever read Stahl, very many years had elapsed from that time till he wrote his own elements; and that what he had drawn from that author, and what was the fruit of his matured reflection, were so amalgamated in his own mind, as not to be distinguishable by himself. In making this observation, we demand that we may not be supposed to be influenced by the irritable, and, we may be allowed to say, unfair style of criticism which has been adopted by his son, Dr. Charles Parry. We are not indeed at any time disposed to be worked upon by threats, nor harsh words, and still less when we find implicit deference to be the only terms upon which we can be allowed to have read an author with attention, or to have been acquainted with his meaning. Our respect for the talents of the late Dr. Parry, for his industry, and his writings, is great, yet we can neither be so forgetful of ourselves, nor of the esteem due to the Doctor's own contemporaries, as to say, that he has proved all his doctrines, or indeed that they are sustainable. These are not the days in which novelties are rejected with disdain, nor within our limited experience is the medical public, at least that part of it of which the press is the organ, the most notorious for refusing new remedies or new theories; and if indeed we believe the celebrated Burke, they even more readily adopt

novel dogmata than any other class. Yet it cannot be hidden from Dr. Charles Parry, that the Elements of Pathology and Therapeutics attracted not very much attention upon their first appearance; and even upon his own shewing, the doctrines they inculcated were not implicitly submitted to. Our present business, however, is not with Dr. Parry; and we have only so far mentioned him, that our intention in placing some of his theorems by those of Stahl may not be misunderstood,—that we may not be supposed so ignoble, so utterly destitute of every high and even generous feeling, that when, like the opponents of Harvey, we can no longer deny the truth of the doctrines, we are yet determined to refuse them merit by denying them originality. It will be readily understood by this, that to many of Stahl's doctrines we assent, and that Dr. Parry likewise assents to them; so far are we, however, from reflecting upon Dr. Parry's candour upon this account, because he has never mentioned the name of Stahl, that we rather look upon it as confirming the doctrines, since two such competent observers have arrived at the same conclusion. After all, enough will be left to shew that Dr. Parry well deserved his reputation.

Of those who quote, or rather who refer to Stahl at the present day, very few, we suspect, have ever perused his writings; and from the tone in which his name is frequently mentioned in modern books, it would seem as if he were looked upon rather as a theoretic visionary, than as an able, ingenious, and diligent commentator upon pathology, and the successful rival of Hoffman, of whom he was the contemporary and colleague at Halle. Hoffman, though older than Stahl, survived him, and left a posthumous essay, which was afterwards published by Dr. Ernest Eugene Cohausen, under the title of 'Commentarius de Differentiâ inter ejus Doctrinam Medico-Mechanicam et Georgii Ernesti Stahlii Medico-Organicam.' In this essay, Hoffman has very ably and very impartially embodied all his great rival's doctrine, and in a style highly elegant and impressive. We know indeed no medical author to whom we would rather refer a young man, either as an example of elegant latinity or of generally good medical doctrine, than Hoffman; and we can well believe him entitled to the high commendations which that great scholar, the late Dr. Samuel Parr, bestowed upon him.* Stahl asserted, in common with Aristotle and perhaps the majority of philosophers at all times, that man consists of

* Dr. Parr was particularly lively in his expressions; and on one occasion, when mentioning Hoffman, he said, that 'he had read passages in his works which made him jump up to the ceiling.'

two parts, viz. a rational soul, and an organic body; by the soul, however, understanding the cause and principle of all the functions and actions of the human body, whether rational, vital, or natural. It may be observed here, how much, under different terms, the same helps have been at all times recurred to in aid of physiological hypotheses. Willis, who perceived that the rational or intellectual faculties were altogether different in appearance from the corporeal functions, makes two souls, a rational and a brute soul, 'anima rationalis' and 'anima brutorum,'—the one common to men with the lower creation, the other peculiar to man. The different sensibilities of Bichat, though more speciously guarded, are merely similar subdivisions of that which Stahl chose to consider as one, but exhibiting different phenomena according to the instruments it had to operate with, or the substance it had to act upon; while the *materia vitæ diffusa* of Hunter again more intimately coincides with the *anima* of Stahl. Not indeed that all these authors have used the same terms, but they all begin with the same general idea, branching it out perhaps according to the momentary current of their ideas when they wrote, and afterwards worked up, and completed into a comely whole. If we, however, look more candidly into these different hypotheses than we customarily do, we shall probably be induced to consider them merely as means which very celebrated men have employed, to unite a series of apparently unconnected observations and facts together; and in this light, in which we are very greatly disposed to consider the theory of Stahl, we shall find much not only amusing, but profitable.

According to the chemistry of the day, Stahl considered the body as composed of three badly uniting principles,—oil, water, and earth; and very liable, spontaneously or from any external cause, as heat, for instance, to run into putrefaction. From this corruption, however, it is preserved by the circulation of the blood, and the secretory and excretory movements thereon depending, by which the most corruptible matter is continually removed from the body. Wherefore he says, life itself is nothing else than the preservation of the body from corruption, by movements, but principally by the secretory and excretory movements.

The principle of these movements, the vital principle, or *primum movens*, is incorruptible, immaterial, and not only presides over the acts of ratiocination, but is the proximate and immediate effective cause of the actions of the solids, of the heart and arteries, and of all those parts which perform the vital and natural functions; and while thus acting

vitally, it constitutes the principle of nature of the ancients, the *anima brutorum* of Willis, or the organic life of Bichat.

In proof of the existence of such a principle, he adduces very many facts; and some of them will be very readily perceived to be of the same kind with those by which Mr. Abernethy supports the doctrine of life, as laid down by Mr. John Hunter. The language of Mr. Abernethy is, that 'experimental science has not yet informed us of more than reason has suggested, from the consideration of the general phenomena of nature, which is, that the motions and changes occurring in surrounding bodies and in our own, are the results of *some subtile substance or substances*, which enters into their composition, or acts upon them.' Now Stahl, observing that all matter is merely of itself inert, immovable, extensible, and divisible into parts, but void of all motion, activity, or effort, follows it up by stating, what can scarcely be denied, that it is therefore necessary that *some incorporeal or immaterial active principle* be added, to induce motion and action, especially as motion itself is incorporeal, inextensible, indivisible. So far it appears to us that we can proceed safely with these authors; but in the farther development of Stahl's system, much more doubt exists. The great difficulty, and in which it so materially differs from Mr. Abernethy's, consists in his making the rational soul the directress of all the vital operations; yet it must be confessed, that he has shewn no slight ingenuity in his attempt. For he says, that the soul is the proximate and real cause of the movements in our body is manifest from this, that at our will and pleasure we can move the joints and limbs, provided that they are properly constituted as organs of motion, and direct them to the performance of certain determinate acts and purposes. Neither is it only these voluntary acts which are under the governance of the mind, but the vital, impelling, and tonic movements of the heart and arteries, which the ready manner in which these organs are affected by the emotions of anger or terror, grief or fear, sufficiently testify. For the whole vital economy, which consists in the circulation of the blood, and excretory and secretory functions, are greatly changed, without any intervening material principle of causation even in the soundest man. Farther, that from a perverse fancy or depraved ratiocination, the internal functions are injured, as a hair seen among food will in some persons produce nausea; a purgative or an emetic, present only in imagination, will have the same effects as if really exhibited; and the contemplation of a beautiful woman excite the venereal appetite. And lastly, he affirms that the soul is the real cause of the

formation of the fœtus in utero; and he derives his proof from the circumstance of the fœtus being acted upon by the impressions of the mother, so as to be deformed or mutilated from this source, and this not only in the first, but almost ni the last months of pregnancy.*

The physiologists of the time of Stahl, as also indeed many who both preceded and followed him, attributed to the brain the office of secreting an agile and most subtile fluid, by means of which the different sensations were made perceptible in the sensorium, and by which the different actions also of the body were performed. 'We see,' says M. Verduc, 'that the spirits serve sometimes to sensation and sometimes to motion, according to the diversity of the organs; and we may even say, that the spirit which is enclosed in a nerve serveth both for motion and sensation at the same time.' But Stahl had conferred all these properties upon his anima, and therefore dispenses with this use of the brain and nerves; and denies both that such a fluid is secreted, and that it is distributed to the different parts to excite sensation and motion.

Stahl taught also, that the soul, or vital principle, has an intimate knowledge of the tendency of every thing which

* On this last ground of proof, we can well believe that much scepticism may exist, most especially after the very learned and declamatory paper of Mr. Laurence on this subject, in the fifth volume of Medico-Chirurgical Transactions. Nevertheless, we profess ourselves converts, in the true sense of the word, (for through many years we treated with the utmost incredulity every fact which was given us in proof) of the influence of the maternal imagination upon the fœtus. We have a very few collections upon this head, from quarters which we cannot question, and one of them in the brute creation. The instance occurred in a bitch, which, when pregnant, was frightened by a seal carried about in a basket, and several of her puppies were born with the fore legs shortened, and resembling the fins of the seal. We do not certainly state this upon our own observation, although we do not question its truth. Should any one, however, think it worth while to investigate its truth, we shall have no hesitation in affording them the necessary information. Allowing, then, the accuracy of this fact, the question asked by Mr. Laurence, 'Does the same effect arise from one cause in men, and from another in animals?' is readily disposed of. Both being subjected to the same emotions, are liable to the same effects. If we may be permitted to observe upon the opinions of an individual for whose acquirements we entertain the highest respect, we should say, that he has not treated this subject with his wonted acumen, since he has supposed, that they who infer the production of some monstrosities proceeding from the imagination, maintain that this is the only cause of monstrosities. This is, however, by no means the case; and questionless, very many aberrations from perfect formation occur, not referrible either to this or any other known cause. We have said more upon this subject than perhaps we should have done, from an anxiety to rescue Stahl from the undeserved contumely with which his medical writings have been treated.

happens either within or without the body, whether favourable or unfavourable to its preservation; and that, in consequence, certain actions were instituted, either to obviate or assist their influence; and he endeavours to prove this, partly as a corollary upon his former assertion, that the soul forms the body, and exhibits the most admirable skill in the fitting and convenient situation, configuration, structure, and texture of the parts, which could by no means occur, if it had not intention, invention, knowledge, and wisdom, and these qualities are also shewn in repairing injuries, healing wounds, and removing extravasations.

Now, the crying sin in all this, if we may be thus permitted to speak, is, in attributing intelligence in this secondary cause, for such Stahl himself considered it, referring all its properties to the great Giver of all, and acknowledging his superintendence in the whole microcosm of man. And only let us candidly consider his doctrine, as far as we have hitherto explained it; and what in fact is it more than an acknowledgment of design in the fabric of the animal body, and of which Archdeacon Paley has since made so much use in his Natural Theology? Nor, moreover, if thus looked at without prejudice, does it much vary from any other of those hypotheses, which have, at various times, had their reign over the whole domain of nature. Mr. Abernethy, advocating the doctrine of John Hunter respecting the *materia vitæ diffusa*, applauds the great minds of antiquity, who were disposed to believe that there were invisible causes producing the alterations which are visible; and again, 'what was called the *anima mundi*, was by many considered as a distinct and active principle, and was not confounded with intelligence of any kind; whilst some used words significant of intellect, without apparently having any clear ideas of intelligence:' and it is in this last number that perhaps Stahl must be ranked, and even Mr. Abernethy's own favourite and truly gigantic physiologist, John Hunter. Few persons are so little acquainted with the accusations of Mr. Laurence and his followers, as not to know that this custom of attributing design, and, shall we say, consequently intelligence, has been one of those most frequently made, and most pertinaciously persisted in, against John Hunter, and from which (what, if the difficulties of the subject were not considered, could hardly be expected,) the accusers themselves are not free. In the Lectures before the College of Surgeons, we are told that Mr. Hunter, 'in speaking of the properties of life, says, it is something that prevents chemical decomposition, to which dead animal and vegetable matter is so prone; that

regulates the temperature of the bodies it inhabits, and is *the cause of the actions we observe in them;*' and though the language of Stahl be not precisely the same, what more does he say, in fact, but that all the functions of the living body are under the superintendence of a vital principle, which he calls the soul? We have somewhat digressed in all this from the immediate purpose of this paper, which is to explain the doctrines of Stahl, and we have certainly done so with 'malice propense.' For we thought that it might propitiate some little the haters of theories, and especially the wholesale contemners of the anima of Stahl, to know that a philosopher of their own day, possessed of all the knowledge which the advances of philosophy could afford him, and of such natural talent as almost, perhaps we ought to say quite, to constitute him one of the great landmarks of his age, has yet embraced similar views, and made it a great business to employ his eloquence in advocating and extending their influence. If, indeed, we are called upon to state our own opinions on this subject, we can say little more than that its importance has been overrated, both as an object of attack and defence. It is not by the existence of this principle that we can be directed, but by the different manner in which it exhibits itself in the various organs; and in this all parties are equally agreed. We can, however, by no means bring ourselves to deny the existence of such a principle, though we hold it to be perfectly distinct from every question of politics, of morals, or religion. As we proceed, we shall find many other coincidences between some of our modern physiologists and Stahl, which, however, we must, in many instances at least, omit to mention.

Consistent with the opinion that the body is but a collection of instruments under the direction of the vital principles, Stahl will not refer the occurrence of death to any necessity dependent upon the structure of the body, but that the Deity confers upon the human mind the *ens motus*, a definite and limited power of producing vital actions, and hence that it finally ceases spontaneously from actuating the body. On which account, the cause of life and death is not to be sought in the organic body, but in that moving principle, which at length ceases to excite the vital functions, especially if it be remembered, that so much injury is continually happening to the body, from external and material causes of disease, which the vital principle may be no more able to remove or expel. To this vital principle modifying the various functions, Stahl attributes the different temperaments.

Having thus given a very brief outline of the manner

in which Stahl supposed the vital principle and the organic body to be related to each other, we proceed to the consideration of his pathology.

That doctrine which Dr. Parry has inculcated only partially, viz. that diseased actions are sometimes salutary processes,* is in the system of Stahl insisted upon as universally true. The sentient or vital principle has a provision against every thing hurtful, early foreseeing and endeavouring to prevent its baneful influence; and hence he states, that fevers and spasmodic affections are not pernicious in themselves and in their own nature, but are instituted by a preserving principle, for the most salutary purpose of excluding or expelling any noxious substance. Consequently, nature is the best physician; and the part of medicine is only to assist nature in her work, than to disturb which, nothing can be more dangerous.

Of all the causes which tend to produce disease, plethora† is the most frequent; so much so, that the founder of the theory we are explaining asserts it to be almost universal. For if there be too much blood, it stagnates, is obstructed, or, in modern language, congested; in time becomes, from these circumstances, corrupted and putrid, and the abundant source of chronic or acute diseases. But as regards the actions of poisons, these are twofold: either they are so virulent, that they strike instant terror upon the governing sentient principle, and hence proceed prostrations of strength, faintings, and even death; or they excite convulsions, vomitings, &c., which are to be considered as salutary and wholesome actions, instituted to expel the offending cause.

The sentient principle has two methods of endeavouring to obviate the evil tendency of plethora. One is by inducing increased secretory and excretory motions, and resolving the superabundant fluid into impure serum; the other by removing the superfluous blood, in its own form, through different emunctories, as the uterus in women, hæmorrhoids and hæmorrhages from the nose in the opposite sex.

Nature however, wise and provident, employs different paths, according to the different ages of the individuals, for

* 'Thus have I endeavoured to shew —

'That many of the movements which constitute what is called disease, and which, for the time, produce disorder of the different functions, whether of body or mind, are in reality processes, the general tendency of which is to restore health and to prolong life.' — PARRY's *Elements*.

† 'The far greater number of the diseases incidental to the human frame depends, at some time or other, on that succession of antecedent circumstances which constitutes the chain of causes, on excessive momentum of blood, whether local or general.' — *Ibid.*

evacuating the superabundant blood. In childhood this is principally through the nostrils, in youth through the lungs, in females after the fourteenth year through the uterus, in men of more advanced age through the hæmorrhoidal vessels. And if this evacuation takes place in proper quantity and in due season, it is salutary and profitable to the body itself; but if in either of these points it should err, very dangerous symptoms ensue: and hence is derived the mode in which particular diseases are more general in particular periods of life.

In the long catalogue of diseases which Stahl has enumerated as proceeding from plethora, there is a great concordance with Dr. Parry, and some similarity in the explanation given of the *modus operandi*. In seeing such an agreement in the following statement, we may, perhaps, be accused of seeing more than is really meant. We shall leave this, however, to the decision of our readers, although to us both explanations seem alike, or so little different, that a similar practice may be grounded upon both.

'In youth, when the impetus of the blood is no longer directed to the head,' says Stahl, 'but rather to the chest, the vessels of the lungs being open, hæmoptysis occurs, and if from any cause this is prevented, asthma, vomicæ, pains in the chest, &c.' And Dr. Parry, after stating the manner in which asthma is most easily relieved, that 'it diminishes as soon as mucous secretion begins to take place, and is more speedily and effectually relieved by spitting of blood,' observes, 'that these facts are convincing proofs of such a preternatural fulness of the vessels of the mucous membrane of the bronchia, as to impede free inspiration, and to produce all the symptoms of spasmodic asthma.'

We shall quote one other instance of coincidence between these celebrated writers, in which language of the same kind is employed, not by any means intending that it should be understood that these are the only instances of the kind, for, indeed, it is impossible to read either author for a few pages without being strongly reminded of the other.

In speaking of local evacuations of blood, Stahl maintains, that the purpose of nature is always beneficial, yet that sometimes she fails in relieving, from the evacuations not being made in proper time, place, or quantity; and the language of Dr. Parry is: —

'Although they may relieve the part which is affected, it does not from thence follow that they restore the patient to health. It may, on the contrary, happen, that the means which, according to the laws of animal life, cure the disease, may kill the patient. This is the case with regard to the effusion of blood either into the

parenchyma or cells of the lungs, which often occurs in peripneumonia, and it is often true in the effusion of fluids into the ventricles of the brain in hydrocephalus. The theory of the curative principle is nevertheless just, and the process, in a great majority of cases, is beneficial to the animal frame.'

With respect to the action of external causes and of medicines upon the body, Stahl denies that they have any active qualities in themselves, but that 'they afford an external and occasional cause to the internal moving principle for instituting various determinate actions, according to its moral estimation of these things,' which is, in fact, saying only what he afterwards says in different words, that medicines have an influence upon living bodies only, and that from their manifest and mechanical qualities no inference can be drawn of their medicinal properties; in fact, that there are no such things as healing ointments *per se*, &c., but that they are the excitants of living actions tending to the reparation of injuries. As might be expected, after attributing the majority of diseases to plethora, venesection he considers as one of the most valuable remedies, both in chronic and acute maladies; and he advises that the operation should be principally performed in the foot; and this he prefers to the upper extremity, as the blood cannot be impelled upwards without injury (motus et impetus sanguinis). He particularly recommends, likewise, with the same intent, in chronic diseases more especially, labour and exercise, with a sufficient quantity of mild potations, and temperance in eating, that thus the motion and circulation of the blood, being increased by the tonic actions of the muscles, not only 'spissitudo,' the mother of so many maladies, may be avoided, but the superfluous fluid may be dissolved into 'salsum serum,' and by increased perspiration be expelled from the body. In order, also, to prevent disease, he advises periodical bleedings at the equinoxes, without any regard to particular temperaments. But the principal duty of the physician is in all cases to follow nature, to observe the methods she pursues, and to assist her processes when they are deficient in energy.

His treatment of fever was the first approach made to the present simple and generally uninterfering plan. Looking at the frequently spontaneous and successful termination of fever, and that, after running a certain length of course, despite of every effort made to arrest it, it gradually ceased and health returned, he inferred that the plan which nature pursued ought to be imitated, and that every thing should be avoided that would at all tend to interfere with her processes. And this leads him to prohibit bleeding in fever,

except very rarely; and even in inflammatory fevers, for this especial reason,—because nature, in fevers, endeavours to diminish the excess of blood by resolution into serum, and not by the evacuation of pure blood; hence the physician ought not to contravene the provident intention of nature. This is certainly not what we should have expected he would have inferred from his doctrines, as explained by himself; but we have abundant evidence for knowing that it is very generally acted upon even in the present day, and we do not believe that one practitioner in a hundred above forty years of age would dare to bleed in fevers. In intermittents, he disapproved of emetics and astringent tonics, and, above all, of the cinchona bark; having observed, what we well know, in some modifications of ague, to be perfectly correct, that not only were relapses more severe and more frequent, but that many severe affections arose from such treatment, as convulsions, dropsy, &c.

In chronic diseases, which he equally attributes to abundance and spissitude of the blood, and more especially its congestion in the viscera and the vena portæ, he also recommends venesections. For attempts are made by nature to evacuate the superfluous blood through the uterus, the hæmorrhoidal veins, the lungs, or through the nose, or congestion in the stomach, the kidneys, &c., which, in any way impeded, produces various and dangerous symptoms, and renders blood-letting absolutely necessary; and this same mode of reasoning is carried to all local diseases, whether affecting the head, the chest, or the abdomen.

Of the medicines that are advised, though far more simple than what were employed in the times preceding him, they were still very composite, compared to what are generally prescribed now. As a refrigerant in fever, he recommended effervescent draughts, nitre or acid mixtures; and in his other prescriptions, the same intentions may usually be recognised as lead to the combining of particular drugs at the present day. All very strong and powerful medicines he rejected, and condemned altogether the use of opiates, as giving only temporary relief, and aggravating the succeeding paroxysms. To tonics and astringents, when employed, he referred the œdema and dropsy in cachectic affections, and was not generally friendly to the employment of those medicines which have received the name of antispasmodics.

We do not think we can do better than finish this article with the opinion of Hoffman respecting his great rival's principles; and in a future paper we hope to lay before our readers the medical doctrines of this celebrated author.

'*I do not deny*,' says this great man, 'that there is much of

Stahl's theory highly estimable, and greatly to be recommended to practice: *first*, because he teaches that health consists not only in the circulation of the blood, but in the due regulations also of the secretions and excretions; and, *secondly*, because, in addition to the pulse and motion of the heart and arteries, which consists in the systole and diastole, he acknowledges yet another principle of the same nature, but more subtile, residing in the solid parts, chiefly in the muscular and nervous fibres, and capable of constriction and relaxation, which he himself calls the "motus tonicus," and the ancients "tonus;" and because he has demonstrated that upon the proper constitution of this tonic motion, the due performance of the natural functions depends.

'He is also among the first who recognised the difficulty with which the blood passes along the vena portæ to the liver, as a prolific cause of chronic diseases; and so much the more, that having no pulse, and, consequently, no sufficient impelling power through the substance of the liver, regurgitations and congestions took place in the viscera and hæmorrhoidal vessels, the fruitful sources of spasmodic diseases. And, lastly, no one among the moderns has so forcibly indicated the dangerous consequences of the suppression of the hæmorrhoidal flux.

'As to his practice, it is chiefly admirable for its safety, that no one following his directions could easily hurt the sick; for he was most adverse to all those powerful medicines which require great prudence in the physician, as violent purgatives, emetics, opiates, strong astringents, &c.

'*Secondly*, That he committed the cure of dangerous fevers and inflammations, for the most part, to nature, and was much averse from disturbing her processes.

'*Thirdly*, That he did not load his patients with a multitude and variety of remedies, but few and select.

'*Fourthly*, That he estimated very highly pediluvia and clysters.

'*Fifthly*, That he was highly favourable to venesection, and especially as a preventive of disease, as, indeed, the most efficient precaution against it, and particularly if employed at the times of the equinoxes.'

Such were the principal peculiarities of the doctrines of Stahl, and the opinion delivered by Hoffman respecting them. In having given them in many instances without comment, we beg not to be understood as entirely subscribing to their justness; yet we cannot, without surprise, remember how much of them is perfectly consonant to the systems, and, what is of more importance, to the practice, of the present day. Though not prepared to advocate, at large, the Stahlian doctrines, enough, we think, has been given to prove that Stahl himself was no idle visionary, nor a mere closet physician. His powers, his ingenuity, and his industry, demand our respect, however much we may be inclined to dissent from his reasonings, or to deny his deductions.

III.

THE MATERIA MEDICA.[*]

THERE is, perhaps, no department of medical science which has attracted more attention in modern times than Pharmacology; and certainly none which has made a slower progress than it has done, in some of its details, and advanced more rapidly in others. This general state of the science, in relation to what it was at earlier ages, is so evidently the result of the recent progress of chemical knowledge, that reference need scarcely be here made to the fact. Indeed, pharmacology is so closely allied to chemistry, that the advancement of the former branch of study necessarily holds a close relation to, and, in some of its departments, depends upon, the progress of the latter. As discoveries, therefore, in chemistry daily added to the knowledge of the physical properties of substances, so that knowledge was taken advantage of, and applied to the highest purposes of science. But as those discoveries were almost entirely limited to mineral bodies, so did those bodies rise in medical importance, until the neglected class of Galenicals was almost altogether thrown into the shade. Hence it resulted, that those substances, which had acquired a classical and imprescriptible right to medical use, were either lost sight of among the crowd of those on which chemistry had thrown no additional light, or were employed in a state of combination by no means according with past experience, and with a timidity commensurate with our ignorance.

It is chiefly, therefore, in the mineral kingdom that the triumphs of modern pharmacy are undisputed. Here chemistry has furnished medicine with some of the most important facts and improvements which have enriched the latter in recent times — has given precision to what was previously known respecting the properties of substances belonging to this class — and, in many instances, ascertained the nature of their composition, and indirectly thrown a considerable degree of light upon their modes of action on living animals. The great utility of this knowledge has been most apparent in its application to the practical purposes of our art; — the individual substances composing this class have

[*] A Manual of Pharmacy. By William Thomas Brande, F.R.S., Secretary to the Royal Society of London; Fellow of the Royal Society of Edinburgh; Member and Professor of Chemistry in the Royal Institution of Great Britain; Professor of Chemistry and of Materia Medica to the Society of Apothecaries of the City of London, &c. &c. &c. 8vo. Pp. 560. London, 1825.

been prescribed with greater decision and utility, because our knowledge of their constitution and properties has been more precise, and hence their services have been more highly valued. It is chiefly owing to these circumstances that modern pharmacologists have acquired an ascendancy over those who had preceded them long before; and it is chiefly as respects mineral preparations that their writings are most valuable. Among the works in this department of science to which the profession has been most indebted, in more modern times, we may particularise, and confidently recommend for perusal, those of Gaubius, Gorter, Hartmann, Lieutaud, Vogel, Bergius, A. Murray, Alston, Cullen, Alibert, Fievée, and Niemann. The works of Dr. Murray, Dr. Duncan, Dr. Thomson, Dr. Paris, and of Mr. Gray, are already in the hands of every practitioner.

The student of pharmacology, who wishes to make himself master of the subject, ought not, however, to content himself with having only consulted modern works in this department of medical science, and still less should he limit his inquiries to the recent works of his own country. The medical literature and science of Germany, France, and Italy, present us with several treatises on the materia medica, which will be perused by the majority of readers with much advantage; and even the works on the subject which have appeared in less modern times will furnish him with much interesting matter, more particularly as respects the very deserving class of Galenicals. The Greek, Roman, and Arabian writers on the materia medica contain, also, much more useful information than those who are unacquainted with their works may be inclined to suppose. What, we may be permitted to ask, do we know more of the virtues of many vegetable substances than may be found in Galen, or, at least, in the writings of Mesue? Considering, therefore, that many useful, as well as otherwise interesting, particulars are to be obtained from the classical and other ancient authors, who have either treated of the substances belonging to the materia medica particularly, or mentioned them incidentally, we shall endeavour to facilitate the researches of those who may wish to refer to these sources. This plan cannot, however, be followed out with respect to many of the older writers: the task would be endless, and the advantages by no means in proportion to the labour required to its satisfactory performance. Those references which we shall add, in the form of notes, may serve to renew many of our pleasantest associations, and to awaken recollections the best calculated to relieve the mind of the weightier cares consequent on the duties of our profession. Even when employing those sub-

stances, whose effects it is our daily occupation to ascertain, the mind may be agreeably amused by the ideas which an acquaintance with those sources themselves can alone suggest; and we shall thus, if we take the trouble to inquire, have it in our power to become acquainted how far our knowledge of the virtues of the vegetable substances, to which those references are chiefly added, has been progressive, or whether or not our advancement in this department of pharmacology has been at all proportionate to the march of general science. For our own parts, we believe that here we have, in several points of view, made but little progress. Of the properties of many plants, there is little to be learnt in some modern works which is not to be found in Galen, Oribasius, Mesue, Clement Clementius, &c.; and as respects their mode of exhibition and application to the particular circumstances of disease, but little has been added since the appearance, at less remote epochs, of the works of Schroeder, Hermann, Walther, Albert, and of some other writers on the materia medica. But very few readers, even at the present day, can peruse the laborious collection of treatises published by Manget, or those of Hoffmann on several classes of remedies, without obtaining much information; and the same may be said of the works of Sylvius, Horstius, Boerhaave, and others. The chief fault of these works is their polypharmacy; but, in numerous instances, the properties of the plants brought together in one formula are by no means incongruous; and in many cases are the advantages of such an assemblage insisted on with truth and propriety, and supported by appeals to observation and enlarged experience. Thus, for example, the reader may find, in Hoffmann's remarks respecting tonics, that their judicious combination and appropriate exhibition will render them the most valuable aperients, under many circumstances which are ably pointed out by him — a fact which, although known also to many writers of experience, has been adduced as a novel observation made by some authors of our own times. The antiseptic and anthelmintic properties of several vegetable bitters have been insisted upon by the older pharmacologists as strongly as by modern ones, and the propriety of combining them with the purgatives obtained from the same kingdom has been copiously exemplified. Therefore, when we find tonic, antispasmodic, aperient, and aromatic plants combined in the same formula, where is the incongruity? Nay more, is not an evident benefit obtained therefrom? If the object be to relieve constipation, spasm, colicky pains, or any similar derangement, can a better plan be devised; or can any one be thought of besides, which,

while it relieves present disorder, will better prevent its return? We are not, however, prepared to deny that the formulæ of the ancients, and of the older medical writers, were encumbered with many useless ingredients, and that they were not always judiciously combined: but we are prepared to contend, and to prove the truth of the assertion, that the moderns, and those of our own country in particular, have erred as much by adopting excessive simplicity of prescription. We have reason to suppose that a combination of vegetable substances, possessed of analogous virtues, or nearly so, is preferable, as respects both the extent and permanency of their effects upon the system, to the adoption of a larger proportion of either one or two substances only. This is not the case with a single class of remedies alone, but it obtains generally. And not only may many individuals of a class be combined, but many of those appertaining to one class may be joined to those of another; and if the combination be made with a due regard to the influence of each, as taught us by experience, and to the circumstances of disease, the general effect will be heightened. Thus, a combination of tonics, antispasmodics, and aperients, when prescribed with a due reference to the condition of disorder existing at the time of their exhibition, will be more tonic, more antispasmodic, and more aperient, than if the same, or even a larger dose, of one only of these remedies had been exhibited with a view to produce a single effect. But this subject has been so well illustrated by many able writers about the end of the seventeenth and commencement of the eighteenth century, as well as by some of the present day, that we shall leave it with stating our belief that, but in few instances shall we obtain the full effects of medicines by giving them in the concentrated and isolated state in which they are extracted from vegetable bodies, unless we afterwards combine them with other substances capable of promoting their action and of determining their effects. We believe that what we gain from the convenience of the form, or diminution of bulk, or gratefulness to the palate, is often lost in the uncertainty of the effect and its evanescent character.

We cannot conclude these cursory observations as to the progress of our knowledge respecting Galenicals, without stating, that we are chiefly indebted to Alston, Home, A. Murray,* K. Sprengel, A. T. Thomson, W. Ainslie, and M. Roques,† for whatever progress has been recently made in this department of the materia medica.

* Apparatus Medicaminum.

† See his truly able and splendid work — the ‘ Phytographie Médicale.’

When we first entertained the idea of bringing the substances composing the materia medica fully before our readers, we intended to make our observations on the classical history, the physiological action, and the employment in disease, of each substance, fuller and more precise than was to be found in any other work. This attempt, on our parts, might have been looked upon as sufficiently presumptuous; but if it had been at all compatible with our other engagements, and the limits of our Journal, we should not have despaired of its performance. Having made many of the most important substances of the materia medica the subjects of clinical experiment, and having it in our power, from abundant sources before us, to know the opinions of the best writers in this department of medical science, as to the properties and mode of action of particular medicines, and their effects upon various forms of disease, the object which we had thus proposed to ourselves seemed not altogether beyond our reach. But as this more enlarged undertaking would occupy too many of our pages, and become, perhaps, tedious to many of our readers, we have contracted our views, and shall therefore give only references where we might have quoted passages. We shall refrain also from stating opinions which may be found in the pharmacological works in general circulation; and in order that our article may not lose the character of a review, we shall make Mr. Brande's recent work on Pharmacy the basis of our remarks.

Having thus gone through, at our leisure, the materia medica and its preparations, we shall then inquire into its arrangement, and develope the plan of classification which first appeared in the pages of this Journal, and which has been subsequently followed, with but slight modification, in the two last editions of the Pharmacology of Dr. Paris, and in the classification of poisons, in the Treatise on Medical Jurisprudence, of the same author.

Abietis Resina.* *Pinus Abies.* — Mr. Brande's remarks on the use of this resin present us with nothing which requires comment. We advert to it chiefly in order to notice the medical use of the tops of the young shoots or branches

* *Classical references.* — Ἐλάτη. Ἐλάτινα Ἄρμη. Græc. ἐλάτη ὑψικόμοιο, Hom.—Virg. Ecl. VII. 66.—Georg. II. 68.—Æn. VIII. 91.—Ovid. Met. X. 94.—Cicer. Tusc. III. 19.—Claud. Rapt. Pros. II. 107.—Plin. XVI. 10, § 18, 42. § 82.—J. Bauh. Hist. Plant.—Raii Hist. Plant. &c.

The Thus, or λίβανος, of the ancients has been considered as the resin of the *pinus abies;* but modern writers, and particularly Dr. J. Billerbeck, seem to have satisfactorily shewn that the Thus, or λίβανος, was procured from the *Juniperus communis.*

of the *pinus abies.* An infusion of these is occasionally employed, in Germany and the northern countries of Europe, as a tonic balsamic and diuretic medicine; and from what we have observed of its use, we think that it is frequently resorted to with advantage. The following is the formula which is generally adopted: —

℞ Turion. Pini Abietis ʒij.
Infunde Aquæ fervidæ ℥viij.

To this infusion may be added some of the alkaline aperient, or deobstruent salts, the spirit. æther. nit., or spirit. juniperi comp. The use of this medicine, continued for a seasonable time, has been found beneficial in several chronic obstructions, which had resisted various plans of cure.

Absinthium. *Artemisia Absinthium.* * — The vermifuge properties of wormwood are much undervalued by Mr. Brande. There is not any of the vegetable tonics which produces a more sensible action on the nervous system than this; and the continued use of it seems to occasion considerable narcotic effects, and congestion of blood in the head. This effect appears to result from the narcotic character of the essential oil, on which its influence on the nervous system depends. Its tonic and anthelmintic properties seem to reside in its bitter extractive matter. This plant was deservedly much used, in torpid states of the abdominal viscera, by physicians both in ancient and in modern times, down to the middle of last century, when it seems to have gone, in some degree, out of vogue. In Germany and France, its essential oil is often prescribed in spasmodic and other nervous diseases. The following recipe is often adopted as an anti-emetic and anti-spasmodic: —

℞ Olei Æther. Absinthii ʒss.
Spiritûs Æther. Sulphurici, et
——— Vin. Rect. āā ʒij. M.
Sumat æger gut. xx. — xxx. omni horâ, aut omni bi- aut trihorio.

Acacia. *Mimosa Nilotica.* † — The gum of this plant is,

* Ἀψίνθιον (*Dios.* III. 26.) — Quasi ἀπίνθιον, not to be drank on account of its bitterness. We cannot agree with Dr. Alston's and Dr. Paris's etymology of the word. — See Lect. on Mat. Med. Vol. II. p. 68, and Pharm. Vol. II. p. 4.

Class. Ref. — Plin. XX. 6; XXIII. 1. — Lucret. I. 934; IV. 11 et 122; VI. 930. — Senec. Suas. VII. Poculum Absinthiatum. — Apic. I. 3. — Quinctil. III. 1. Parum mellis et absinthii multum habet. — Varro apud Non. III. 4. — Gal. de Simp. VI. — See J. Bauh. et Raii Hist. Plant. &c.

† Ἄκανθα Αἰγύπτιαι; — ἄκανθος μέλαινα. — Ἀκάκια. Græc. — *Class. Ref.* — Theoph. IV. 3. — Diosc. I. 134. — Virg. Georg. II. 119. — Plin. XIII. 9, § 19, &c. — Prosp. Alpinus de Plant. Ægypt. — Tournef. Instit. &c.

to the disciple of Broussais, one of the best articles in the materia medica. As a grateful demulcent merely, the following recipe, given by Mr. Brande, may be adopted, or varied according to circumstances: —

'℞ Mucil. Acaciæ ℥j.
Olei Amygd.
Syrup. Tolutani, āā f. ℥ss.
Aquæ Cinnam. f. ℥ij.
——— distillat. f. ℥iv. M.
Fiat mistur. cujus sumatur parum subinde.'

Acetum. — The pharmaceutical history of vinegar is given very fully and satisfactorily by Mr. Brande. On this topic we shall not detain our readers, but proceed to observe briefly, that vinegar, exhibited in the form of injection, with an equal quantity of water, is frequently serviceable in removing obstinate constipation. Birnstiel, in his work on Dysentery, says that he has found two ounces of vinegar and the same quantity of water, given as an enema, most serviceable in relieving the tenesmus usually accompanying the disease. Leak recommends its use in uterine hæmorrhage. The vapour of vinegar is sometimes serviceable in chronic bronchitis. We need not refer to its use in other disorders, nor to its virtues as a destroyer of contagion. In the latter capacity, it cannot be considered as possessed of the least virtue: the beneficial effects resulting from the use of it and of its different preparations proceed entirely from the stimulus which its vapour imparts to the nervous system; and hence it renders the system, like other penetrating odours, less susceptible of a noxious influence. Mr. Brande very justly remarks, that 'a glyster of diluted vinegar is sometimes used in typhus fever, and is a useful evacuant of the lower bowels.

'℞ Aceti f. ℥ij.
Infusi Anthemidis f. ℥v. M.
Pro enemate.'

Aconiti Folia.* *Aconitum Neomontanum.* — Although we cannot agree with Mr. Brande that this plant should be expunged from the materia medica, yet we think that it will not be found beneficial in many instances, and that we have no satisfactory proof of its efficacy in scrofula and cancer. Meckel prefers the infusion of the leaves.

* *Class. Ref.* — Ἀκόνιτον, Græc. Frequently mentioned in the fables of the poets. See Nicand. in Alexiphar. — Dionys. Perieges. V. 789. — Ovid. Metamorph. VII. v. 416.—Theoph. IX. c. 16. — Dioscor. IV. c. 77.— Plin. VI. c. 1; XXVII. c. 100.—Galen. de Simp. Med. Fac. VI. Strabo. XII.

Allium.* *Allium Sativum.*—Garlic, boiled in milk, is a common domestic anthelmintic. Its use in asthma, catarrh, autumnal intermittents, and as an external irritant and revulsant, is sufficiently well known. Cotton, moistened with the juice of garlic, and put into the ear, has been frequently found serviceable in cases of rheumatic deafness.

Aloes Extractum.†—The physical, pharmaceutical, and medical history of aloës is well known. It has been accused, since the days of Fallopius, of occasioning hæmorrhoids. 'Experientia docet,' (he states, in his Treatise de Medicam. Purg.) 'quod frequens usus aloës aperit venas hæmorrhoidarum, quod ego millies vidi, et ex centum eorum qui utuntur frequenter aloë ad excernendas fæces, videbitis nonagnita pati fluxum hæmorrhoidarum.' We have, however, heard this opinion controverted by men of great experience. We believe that much of the irritating effects of aloes on the large intestines is owing to the manner in which it is prescribed. If it be intimately combined with oleaginous, saponaceous, or mucilaginous substances, so that its particles are minutely divided, and rendered more soluble in the upper portions of the intestinal canal, we have every reason to suppose that its effects upon the rectum will not be so manifest as when it is exhibited in a more insoluble form.

'The following pills'—Mr. Brande very justly observes—'are useful for obviating costiveness in dyspeptic habits, but they should not be kept too long in a dry place, as they are apt to become hard, and so insoluble as to pass through the bowels,—an inconvenience which may to a great extent be remedied by the addition to the mass of about a fourth part of sugar or of soap.

'℞ Pulveris Aloës,
——— Mastiche,
——— Rhæi, āā 3ss.
Aquæ, q. s. ut fiant massa in pilulas xx. dividenda, quarum sumantur duæ vel tres ante prandium.

'The time for taking these pills is immediately before dinner; they then blend with the food, prevent flatulency, and are usually found to be operative the following morning after breakfast.'

* *Class. Ref.*—Σκόροδον. Hippocrat. de Rat. Vict. in Acut. Morb. II.—Diosc. II. 182.—Theophr. IV. 7.—Plaut. Poen. Act. V. Sc. 5. v. 34.—Horat. Epod. III. v. 1.—Plin. XIX. c. 6.—Columel. II. c. 3.—Gal. de Simp. VIII.—Virgil. Eclog. II. 11. Galen de Simp. Med. VIII.—Oribas. Med. Collect. XI.—Paul Æginet. VII. c. 3. &c.

† *Class. Ref.*—Ἀλόη. Dioscor. III. 26.—Gal. Comm. 2. in Hip. de Art. c. 49.—Cels. II. c. 12.—Plin. XXVII. 4.—Oribas. VII. c. 27.—Juvenal. VI. 180. Plus aloës quam mellis habet.—*Sedum Amarum* Columellæ?—Actuar. de Meth. Med. V. c. 8. &c.

ALTHÆA OFFICINALIS.*—Mr. Brande sets no high value on the medical properties of this plant. It has, however, enjoyed a long and a great reputation, and is still very generally prescribed on the Continent. The decoction of the althæa officinalis is undoubtedly an excellent demulcent in affections of the bowels, and in several disorders of the chest; and is, notwithstanding Mr. Brande's opinion to the contrary, superior to the decoction of barley, or to gum-water.

AMMONIACUM.†—There are few articles in the materia medica which are more injudiciously employed in some disorders of the lungs than ammoniacum. Wherever there is any degree of inflammatory action existing in this organ, ammoniacum ought never to be prescribed. In the chronic stage of bronchitis, however, and of catarrh, it is a most useful expectorant. In the dyspnœa, also, of aged persons, when this arises from some degree of spasm of the bronchial ramifications, with accumulations of viscid mucus in them, the use of ammoniacum will prove serviceable. Peripneumonia notha, of cold phlegmatic habits, and in very aged persons, is frequently benefited by its use. In these cases, it may be advantageous combined either with myrrh, assafœtida, oxide of zinc, sulphate of zinc, small doses of squills, conium, senega, camphor, althæa officinalis, the kermes mineral, or small doses of antim. tarizat.;—with one or more of them, according to circumstances.

This remedy may be made a useful ingredient in prescriptions for hysteria, chlorosis, emansio mensium, and amenorrhœa, when the system is weak and the pulse languid—for chronic obstructions of the abdominal viscera and glands, and for some cases of passive dropsy, especially when combined with small doses of mild mercurials, or other appropriate remedies—for cold flatulent colics, habitual costiveness, and when there seems to be a loaded or saburral state of the mucous surfaces of the digestive tube, and when the functions of the intestines are impeded by an accumulation of viscid mucus in them. Its combination, in these cases, must be left to the judgment of the practitioner. We have found its internal and external exhibition of service in mesen-

* *Class. Ref.*—Ἀλθαία. Diosc. III. 163.—Theoph. IX. c. 19.—Plin. XX. 21.—Gal. de Meth. Med. XIV. c. 5.—Virg. Eclog. IV. 32; X. 71.—Calpurn. *Ecl. iv.* 32.

Probably derived from ἀλθίω, or ἀλθαίνω, owing to its extensive use in medicine, and as an application to wounds. Or from Althæa, the mother of Meleager.—*See* OVID. *Metamorph.* VIII.

† Ἀμμωνιον. Nicander, in Alexiphar.

teric diseases, and in the dislodging, from the bowels of children, of the viscid mucus containing ascarides. The application of a large ammoniacum plaster over the abdomen, is of great service in many of the chronic disorders of the viscera contained in this cavity. It may be combined, with great benefit to these diseases, with a number of other substances, as castor, assafœtida, valerian, vegetable tonics and bitters, ammonia, sulphuretum antimonii, taraxacum, &c.

Ammoniacum seems to exert its activity primarily upon the nervous system, and chiefly upon the distributions of the great sympathetic nerves, and, through their influence, upon the circulation. Hence its action becomes diffused throughout the frame; diminishing the spasm of debility, from its influence on the nervous system, and increasing the tonic action of the heart and capillary vessels, from the connexion existing between these and the sympathetic class of nerves. We have no satisfactory proof of its being absorbed into the circulation. If, however, absorption of it to any extent actually take place, the circumstance may serve farther to explain its action upon the animal economy. It will be seen from this, that ammoniacum ought never to be exhibited whenever there exists any febrile commotion of the system.

The following formula will be found beneficial in chronic disease of the liver or spleen, or in dropsy arising from a torpid state of the absorbents and venous capillaries:—

℞ Gummi Ammoniaci,
Extracti Taraxaci,
Saponis Venet. āā ℈j.
Pulveris Scillæ gr. vj.
Pilulæ Hydrargyri gr. xv.
Olei Junip. q. s. M.
Fiant Pilulæ xviij.

Instead of the blue pill, or, indeed, in addition to it, a scruple of the sulphuretum antimonii may be added. If the ammoniacum be exhibited in the form of mixture, it may, when there is a very great and obvious want of action, be given with advantage in conjunction with the infusion of the horse-radish, vinegar of squills, and with either the nitrous ether or compound spirit of juniper berries.

Amygdala* Amara et Dulcis. *Amygdalus communis.*—The existence of hydrocyanic acid in the essential oil of

* *Class. Ref.*—Ἀμυγδαλος, Græcorum.—Ἀμυγδαλια πικρὰ, Diosc. I. 176.—Theoph. His. Plan. II. 1. de Caus. I. 21; III. 23.—Plin. XVII. 7; XVIII. 4.—Columel. V. c. 10.—Ovid. Art. Amat. III. 183.—Virg. Geor. I. 187; II. 62.

the bitter almond, renders this latter substance a suitable substitute for the former, in affections of the lungs, in coughs of a spasmodic character, especially hooping-cough, if the patient be not very young;* in asthmatic complaints, and some cases of local irritation,—as in irritable ulcers, diminishing their discharge, or stopping it altogether. It may be combined with camphor, or other antispasmodics, in these diseases; and with antispasmodics and tonics, in disorders of the stomach—in dyspepsia, gastrodynia, cardialgia, and pyrosis.

The oil of bitter almonds, or the hydrocyanic acid, may be added to the mixture prescribed at p. 39, in cases of cough and catarrhal irritation of the larynx. If the oil be preferred, about eight or ten minims will be found sufficient.

From the experiments of Mr. Brodie and M. Orfila, the oil of bitter almonds and the hydrocyanic acid seem to act, when given in small quantities, as stimulants to the involuntary and voluntary classes of nerves,—if they be exhibited in large doses, they overpower their vital action, impair their sensibility, and operate as powerful sedatives of the functions of the large nervous masses. The sedative effects produced upon the brain and nervous system are soon followed by a remarkable diminution of all the organic and animal functions; the changes produced upon the blood by respiration become impeded, or altogether arrested; and venous blood being consequently circulated for a time, thus serves to heighten the primary effect. In order to counteract these effects, ammonia, and other stimulants, as coffee, turpentine, &c. should be exhibited, and effusion of cold water on the head may be resorted to.†

'The expressed oil of sweet almonds,' Mr. Brande observes, 'forms with alkalies a soapy mixture, which may be substituted for emulsion, or which sometimes, with an increased quantity of alkali, is used in renal and urinary irritation, especially that arising from uric sand.

'℞ Olei Amygdalarum f. ℥ss.
Aquæ Rosæ f. ℥ij.
Liquoris Potassæ f. ʒj.
Misceantur agitatione, et adde
Syrupi simplicis f. ℥ss.
Aquæ distillatæ f. ℥v. M.
Fiat mistura, de qua sumantur f. ℥ij. pro dosi.

* We must caution practitioners against exhibiting this powerful medicine to young children.

† For farther particulars respecting this acid, see the works of Dr. Elliotson and Dr. Granville, and an article in the 16th volume of the Medical Repository.

'In cases of catarrh, with hoarseness, f. ʒiss. of liquor ammoniæ is sometimes substituted in the above mixture for the solution of potassa.'

ANETHI SEMINA.* The seed of the *Anethum Graveolens*.—The *aqua anethi* forms, perhaps, the best carminative medicine for the flatulency and singultus of children; and is, moreover, an excellent vehicle for other carminative and aperient remedies. The seeds of this plant exert a considerable stimulating influence on the abdominal functions; and, therefore, prove a useful adjunct to other medicines which are indicated in torpid conditions of these viscera. Schroeder thus enumerates the virtues of the *anethum graveolens*:—

'Lenit dolores, auget lac, conciliat somnum, venereos appetitus minuit, singultui vomituique medetur: et hæc omnia præstat usu interno et externo. Inprimis tamen extrinsecus clysteribus anodynis immiscetur, capitisque cataplasmatis anodynis et somniferis (summitates cum oleo olivarum coctæ).'—P. 534.

(To be continued.)

IV.

M. CHANSAREL'S NEW CHEMICAL DOCTRINE.†

THERE is an epoch in the history of chemistry which it is not very easy to fix, but which every one is persuaded has happened, and which does furnish a boundary or line of demarcation in the busy events of that science, notwithstanding the difficulty of assigning to it day and date. We allude to the general cessation of search after the Philosopher's Stone; and knowing that such a search did cease, pretty nearly, perhaps, about one particular period among men of science, we think the question might not be frivolous,—on which side of that epoch have the most useful, the most important, and the most AUTHENTIC, discoveries in chemistry been made? All the world would exclaim — on this side, cer-

* *Class. Ref.*—Ἄνηθον. Græc. Used for garlands by the ancients. See Theocrit. Idyl. VII. et Virg. Eclog. II. v. 48. It was given, according to Plinius Valerius (IV. c. 27), to the Athletæ, as an ingredient in their food, in order to sharpen the appetite. Theoph. Hist. Plant. I. 18.—Diosc. III. c. 67.—Plin. XX. 18.—Columel. XI. 3; XX. 120.—Unguentum Anethinum, Diosc. I. 52.—Pullus Anethatus. Jus Anethatum, Apic. VI. 2; VII. 6.—Oribas. Synop. I. c. 22.

† Nouvelle Doctrine Chimique, &c.—*i. e.* The New Chemical Doctrine, followed by a Dissertation on Poisons and Counterpoisons, and a Proposition concerning New Methods of Treatment in Cases of Poisoning; with some Observations on the General Toxicology of M. Orfila. By Chansarel, Pharmacist in Bordeaux, &c. &c. Paris, 1824. 8vo. Pp. 200.

tainly. But if there be truth in M. Chansarel, we must ask all the world, if they are *very* certain of that?

O ye powers and powerful agents of nature, science, and art!—ye Scheeles, Cavendishes, Blacks, and Voltas—ye Murrays and ye Thomsons—*cum multis aliis*—and thou, greater than all, the greatest as well as the last of discoverers—when we cast our eye to yonder shelves, and see how much among you has been contributed to make them groan, and then return to the little book before us, we know not what to think! Discovery has been carried too far—it has gone beyond its boundary, and must retreat to a position within its former limits. We have found out too much—we have proved too much; and, in logic, this is to prove nothing. In chemistry, it is to be feared that we have discovered more than was discoverable—but we are as yet spared the dreadful apprehension (in its fullest extent) of having discovered nothing at all—and the duty more immediately devolving on us is, to *dis-discover* a portion of that which we have vaunted us of proving and demonstrating. Here comes a brave *Bordelais*, with a little book, to make us unsay, and unthink, and disprove no trivial matters!

It is no longer considered good taste to burn and destroy men whose opinions are not the same with those of every body else; or to imprison and punish the advocates of new doctrines and views, of whatever matters that concern the world, either of learning or science—however fashionable it may be to abuse, contemn, or discredit them. M. Chansarel, perhaps, may escape those awful consequences, which we are not quite sure that he is, in reality, so much afraid of as he pretends. Baron Cuvier (it may be true) will not go to see the *fossile skeleton* on the Boulevard des Capucines, because, if it be a real man, he is come to overturn the baron's theory; yet the stony bones will not be the less allied to animation that the distinguished geologist disdains to breathe upon them; and M. Chansarel may not tell a word less of the truth, should no one deign to prove the validity of his experiments by repeating them.

For our own parts, and for our own sakes, we would beg to say that we are not to be massacred along with our author, because we have brought his book into a little more notice than, perhaps, it might yet have attained. We do not constitute ourselves judges of the matter; but having been rather struck with the merits of the performance, we think it of sufficient importance to convey some idea of its nature to our readers.

Our author is what some might designate a bold man. No sooner do we turn the title-page than we find the fol-

lowing Jonathan Swift-like exordium, unintroduced by any prefatory matter whatever: —

'In displacing water from the rank of the elements, to which the ancient philosophers had, with good reason, assigned it, the authors of the new chemistry have been ambitious to imitate those modern philosophers who, to the prejudice of the great *Joshua*, that stopped the sun in his course, now consider that luminary as a fixed body, placed in the centre of the universe, before which the earth incessantly revolves,' &c.

He then proceeds to dispute the doctrine of the compound nature of water; maintaining that the production of this fluid by the combustion of oxygen and hydrogen, in the usual manner of the experiment, does not *form* the water, but merely causes the deposition of that water which was previously contained in these gases — these bodies, like all others, being subject to humidity, which is set at liberty by the destruction of the inflammable principle through combustion.

The other experiment of separating water into constituent parts, of oxygen and hydrogen, he likewise pronounces to be a fallacy. Distilled water, made use of in the experiment, contains aërial particles, and oxygen in particular, which can be separated only by presenting a substance for which it has a stronger affinity; and iron, heated to a certain degree, manifests such affinity. According to our author, therefore, it is not surprising that the gases in question should be educed; but such would not be the case with water *deprived of its air*. We do not exactly comprehend this dogma; for he himself asserts the impossibility of performing the experiment with success.

He contends that it is proved, by many experiments, that it is not the water in this case which is decomposed, but the metal submitted to the action of the oxygen contained in the water. He mentions, that a piece of iron, heated to redness, if plunged into cold water, becomes oxidated, which will not be the case if placed in boiling water; and that if two pieces of the same metal well cleaned be introduced, the one into a phial of boiling water, and the other into one filled with cold water, and the two vessels be well closed, in the course of a night the first will undergo no change, while the other will be found sensibly oxidated.

In advancing the same opinions as to the decomposition of water by the solution of metallic salts, he maintains the doctrine, that metals themselves are compound bodies, consisting of a particular basis, and an inflammable principle, viz. hydrogen. 'Every burning substance which leaves a residuum, or gives rise to the formation of any product what-

ever, must doubtless be composed of two bodies, if not of more.' The doctrine of the composition of metals he extends also to sulphur, phosphorus, and other substances commonly received as simple bodies.

With regard to the changes that take place by the combustion of metallic substances, he says, that

'The bodies susceptible of the gaseous form exist in the metals in an entirely different state from that in which we obtain them in our laboratories; that they exist in a dry state; but that, in separating them from their natural combination, they take such quantity of water as is requisite to constitute gas; which, in resuming their original form, they relinquish. Hence, that water which accompanies the reduction of metallic oxides, the theory of which is easily understood, if it be kept in mind that the oxides are merely metals deprived of their combustible principle, and united with oxygen — that charcoal is a combination of carbon and hydrogen — that, in this state, the oxygen, having a greater affinity for carbon than for the metallic basis, abandons the latter, in order to unite with the former, thus constituting the carbonic acid disengaged; while the hydrogen, separated from the carbon, and coming in contact with the metallic basis, run in a separate state of existence, unites with it, and causes it to pass once more into its original form — hence the reduction of metallic oxides by means of charcoal.'*

He asks, why, if water be composed of the gaseous bodies in question, it cannot be formed by directly mixing them without the aid of combustion, and why they cannot be separated without the intervention of acids and minerals? And we have here a very curious and *edifying* apostrophical annotation: —

'It has pleased God to form water to refresh and serve as an agent to nature; and were it true that water is susceptible of decomposition, and that it were, in fact, decomposed by entering into the vegetable and animal economy, at the same time being insusceptible of recomposition, unless by burning these gases in closed vessels, since the formation of vegetables and animals, there would not be a vestige of it remaining, unless we could suppose that there are in nature agents for the collection of these gases in balloons, where they undergo combustion in the same manner.'

The grand secret is, that

'*Hydrogen* plays the principal part in the phenomena of nature, and that it exists in all combustible bodies; it forms a constituent

* M. Chansarel asserts, that his opinion as to the simplicity of water is not confined to himself, but that many chemists, however they may have advocated the contrary doctrines, are, in fact, persuaded of the same thing, although, for various reasons, they dare not, or will not, avow it.

of the electric, and the basis of the magnetic fluid, as well as of the *essence of the needle* which directs the mariner from pole to pole.'

M. Chansarel carries his principle farther than we can possibly, at present, follow him. He ascribes the apparent formation of water by the explosion of various powders, the action of alkaline metals in the supposed decomposition of that fluid productive of hydrogen to new combinations, among the principles of these substances, when exposed to the influence of the requisite agencies. In order to prove that the oxygen produced in the heated iron tube is obtained from air contained in the water, and the hydrogen from the metal, let oxygen alone be made in like manner to pass over iron shut up in a porcelain tube heated to redness — the result will be the oxidation of the metal, and likewise the production of hydrogen gas.

Upon the ground that water has an extreme avidity for air, he states, that its freezing does not depend upon the absence of caloric, but on the presence of air; and that, if it be closely shut up while in a state of ebullition, it will not congeal, however low the temperature to which it may be exposed.

Our author defends the Stahlian doctrine of *phlogiston*, a word which, if we rightly understand him, he receives as synonymous with hydrogen in the dry state; he accuses the modern chemists of neither understanding, nor sufficiently studying, the ideas of its author; and predicts that, sooner or later, the most eminent among them will be obliged to retrace their steps.

The *Traité de Chimie Elémentaire* of Thénard comes often under his correctional notice. The author of that work enumerates forty-seven simple bodies, of which M. Chansarel recognises but very few as being really so.

Hydrogen, we are now told, is a compound of two principles at least, if not of more, *i. e.* of a peculiar basis, which he believes to belong to the class of *Carbones*, and of an inflammable substance analogous to that which resides in all combustible bodies, and which is destroyed by combustion.

'This gas exists in the dry and combined state in all combustible bodies; it is this which has deceived the most eminent chemists, and formed the object of the great and miraculous experiment of the pretended decomposition of water, begun by Fourcroy, Vauquelin, and Seguin, May 13th, 1790, and continued day and night to the 22d of the same month, in order to obtain — what? — we dare hardly mention it — 1.039.338 grains of hydrogenous gas by the intervention of zinc and dilute sulphuric acid; which quantity gave

in weight, by combustion with 6.209.869 grains of oxygen, 12 oz. 4 dr. and 45 grains of water, mixed with several foreign bodies.'

M. Chansarel has the effrontery to compare these *savans* to so many alchemists, watching day and night the *projection* of the Philosopher's Stone!

In like manner, borium is a compound of two similar principles—proved by submitting it to a due degree of heat in a tube of iron or porcelain, and passing oxygen over it; the result will be the production of boric acid, and the disengagement of hydrogen.

Carbon itself has been the subject of great mistake on the part of chemists: even in its purest form, that of the diamond, it is a compound, always containing this ubiquitary hydrogen, which nothing will separate from it but oxygen—hence the formation of carbonic acid, and the inflammation of the combustible principle. Both charcoal and the diamond are decidedly compounds of two, if not more principles. On the other hand, he denies that potass exists in charcoal.

With regard to the identity of charcoal and the diamond, he admits that they both contain carbon and hydrogen; but, from the fact of the diamond disappearing entirely in the heating process, and the charcoal leaving a residuum, he infers that they cannot be the same. Charcoal is improperly termed carbon, and ought to be designated *hydrate of carbon.* There is no such thing as pure carbon: it cannot be obtained any more than the radices of the metals, whose hydrogen is separable only by the application of oxygen; and carbon, uniting with this, forms the acid, that either separates itself, or fixes on the proper object of its attraction, as potass, for instance, in the combustion of charcoal.

Phosphorus is no more simple than carbon, but, in like manner, a compound of hydrogen and its own peculiar radical. *Sulphur* differs from *phosphorus* in nothing but its basis—and *toujours hydrogène; iodine,* too, is of the plural number—whether *dual* or not we cannot yet say. *Chlorine* is not only compound, but incombustible of itself; and *azote,* though admitted to be simple, is rejected absolutely from the brilliant order of combustibles.

It is impossible, consistently with the scope of the present article, to do justice to our author, by following him through the different articles on which he animadverts. We aim not at introducing our readers to a thorough acquaintance with 'the new doctrine,' but to announce that such a doctrine has been set forth. Of its merits, we repeat that we pretend not to judge. Perhaps what we have done may excite those who are competent to estimate it justly, to examine it closely. Its

discrepancy with regard to the received opinions of even the best authorities of the day, should in no degree impede its progress. This is not the age in which *authority* can annihilate *facts*, or the *opinions* of great men extinguish *proofs* adduced in opposition to them by those of less pretension. We think it our duty to commend the practical manner in which our author has laid his ideas before the reader; and we shall dismiss him for the present, by extracting a short article, as a fair example of his lucubrations:—

'*Of Hydro-chloric Acid.*—This acid, though said to be evidently compounded of equal volumes of hydrogen and chlorine in the state of concentration in which these two gases naturally exist, does not appear to us to be formed without oxygen, any more than those we have already noticed; and since hitherto its nature has remained undiscovered, it is impossible to say that it is deprived of that agent. The hydrogen, which is obtained by the passage of a current of electric sparks by means of platina or gold conductors, is no proof that the gas is a constituent part, or of the privation of oxygen. When the chemists to whom we oppose ourselves shall become convinced by experience, that the metals are compounds of the principles stated above, and that electric sparks are merely hydrogen excited to a state of spontaneous inflammation by friction or some sort of shock, they will perceive that this gas is produced by those same sparks, or by the electric fluid of the conductors employed in the experiment, and that this gas carries acid particles along with it. It is not because chlorine has considerable affinity for hydrogen, that we are to conclude that the latter supplies the place of oxygen. Muriatic acid being undecomposable, as we find from the researches of Henry, Berthollet, Gay-Lussac, Thénard, and Berzelius, nothing positive can be advanced concerning its nature; nor can it be affirmed that it is composed of this or that body, until, by directly combining this same gas with a known radical, we obtain a similar acid. Till this discovery, one of the most advantageous that could accrue to chemistry, we still maintain that the acid in question is no more formed without oxygen than the other acids, and that it is doing considerable injustice to science, to refuse to certain bodies that which can be proved neither by experiment* nor synthesis. We ought to add, that if this acid has no action on combustibles, whether cold or hot, it is because it is restrained by the laws of affinity; but that is no proof, let our *savans* say what they will, that it is the result of equal parts of hydrogen and chlorine. Time and experience will one day prove the contrary, without doubt; and truth will, sooner or later, rend the veil which obscures us with regard to this matter. In expectation of this satisfaction, unquestionably the sweetest that the friends of science can enjoy, we shall now, for the sake of humanity, report what we published long since, under the title of *A Dissertation*

* Query, analysis?

on *Poisons and Counter-Poisons*, adding the results of our experience since that time.'

For two reasons we omit notice of the remaining portion, amounting, indeed, to two-thirds of the volume: in the first place, it is not connected with the prior subject—at least in such a way as to admit of convenient extension or identification, being, in fact, a change of subject; and secondly, whatever may appear to us of sufficient importance to be extracted, we shall shortly lay before the professional public in another and more advantageous form.

We shall just apprise our readers, in conclusion, that about forty of the last pages are an attack upon the Toxicology of Professor Orfila,—a work hitherto so highly appreciated, as to have superseded every other in that department, and even, in great measure, to have been considered the *ne plus ultrà* of a branch of medical science which is ill enough understood in this country. This opinion of the work is by no means our own, highly as we must esteem it; but M. Chansarel brings grave charges against the author, both as to the appropriation of discoveries not his own, and the recommendation of improper remedies for certain poisons. *La Nouvelle Doctrine Chimique* is a small, and not very elegant volume—it is, perhaps, more properly of the tribe of pamphlets—but we shall not be surprised to hear of its making some noise.

PART II.

ORIGINAL COMMUNICATIONS.

PATHOLOGY OF PHLEGMASIA DOLENS. I.—*Case of Phlegmasia Dolens.* By JOHN DAVIES, Member of the Royal College of Surgeons, &c.

IT will be seen from the previous part of the history of the present case, published in the preceding Number of the REPOSITORY, that the subject of it was seized, in about three weeks after her confinement, with an excruciating pain in the left loin and hip, and that this pain darted down into the ham and leg of the same side, the latter of which became insensible, and ultimately dead and sphacelated, so as to require amputation. The limb, above the knee, presented all the appearances characterising phlegmasia dolens. It was considerably swelled, cold, and knotty. Below the knee, the circulation became obstructed in the veins almost immediately after the first attack, and marks of approaching gangrene soon made their appearance. In a week after, sloughing took place

about the ankle and foot, which extended so rapidly as to destroy, in two days, all the soft parts, from the toes to two-thirds up the leg. The limb was removed, as the only chance of saving the patient's life; and for a week after the operation she had no unfavourable symptoms. The amputated limb was examined, and the veins were found highly inflamed, and the blood coagulated in them throughout. I now continue the history of the case from the date at which the patient was stated to be doing well. Mr. B. Cooper saw her on the 20th of May.

21st. — There were no bad symptoms whatever. The patient's appetite was good; and she had had a comfortable sleep in the night. The stump felt quite comfortable; but as there was a little fluctuation under the dressing, it was thought better to remove it. On the straps being removed, it was found that the edges of the wound had not united. The discharge was not great, and it appeared very healthy for the first dressing. Granulations were shooting out over all the surface of the wound, and the appearance of the stump was altogether favourable. All the ligatures came away at this dressing. The edges of the wound were again drawn slightly together with straps of adhesive plaster, leaving sufficient room between them for the exit of the discharge, and the end of the stump was covered over with a pledget of lint, on which was spread common cerate. The cascarilla medicine was continued, with a little opiate at night, and the diet was to be mild and nourishing.

22d. — In the morning the patient was as well as on the day before, but towards evening she had a little tendency to diarrhœa; otherwise she felt very comfortable in every respect. There was a little discharge of healthy pus from the wound. The pledget of lint was removed; but as there was a sufficient outlet for the discharge, the adhesive straps were left. The end of the stump was covered with a soft bread poultice over the plaster. She was ordered to take the chalk mixture, with a little laudanum, for the diarrhœa.

23d. — At eleven in the morning, she felt more irritable than she had done since the operation. The pulse was about 120, and rather weaker than before. The diarrhœa had ceased, and the bowels were comfortable. She complained of no pain any where, but her spirits were depressed. Her appetite, notwithstanding, was tolerably good, and she had slept several hours in the night. The tongue was perfectly clean, and she complained of no thirst.

The dressings were removed from the stump. The granulations and the discharge appeared as healthy as any I have ever seen. The limb above felt cool, and appeared quite free from inflammation; but there was a swelling of the labium pudendi of that side, of the size of half a small orange. I pressed the inside of the thigh and groin, but she did not complain of any soreness. The surface of the wound, although appearing so healthy, was extremely tender. There was a small coagulum hanging out of the femoral vein.

The wound having been cleaned, a soft bread poultice was laid over the end of the stump; after the application of which, during

the time we staid in the house, she felt very comfortable. There were no symptoms now indicating any sudden change. The pulse was by no means bad; the head was not in any way affected; nor was there any pain worthy of notice in any part of the body. The tongue, as already mentioned, was perfectly clean and moist.

Mr. L'Estrange and myself had not left the house half an hour before the patient was taken with a violent shaking of the whole system. This affection came on quite suddenly, while she expressed herself perfectly free from pain; but as soon as she was seized with it, she complained of an insufferable oppression at the heart and pit of the stomach. As Mr. L'Estrange and myself were both out of the way when her friends sent for us, our assistant went to see her, and gave her a drachm of laudanum in camphor mixture. As soon as I arrived — about half an hour after the commencement of the attack—I was greatly surprised to see the patient apparently within five minutes of her death. She was quite insensible and speechless, gasping once every fifteen or twenty seconds only; the eyes were motionless, and drawn upwards; there was no pulse to be felt at the wrist, and the shaking had entirely ceased.

There was now very little hope of her living many minutes; but being anxious to try something, I instantly began to pour some brandy into the stomach. I was able to get liquid down by little and little; and after about a quarter of an hour, when she had taken about four ounces of it, the pulse could be feebly felt at the wrist; otherwise she remained just in the same state. Unless the brandy was being continually given, the pulse immediately sank. Shortly, my partner, and my friend, Mr. Daniel, of Bishopsgate, came to my assistance. We were determined to keep up life as long as stimulants would do it; we therefore gave her, alternately with the brandy, a mixture of æther, spirit of ammonia, and spirit of nitre, as fast as we could get it down. We removed the poultice also from the stump, and dressed it with a strong solution of opium in water, with the addition of spirit of wine; and the chest was well rubbed with turpentine. These powerful stimulants raised the pulse a little, and in about an hour the shaking began to return. In about two hours from the commencement of the exhibition of the stimuli, the patient was considerably recovered. She was now able to speak, and to breathe comparatively freely. The pulse was much improved; but to keep it up, it was necessary to continue the brandy or the æther mixture, in small quantities, every two or three minutes. She was by this time a good deal under the influence of opium. In half an hour more she was much improved; so well, indeed, was she, that we thought ourselves justified in leaving her for a short time, giving orders previously to continue the brandy frequently.

During the two hours and a half we were with the patient, she took about a pint of brandy, an ounce of rectified æther, half an ounce of spirit of ammonia, and half an ounce of spirit of nitre. We left her at half-past three. During the rest of the afternoon

and the evening she continued tolerably comfortable. She slept a good many hours altogether, and took arrow-root at intervals. A table-spoonful of brandy was given to her frequently, but the æther mixture was omitted after the heart became able to continue its action without its assistance.

The stump was dressed in the evening with a weaker solution of opium. At this time the discharge consisted of pure, healthy pus, and the granulations appeared as healthy as before. The opium had taken away considerably the irritability of the wound. There was nothing in the appearance of the wound, or of the limb above it, to account for the extraordinary symptoms which were manifested during the attack.

I saw the patient between twelve and one at night. She was then asleep. Her pulse was good, considering the nature of her case, and her breathing was easy. She was evidently under the influence of opium. She had had a stool of a perfectly natural colour.

She was ordered to have arrow-root or sago, with a little brandy in it, frequently in the course of the night, and to drink a little brandy and water at intervals.

She continued in a very comfortable state during the night; she slept three hours without intermission, besides several short naps both before and after. She took her sago and brandy with a degree of relish, and she complained of no particular pain in any part of the body. These comparatively favourable appearances continued till about seven o'clock in the morning of the 24th, when she was seized in the same manner as on the day before. I was by her bed-side in less than ten minutes from the commencement of the attack. She had all the symptoms which have been already described, as relating to the previous attack. I had recourse to the same sort of stimulants. After every spoonful, the pulse could be felt at the wrist for about half a minute, but it sunk again almost before I could have time to pour more down. I continued the stimulus for an hour with a determined perseverance; but all I could do was no more than to keep the heart from ceasing entirely to act. The chest was rubbed, in the meantime, with spirits of turpentine; and the wound was again dressed with the opiate lotion. Even now it appeared healthy. The discharge consisted of white healthy pus, and there was not the least appearance of disease on any part of the surface of the stump.

In about an hour and a half she became incapable of swallowing. I could think of no further means to be tried, except transfusing blood into her vessels; but as the effect and fitness of that remedy was doubtful, and as her friends were not inclined she should be "tortured" even by giving her the stimulants, I did not propose transfusion. She died in about half an hour after she became unable to swallow.

Dissection. — The body was examined forty hours after death. As the examination was necessarily performed late at night, we could not inspect the body very minutely. The fat and muscles

were remarkably oily throughout the body. The muscles were very flabby. The femoral vein of the side affected was inflamed in the highest degree, and its coats thickened. It was full of coagulated blood. This state of the vein extended throughout the iliac, into the cava, nearly as high as the diaphragm. The disease of the vein did not descend at all on the opposite side, from its bifurcation. All the small veins, as far as we could perceive, of the diseased limb, were in a similar state; but we must infer that some of them were pervious, otherwise the blood could not have returned from the arteries. The inner coats of the arteries were red throughout the body; but as I had often noticed this appearance in subjects who had died of phthisis, and several other chronic diseases, where no symptoms of inflammation of the vessels existed during life, I did not consider it inflammation in this instance, especially as there were no symptoms to indicate such an affection before death; for the violent shaking with which the patient was seized was not a rigor, similar to that which takes place at the commencement of fever or of inflammation, but a nervous affection more like that attendant on chorea. This affection of the arteries is more particularly to be observed in subjects who have been considerably debilitated, either by depletion or by disease, before death. Whether it may be owing to the vasa vasorum not possessing a sufficient power to empty themselves during dying, I am not able to tell. The inner surface of the stomach was remarkably pale. The large quantity of stimulating substances poured into the organ before death did not in the least inflame any part of it. The texture of the uterus was very soft, so that the finger might have been easily pushed through it; and its internal surface appeared as if, in some degree, abraded. The thoracic viscera were healthy; so were also the intestines. The brain was not examined, for want of time.

I have related simply the history of the case throughout, with the principal morbid appearances after death. It is difficult to account for the sudden change in the state of the patient, whilst the wound appeared so healthy to the last. We suspected at first that the extremity of one of the nerves might be irritated by some part of the poultice applied to the stump; but after this was removed, and the wound washed quite clean, the symptoms continued for two hours or more, and returned the following morning, while the opium lotion was to it. From the history of this case, as well from another case which I have since seen, and which bears a striking resemblance to the present, I am disposed to think that the *nerves* of the limb are the parts which constitute the first seat of disease. The attack is instantaneous, and the pain most excruciating; but the swelling does not take place until many hours after. If the inflammation of the vein were owing to the pressure of the child before, or during delivery, the disease ought to manifest itself soon after; whereas, in the present case, it did not make its appearance for three weeks after delivery. I have seen a few cases of the disease, in an inferior degree, and in all these it did

not shew itself for some days after parturition. The morbid *appearances* after death are decidedly in the vein; and, according to our present knowledge, to go beyond that, to seek for the original seat of the disease, would be only an *inference* drawn from the first phenomena manifested by the malady.

Any further remarks which I should be able to make on the case, would throw no more light upon the nature of the disease, than the perusal of the history of it alone will do. I shall, therefore, say no more, than that I am much indebted to Mr. B. Cooper, and several other friends, for their kind advice and assistance in the treatment of the present case, and in the examination of the body.

Tottenham Court Road, June 16th, 1825.

II.—*Case of Phlegmasia Dolens.* Communicated by Dr. D. Davis, Member of the Royal Colleges of Physicians, London and Edinburgh, &c.

W. J. W., a medical gentleman, was attacked in the right thigh and leg by phlegmasia dolens, on the 10th of February, 1825, whilst suffering in the last stage of phthisis pulmonalis. He had, at this time, been confined upwards of eleven months with this latter disease, and his pulse was then very rapid, and the hectic flushings strikingly marked. The phlegmasia dolens became perfectly characterised: the whole limb was uniformly enlarged, and extremely painful up to Poupart's ligament; it had a dull white appearance, and exhibited no indentation from pressure. The patient was attended by Dr. W. Williams and Dr. Stour Pennington.

Lint, saturated with warm water, was applied over the whole limb, which was thereafter encased with fine oil-skin: these means gave the patient considerable ease, but produced no apparent alteration of the disorder. The left leg was somewhat swollen, and slightly painful a few days before the patient's death.

Appearance on dissection.—The abdominal cavity having been laid open, the right common internal and external iliac veins seemed unusually prominent, and appeared to the touch of a firm consistence, like chord. Upon opening these veins, they were found to be filled with layers of coagulable lymph, so as to render them completely impervious. This state of disease was traced as far as the upper part of the femoral vein.

The corresponding arteries were healthy. The lymphatics were not examined.

The vessels on the left side of the pelvis were quite pervious and natural.

III. — *Case of Hydrophobia.* By H. Whitmore, Surgeon, London.

On the 23d of May, 1825, at one o'clock in the morning, I was called to Phillip Farrall, aged 44, by trade a farrier. On inquiry,

I learnt that he had eaten his dinner abroad heartily on the previous day, and had drank three glasses of brandy and half a pint of porter. No symptom of any approaching illness manifested itself till about six P. M., when, on endeavouring to take a draught of porter, he found, to use his own words, that 'it went against him,' and he could not allow the pot to go near his mouth. He, however, was not disconcerted at this, and on his road home he again endeavoured, but in vain, to drink some more porter. Between nine and ten o'clock he reached home with much difficulty. By this time his convulsive manner of breathing had become so violent as to alarm the people about him. I found him in bed, labouring under severe spasm about the region of the diaphragm, and complaining dreadfully, whenever the door was opened, of the current of air which blew upon him and increased his sufferings and spasms in a frightful degree. The character of his disease was thus made apparent; but, for better satisfaction, I ordered some water to be brought, which, on its being brought near him and poured from one vessel to another, distressed him very much. He recollected, after inquiries had been made at him, that, about four months ago, while attempting to give some medicine to a little dog, he received a bite on the forefinger of one hand, and on the thumb of the other. Upon examining these parts, no mark whatever could be observed, and no tingling sensation or pain had been felt in their neighbourhood; but he had observed to his wife, some three or four days before, that he had a pain in one arm, which he thought was rheumatic. The dog died of very equivocal disease, in two days after the bite was inflicted.

Upon a closer examination of the patient, his tongue presented a thin layer of a dark glossy mucus; the teeth were covered with sordes; pulse full, hard, and frequent. I immediately took about forty ounces of blood from the arm. He expressed a desire to hold the basin, which he attempted to do; but, as soon as he heard the noise made by the flow of the blood in the basin, he became again violently convulsed, and endeavoured to conceal his face under the pillow, lest he should interrupt the operation, from which he expressed great relief. His irritability seemed much lessened after the depletion; the pulse was reduced in power, but not at all in frequency. No symptoms of syncope supervened. I ordered for him Pil. Saponis c. Opii gr. v. to be taken every half-hour.

2 A. M.—Only one pill has been taken, and that with much difficulty; complains of extreme dryness of the throat, but, on any drink being offered him, the effect produced is much the same as before he was bled, though somewhat less violent. Pulse 120. I directed the pills to be continued. I watched an opportunity, at this visit, to observe the effect produced by a current of air being directed upon him, whilst his attention was occupied in discourse, and remarked that it immediately produced violent convulsion.

9 A. M.—No more of the pills have been taken, nor can medicine or sustenance, in any form, or by any contrivance, be introduced into his stomach: has had several very short sleeps during

the night: has passed some urine, which looks healthy; this he managed by placing the urinal under the bedclothes; but even then, he says, the noise produced very violent spasms. His inability to take any thing by the mouth seems more complete; in all other respects he is much the same as on my last visit.

Noon.—I met, in consultation, Drs. Lambe and Bostock, and Mr. Lambe, who ordered Hirudines x. scrob. cordis—Mist. Assafœtidæ ℥x. ft. enema—Extr. Belladonnæ gr. xii.—to be divided into four suppositories, one to be introduced every four hours.

Half-past Four, P. M.—I met Drs. Lambe, Bostock, Roget, R. Bright, and Mr. Lambe. The above prescription has been attended to, beginning with the leeches, from which he expressed instantaneous and decided relief. Soon after the enema, he had a voluntary alvine evacuation; and, in about five minutes afterwards, I introduced one of the suppositories; but not being satisfied that the whole of it was left in the rectum, I immediately introduced another, making in all six grains of the extract. We now find him far more tranquil. He expressed a wish to take some wine; a teaspoonful of which, with much effort, he succeeded in getting down. Continues perfectly sensible. Pulse weak; ranging from 88 to 100, with many inequalities.

℞ Plumbi Superacet. ℈j.
Extr. Belladonnæ gr. viij.
Ft. pil. iv.; capt. unam 2dâ quâque horâ.
Emp. Lyttæ inter scapulas.

8 P. M.—Has taken two of the pills. Pulse very much increased in power and frequency; skin very hot and dry; more restless. Tongue clean, as it has all along been, excepting on my first visit: complains of much thirst. His inability of swallowing has increased again; and on his attempting it, the convulsion occasioned thereby seems more violent in its character than on my last visit. He spits, with difficulty, a thick, viscid phlegm.

11 P. M.—Met Dr. Bright, and Messrs. Lambe and Aikin. One more pill has been taken: general state much the same as at eight o'clock. It is the opinion of all present, that he is much worse than on our last meeting. There are no inequalities in the pulse, but it ranges from 96 to 120, and hard.

The dose of the cerussa acet. to be increased two grains each, and the belladonna one grain.

25th. 3 A. M.—A messenger came to beg a strait-waistcoat, saying the patient was raving mad, running up and down stairs, threatening to murder his wife wherever he could find her. Up to this time, it had repeatedly occurred to me that this poor man possessed naturally a strong mind, and much reasoning capacity, and seemed particularly attached to his wife. Before his reason left him, he gave particular directions as to his funeral, &c. He was a native of Ireland.

6 A. M.—Found him very incoherent and violent. On being placed between the door and window, he made no complaint of the

current of air, as he had done before: called for some porter, which was given him, and of which he drank eagerly, but experienced some difficulty in its passing down the œsophagus; and, on its reaching the stomach, it was rejected with much violence, together with a great quantity of brown fluid, which he was constantly throwing up.

Half-past 8 A. M. — Met the gentlemen formerly mentioned. Only two more of the pills have been taken since our last meeting: thus, in the last sixteen hours, he has taken Ceruss. Acet. gr. xxix. and Extr. Belladonnæ ℈ss. without any sensible effect having been produced. He continues very incoherent, still vomiting great quantities of brown fluid. While we were in consultation, he suddenly fell prostrate upon the bed, breathing laboriously, and was much distressed by the quantity of phlegm in the trachea, which he could not expel. Slight convulsion of the extremities came on; and in this state he remained, attended with low muttering, till death closed the scene, at half-past ten A.M., being forty hours from the attack.

On examination of the body, we found a very considerable quantity of viscid phlegm in the trachea, and all down the bronchiæ. At its bifurcation, this viscid matter seemed, from its quantity and consistence, to have produced suffocation: one of the cartilaginous rings of the trachea was very firmly ossified. The epiglottis was perfectly healthy, as also was the œsophagus. The lungs were very firmly adhering in every direction, with particular dryness of their surface: their substance was not unhealthy. The stomach contained eight or ten ounces of a dark-coloured fluid, which exhaled a sour odour, and very much resembled equal parts of port wine and water. The stomach did not contain any undigested food: the whole of this viscus appeared very relaxed, and there were no rugæ observable on its internal coat, but a few ecchymosed spots were remarked in it. Particular circumstances prevented us from opening the spinal column; but the brain, and all other parts which were examined, if not perfectly healthy in their appearance, certainly shewed no active recent disease.

On taking a review of the above case, the following points seem forcibly to present themselves. In the first place, the name given to this disease is very inapplicable, and would apply equally well, perhaps, to some others of high nervous irritability: and again, *fear* is, by no means, confined to water or fluids of any kind; for a current of air, or any thing exciting the sensibility of the surface of the body, is, or certainly was, in this case, more than equally dreaded by the patient; the effect, too, bore a due proportion to the alarm entertained. The name appears to have led some into error who have written on this disease. A very respectable author has informed us, ' the person is, however, capable of swallowing any solid substance with tolerable ease;' an assertion quite at variance with the fact in the present instance.

PART III.

COLLECTION OF MEDICAL FACTS AND OBSERVATIONS.

Section I. — British.*

Cynanche.—Treatment of Cynanche Trachealis.

'The general symptoms of *croup*, the extreme danger of the disease, the frequent inefficacy even of the most active and best-directed treatment, and the striking appearances on dissection, are familiar to every practitioner. There is one fact, however, in the history of this disease, which has not as yet been noticed by authors on the subject; and one means of treatment, which has been repeatedly successful in my own hands and in the hands of those from whom I first received my information of its utility, which, I have reason to believe, has not come into general use.

'The fact to which I refer is, that the exudation of *fibrin* very frequently commences on the surface of the *tonsils*, thence spreads along the arches of the palate, coats the posterior surface of the velum palati, sometimes surrounds and encloses the uvula; and at last descending, covers the internal surface of the pharynx and œsophagus, the larynx and trachea. That this is the frequent progress of the fibrinous exudation I am convinced, from the careful and repeated observation of the phenomena during life and upon dissection.

'What is of much more importance, however, than the observation of a pathological fact, is the ascertained efficacy of a means of cure for this disease. Not merely have I repeatedly found the application of a solution of *nitrate of silver* completely successful in removing the fibrinous crust covering the tonsils, velum, and uvula, but I have been led to attribute the rapid alleviation and ultimate removal of all the other symptoms to this remedy; even in cases in which, from the severity and peculiar signs of the complaint, I had no doubt that fibrin had already exuded from the lining membrane of the larynx and trachea.

'The solution which I employ is *a scruple* of nitrate of silver in an ounce of distilled water. By means of a large camel-hair pencil, this solution is to be freely applied once or twice a day, according to the severity of the symptoms, to the whole lining membranes of

* The 'Facts and Observations' contained in this Section are selected exclusively from *British* sources, and more especially from the *Original Communications* contained in the other medical and scientific journals of Great Britain. This is a new feature of the present Series of this work, which, as it will present our readers with a condensed account of whatever may deserve to be perused in these publications, cannot fail of proving both serviceable and acceptable to them. — Editors.

the fauces. The surface of the tonsils, or wherever else the fibrinous crust is actually in view, will, of course, be particularly attended to; but I do not hesitate to push the pencil to the lower part of the pharynx.

'This remedy, so far from being productive of any irritation, beyond the mere mechanical and temporary one attending its employment, uniformly alleviates the symptoms of croup; such as the difficult respiration, the barking cough, and the peculiar anxiety of the little patient. It has evidently such an effect upon the diseased surfaces, both those which it actually touches and those which are continuous, as to induce them to throw off the false membrane by which they are covered, and, it appears, also to prevent the further progress of the exudation.'—*W. Mackenzie, And. Prof. Anat. and Surg. at Glasgow, in the Edin. Med. Journ., Ap.* 1825.

GALL-BLADDER—*Fatal Case of Inflammation of the.*

A MAN, aged forty-three, corpulent, and by trade a tin-smith, was seized (Oct. 23, 1824,) with severe pains in the abdomen, accompanied by fever, restlessness, and thirst.

Under the notion that this was an attack of colic, to which he was at times liable, heat was applied to the abdomen, and some hot gin and water were administered; but these remedies only aggravated his complaints, and medical assistance was therefore speedily called in.

The pains in the abdomen were now intolerably severe, and particularly at one fixed point in the *right* hypochondriac region, immediately under that part where the *cartilages of the false ribs turn up to be inserted into the sternum.*

If to these symptoms of pain, fever, and restlessness, we add frequent vomiting, obstinate constipation, and great prostration of strength, we shall have before us the principal features of this case, which proved fatal in *about sixty-eight hours*, notwithstanding the early and active employment of bleeding, purgatives, enemata, the warm-bath, a blister, and opiates.

On examination, five hours after death, no morbid appearances whatsoever were to be seen, either in the thorax or in the abdomen, except the following connected with the *gall-bladder*, which we give in the words of the reporter, Dr. D. Scott, of Cupar-Fife, in whose care the man had been:—

'Between the colon, meso-colon, and gall-bladder, some adhesions existed, which being removed, and the bowels put aside, the *gall-bladder* was seen prominent, fleshy, and evidently containing a stone in its larger end. On cutting through this bag longitudinally, its coats were found thickened to such a degree as to measure *half an inch across;* and within the cavity was found a *gall-stone*, and a few ounces of a thin, blackish fluid, similar to dark coffee-grounds or to ink diffused through thin mucilage.

'The *stone* was about the size and shape of a green olive, and not dissimilar in hue: it was light for its bulk, and externally presented a white, shining, crystalised appearance, and, when held near the

candle, was quite sparkling and resplendent; the whole outer edge was rough, and the angles very sharp.

'The gall-ducts and liver appeared perfectly natural, both externally and when cut into.'

To the preceding details the Editor of the Edinburgh Journal adds—

'The preparation (*of the gall-bladder*) has been deposited in the museum of the University, and from the *gall-stone* a very fine specimen of *cholestrine* has been prepared. The chief peculiarity in the gall-stone was, that its external crust, which had a pure white colour, was crystalline; that the crystals had, in general, the irregular form of pearl-spar, but that some of them were distinctly four-sided prisms broken off at the prominent end.

'Its structure was crystalline, and radiated in laminæ of transparent matter, with a few streaks of opaque, greenish-brown grains. It weighed sixty-six grains, and consisted of scarcely a grain of green colouring matter, soluble in potass, and insoluble in alcohol,—the remainder being pure cholestrine, with all the properties assigned to it by Chevreul.'—*Edin. Med. Journ., April* 1825.

Iritis, occurring in Syphilitic Cases.

'The second point in this inquiry, namely, the possibility of *mercury* creating a disposition to *iritic* inflammation, or, in other words, operating as a cause of the disease, has partly come under notice already in the few observations which led to this discussion.

'Mr. Hewson, as we have seen, is of opinion that *mercury* possesses no injurious power of this kind; and states, in opposition to what Mr. Travers had inferred, *that its constitutional operation rather diminishes than increases the susceptibility to the disease*; and he subsequently has recourse to the supposition of a *defective and inadequate* mode of administration, to account for those cases of *iritic* inflammation which occur in the persons of the diseased who have taken the mineral.

'It is quite unnecessary to inquire into the reasons on the strength of which Mr. H. maintains his opinion, for, in truth, he assigns none, and is ready to meet every objection by quoting experience and observation. Unfortunately, however, for the effect of this mode of reasoning, the book itself furnishes means of appreciating the weight which should be given to general assertions, formed either on speculative or dogmatic principles, or without due attention to all the points of a question of fact; for, of the *twenty-five* cases recorded in the Appendix (as examples of this disease), not fewer than *fifteen* are instances of persons who had used the remedy (*mercury*) in one form or other—in many it had been used more than once, and in one or two it had been given in great quantity, and, in general, with marked effects. After this,' the reviewer adds, 'we think it will require either great ingenuity or great effrontery to maintain that these cases do not furnish strong presumptive evidence, that the *iritic* inflammation, if not the consequence of *mercurialism*, was at least as likely to arise from this cause as from

the constitutional effects of the *syphilitic* poison.'—*Rev. of Hewson on Venereal Ophthalmia, Edin. Med. Journ., April* 1825.

Mediate Auscultation, as a Means of Diagnosis in Diseases of the Chest.

On this subject the Editor of the Edinburgh Medical Journal, in a recent Number, makes the following remarks, which perfectly accord with our own sentiments as expressed in the Repository:—

'How is it that a discovery, which, we have no doubt, an unbiassed posterity will rank among the first of this age, and which certainly deserves to form an era in the history of pathological medicine, meets in this country with such general contempt and neglect? Is it, that, after fair and deliberate deductions from a careful and continued series of experiments, *mediate auscultation* has been laid aside from a conviction of its utter inutility?—and have we, by patient and persevering investigations, proved the most eminent men in this department of medical science in our neighbour kingdom, to be nothing better than a trifling set of drivellers, amusing themselves with a plaything, and wasting their time in pursuit of the mere phantom of a warm imagination?

'Were this proved to be the fact, then one of our most distinguished professors was perfectly justified in treating publicly this subject with merited contempt. But that this is by no means the fact, we most strenuously assert; and this we do still more unhesitatingly, because all of those who, like ourselves, in opposition to the general opinion, or rather prejudice, have treated this subject with that attention which it deserves, and whose opinion we have had an opportunity of learning, join with us *in speaking decidedly in its favour.*'—*Edin. Med. Journ., April* 1825, p. 406.

Neuralgia cured by the External Application of Belladonna.

Case I.—'John Gale, hospital-serjeant, 66th regiment of foot, thirty-nine years of age, delicate, subject to inflammatory attacks, went to bed on the night of the 2d of March, 1824, quite well. He awoke with a strange pulsation and tingling over the *right* eyebrow, which soon increased to a sensation of heat and soreness, and at length to a most extraordinary pain, extending across the temple, and shooting down the cheek. This was attended with an involuntary constriction of the eyeball, and a copious effusion of tears. The focus of the pain appeared to be the supra-orbital foramen of the os frontis. The paroxysm lasted two or three minutes, when there was an interval of partial, and sometimes of complete ease, for five, six, or ten minutes; then the same symptoms recommenced, and, after four or five hours of alternate torture and comparative happiness, the disease ceased; the forehead and temple, however, remained numb, and tender to the touch, the day after.

'From a belief that the disease was, in some way, connected with vascular fulness of the system and topical congestion, the depletory plan of treatment was carried into effect. Blood, in considerable quantities, was abstracted, generally and locally; the bowels were

briskly purged; blisters were applied to the *right* temple, and behind the ear; the patient was confined to bed, was kept on spoon-diet, and all sources of nervous irritation were carefully avoided.

'This mode of treatment was persevered in for about *ten* days, but with very little advantage; for, at the end of this time, the paroxysms were neither reduced in frequency, nor moderated in violence.

'On the eleventh day, about ten grains of the extract of belladonna, moistened with a little water, were rubbed over the *right* eyebrow, for about three minutes, during a violent paroxysm. The result was, an instantaneous abatement of the pain: it returned, however, in half an hour; but on that night, (the *twelfth* from the first attack,) the patient slept better, and had fewer and shorter fits of pain than on any preceding one since the commencement of his illness.

'The same application was repeated on the next night, and with similar good effect; on the fourteenth night there was an intermission; on the fifteenth the medicine was again used, and the patient passed the night tolerably well. The disease continued to yield; and finally, in *three* weeks, (that is, we presume, at the end of *one* week from the first application of the belladonna,) the man was quite well.

'Since that period (now thirteen months) the disease has returned two or three times; the attacks, however, were mild, and always yielded to the same application.'

Case II.—'A lady, fifty years of age, plethoric, but healthy, was attacked (on the evening of the 26th of March last) with a tingling over the *right* eyebrow, which gradually changed into a convulsive movement of the levator palpebræ and orbicular muscles, with lancinating pain over the brow, radiating from it across the temple, down the cheek, up the forehead, and into the orbit of the same side. The acuteness of the pain continued only three or four minutes, was followed by about a quarter of an hour's ease, and then came on as before. The succession of paroxysms, constituting, as it may be termed, *the fit* of the disease, lasted about six hours; and in this, as in the preceding case, an unpleasant feeling of numbness, and slight irregular twitches of the muscles of the eyelids, were left behind.

'For ten days (during seven of which sleep was entirely banished) the disease was suffered to proceed in this manner, no medicine or medicinal application being employed during this time, but some fomentations to the part. On the eleventh day, about the size of a pea of the extract of belladonna, moistened with a little water, was rubbed with the finger over the seat of the most excruciating pain, at the supra-orbital foramen. The friction was continued about five minutes, when the iris of the *right* eye became considerably expanded; it was then discontinued. In less than ten minutes the lady exclaimed, *I feel no pain:* in about five minutes more, the convulsive twitchings of the muscles of the eyelids also ceased; and,

from that hour to the present time (April 17), the patient has not had the slightest return of the disease, and is now in excellent health.'—Mr. Henry, *Assistant-Surg. 66th Regt., in Lond. Med. Journ., June* 1825.

Oleum Æthereum. Lond. Pharm.

Mr. R. Phillips having, in his translation of the London Pharmacopœia (last edition), appeared to doubt the existence of *oil of wine* (*oleum æthereum*), as a distinct substance, Mr. Hennell, chemical operator at Apothecaries' Hall, was induced carefully to repeat the process usually adopted in that Institution for obtaining it, and has communicated the result to the public in the following terms.

'Half a gallon of rectified spirit of wine (sp. gr. ·830) was mixed with an equal bulk of sulphuric acid, and distilled in a glass retort; the products were æther, water, sulphurous acid, and about four ounces of a yellow fluid floating upon the water, which, when separated and washed with a solution of carbonate of potash as long as there was any trace of sulphurous acid, was a solution of true *oil of wine* in æther. The æther may be removed by spontaneous evaporation, or it may be distilled off with a very gentle heat.

'The oil thus obtained, and which amounts to about two ounces, is a yellow fluid, resembling in appearance oil of lavender or peppermint—perhaps rather more viscid; it has a specific gravity of 1.05. After being kept a few months it becomes more viscid, and a number of prismatic crystals form in it, which in many of their characters very much resemble naphthaline. These crystals are soluble in æther and alcohol, and crystallize from both those solvents in very slender prisms; they melt with a very slight heat, and sublime unaltered; in warm sulphuric acid they dissolve, forming a pink solution; they dissolve in cold nitric acid, forming a deep *red* solution, similar to that of morphia in the same acid — heat destroys this colour instantly, and the solution, after boiling or being diluted with water, throws down a white flaky precipitate; they are insoluble in muriatic and in acetic acids, and in the caustic alkalis, hot or cold.

'The oil of wine is soluble in æther and alcohol, but insoluble in water; distilled with *water* it passes over, like the greater number of the essential oils, without having undergone any alteration; but when a portion was attempted to be distilled *alone*, the greater part came over in the form of a thick oily matter, a considerable quantity of sulphurous acid was formed, and charcoal and a little sulphuric acid were left in the retort.

'With a view to get rid of a portion of acid, which the carbonate of potash had apparently not removed, some of the oil was heated in a solution of caustic potash; it diminished considerably in bulk, and became much more viscid than before; it was separated from the potash solution by the action of æther, and when the æther was distilled off there remained a yellow oil with very little fluidity, which evaporated entirely when heated, without any appearance of decomposition or evolution of sulphurous acid, and which in a few

days concreted into a mass of prismatic crystals, having all the characters of those already described.

'The potash solution evaporated to dryness, afforded a residue somewhat like acetate of potassa in appearance. Upon heating a few grains of this it took fire, and burned with a flame resembling that of alcohol, and sulphate of potash remained—it dissolved in hot alcohol, and the solution on cooling deposited crystals in the form of pearly scales; in short, it had all those characteristics which have been ascribed to sulphovinate of potassa: and therefore, says Mr. Hennell, I consider *oil of wine* as a compound of sulphovinic acid and the peculiar crystallizable oil which has been here described.

'There are two facts which render it probable that *oil of wine*, when obtained as in the above process, from alcohol and sulphuric acid, is a product of the decomposition of sulphovinic acid; namely, *first*, that when alcohol and sulphuric acids are mixed in equal bulks, sulphovinic acid is formed in great abundance—nearly, five ounces of sulphate of lead were obtained from the sulphovinate of that metal, formed by neutralizing the acid resulting from a mixture of four ounces of alcohol with an equal bulk of sulphuric acid, the mixture having been allowed to become cold before it was saturated; and, *secondly*, oil of wine, or a fluid exactly resembling it, is obtained when any of the sulphovinates are carefully decomposed by heat.'—*London Journal of Science, April*, 1825.

Opium. — *Case of Poisoning by Opium successfully treated by Dr.* Alison *of Edinburgh.*

On the 5th of February, 1825, Dr. Alison was called to see a gentleman's servant, a strong man, aged thirty-five, who had swallowed, as he was said to have confessed about twenty minutes before, *one ounce and a half of laudanum* in a fit of despondency succeeding intoxication. He was found speaking incoherently, and as if intoxicated, but without any appearance of *stupor;* the pulse full, strong, and frequent; the skin warm, and the face somewhat flushed.

During the space of an hour, various attempts were made to empty the stomach by means of mustard, sulphate of zinc, tartar-emetic, &c. but in a great measure ineffectually; for although vomiting did take place several times, yet the quantity of matter evacuated hardly exceeded a mouthful at a time. At length all expedients to excite the action of the stomach ceased to have any effect, and the man fell into a state of profound coma. About an English pint of tepid water was now introduced into the stomach, by means of an instrument recommended by Mr. Bryce; copious vomiting immediately succeeded, and a repetition of the process was followed by the same effect.

After the evacuation of the stomach, the breathing became more regular and less stertorous, but the livid flushing of the face continued, and the only signs of sensibility manifested, were frequent and feeble efforts to scratch the legs and thighs. The pulse was still full and frequent, and the skin warm on the upper parts of the

body. The patient was now stripped naked, and cold water was dashed over his head and shoulders. By this he was powerfully excited; he sprang from his seat, and fell forwards, gasping strongly and repeatedly; when raised, he opened his eyes and looked wildly around, and being rubbed dry, walked with assistance into an adjoining room, where he lay down and had hot bottles applied to his feet, which were now very cold.

For nearly an hour after this he was very restless, tossing about in bed, and scratching himself incessantly, but could hardly be induced to speak. At length he fell into an apparently tranquil sleep; the flushing of the face entirely subsided; the skin became rather cold; the pulse smaller, but still firm; the breathing slow, but regular and easy.

In this state he continued for more than an hour, easily roused, and sensible when spoken to. The medical gentlemen therefore thought they might with safety commit him to the care of the attendants, and withdrew. In about four hours after, however, Dr. Alison was recalled, and found him with all the appearance of a dying man: he was quite insensible; the countenance pale and ghastly; the lips livid; the jaws fallen; the skin generally cold, although warmth had been assiduously applied; the respirations four or five only in the minute, and the inspirations performed with a convulsive start; the pulse much smaller than before, but still tolerably firm.

From this state he was gradually roused and restored by dashing cold water on the face, by applying ammonia (the *liquor amm.*) to his nostrils, by frictions with the same on the chest, by the application of hot bottles to the feet and stomach, and by the exhibition of hot coffee, &c. &c.; so that in about twelve hours from the time the laudanum had been taken every alarming symptom was at an end. —*Edin. Med. Journ. April*, 1825.

Note.—The reader will not fail to observe in this case, the influence which the introduction of a small quantity of fluid into the stomach seems to have had in producing copious vomiting; and the beneficial effect which that vomiting seems to have had upon the state of the patient, the excitement produced by the *cold affusion*, the state of collapse which supervened during *sleep*, and the subsequent restoration by means of *stimuli*, will also attract notice; while the state of the pulse, *full, strong*, and *frequent*,—the *stertorous* breathing,—and the *livid flushing* of the face,—will induce some to think that *bloodletting* might at one time have been advantageously employed. R.

Opium and Prussic Acid, Antidotes for.

Mr. John Murray has published in the last number of the Edinburgh Journal of Science some 'Researches' on these articles, in which he says, 'I have no hesitation to pronounce with most positive certainty, that in *ammonia* will be found a complete antidote to *hydrocyanic (prussic acid)*, and in *acetic acid* an effectual counterpoison to *opium*.'

This opinion Mr. Murray seems to have formed from the result of various experiments conducted by himself, and detailed in the paper above mentioned. Of these we shall select the principal, and give them in his own words:—

1. 'A small portion of *hydrocyanic acid* was given to a healthy young rabbit, which proved fatal in ten minutes. Soon after its administration, the head declined on one side; violent spasms supervened; the eye lost its lustre, and the animal died in dreadful convulsions.

2. 'A greater quantity of hydrocyanic acid was given to a young rabbit than proved fatal in the preceding case. *Ammonia* was occasionally applied to the mouth on a sponge; the animal exhibited no unhealthy symptom whatsoever.

3. 'Half a drachm of hydrocyanic acid was given to a healthy young rabbit: the effects were prompt; respiration became laborious and difficult, with a grating in the throat; the eye lost its brilliancy; the head dropped; it raised a sharp cry, and was convulsed. Strong *ammonia* was dropt into the animal's mouth, and it was repeatedly wetted with a sponge dipped in *ammonia*. It almost instantly revived, and even licked repeatedly the finger which sometimes applied the ammonia, apparently quite sensible of the instant and continued relief it afforded. The animal effectually recovered; its lips were excoriated by the ammonia.

4. 'A considerable quantity of the *hydrocyanate of ammonia*, with excess of base, was administered to another rabbit, but without any deleterious effect.

5. 'Conscious of the complete antidote to this formidable poison found in *ammonia*, I took a quantity of *hydrocyanic acid*, sufficient to produce violent head-stupefaction, &c.; but diluted ammonia afforded me instant relief. I occasionally applied it to the olfactory organs, and bathed the forehead.'

Mr. M. in another part of the paper says, he had always found that the violent headach which sometimes occurred in preparing hydrocyanic or prussic acid, was relieved and removed by ammonia.

Opium.—1. 'Half a drachm of *super-acetate of morphia* was given to a young rabbit. No apparent derangement of its healthy functions took place; it rather seemed to act as a stimulus to appetite.

2. 'Two and a half drachms of *tincture of opium* were given to a rabbit. In a short time the eye became more opaque, the pupil dwindled to a mathematical point, and was insensible to the stimulus of light; the head fell to the floor; the breathing was laborious, difficult, and loud, and there supervened a total prostration of strength. *Acetic acid* was then administered through a quill, and applied to the mouth on a sponge repeatedly; the head was also bathed with *acetic acid*, and it was also applied to the extremities, and in the direction of the spine. The whole quantity of the acetic acid used was about a fluid ounce; the animal was also frequently roused, and finally kept warm: it effectually recovered.

3. 'These experiments were repeated with uniform success on

other rabbits. Several days have elapsed, and they continue in the most healthy condition.

It is necessary to observe, that the acid employed in these experiments was the *acetic*, and not the *acetous* acid, as this is a circumstance upon which Mr. Murray lays much stress. The particular preparation of ammonia employed is not specified, but it was doubtless the liquor ammoniæ. — *Edin. Journ. of Science, April*, 1825.

Paralysis.—Loss of motion on one side, with loss of sensation on the other.

Francisco Cesario, thirty-five years of age, by trade a mason, and in good health, fell on his back in February or March, 1824, from a scaffold twenty feet high.

He was stunned for a few minutes by the fall, and on recovering his senses found that his *left* side, from the shoulder downwards, was deprived of all power of *voluntary motion*, but retained its sense of *feeling* unimpaired; whilst over the *right* side the power of *voluntary motion* was present, but *sensation* totally extinct.

Three months after the accident, the following report is made of his situation.

Pricking with needles, or pushing a lancet deep into the muscles of the *right* side, produced no sensation of pain or uneasiness, while over the *left* side the sense of feeling was morbidly increased.

The muscles of the *right* side were extremely prominent, powerful and perfectly under control; while those of the *left* were particularly flaccid, and much wasted, and no longer obedient to the will.

The temperature of the *right* side was one and a half degrees Reaum. (*equal to* $3\frac{3}{8}$ *Fahr.*) less than that of the *left*, which was rather greater than natural.

Although the sense of *feeling* was entirely lost on the *right* side, yet he could still with the *right* hand perceive the weight and consistency of external bodies; on the *left* side, the hand and foot were œdematous.

From the fourth conical vertebra upwards, *sensation* and *motion* were perfect on both sides, and the line of demarcation was so exactly drawn that it might be defined by a packthread surrounding the neck.

The countenance was not expressive of either suffering or disease, nor were the energies of the mind in the slightest degree impaired; the breathing was but slightly affected, and the pulse in each arm was 70, soft, full, and regular; there was no headach or thirst, and the tongue was clean; the appetite had continued good throughout, but he could procure no motion without purgatives or enemata, and the fæces were invariably passed in small hard scybala, varying in colour from light clay to pitchy black. He slept little, but soundly; and the skin was soft, although he had never perspired, as he stated, since the accident; the urine, natural in quantity from the first, was passed with some degree of hesitation, and deposited, when left to settle, a copious white cretaceous sediment.

The body stript and minutely examined, presented no appearance of violence or disease, but, on pressure, a slight degree of tenderness was felt at the tenth dorsal vertebra.

The preceding details are extracted from a communication in the last number of the Edin. Med. Journ. (April 1825,) which was received from Mr. Robert Dundas, surgeon to the British hospital at Bahia, under whose care the patient was for some time, and by whom various remedies were employed for his relief, but apparently with little benefit. The termination of the case is not yet known.

Stramonium, Caution with respect to its Use.

Perhaps we may be excused for cautioning surgeons against the too free exhibition of this extract in the form of *suppository*, in cases of painful diseases of the rectum. An hospital surgeon of celebrity in this metropolis prescribed two drachms of the extract of stramonium, to be made, with some other ingredients, into six suppositories; one to be put up the rectum occasionally, when in much pain. One was accordingly introduced, — it dissolved, and was entirely absorbed: the patient became affected with symptoms closely resembling delirium tremens, and nearly died.— *Med. Chir. Rev. Ap.* 1825, *p.* 493.

Tympanites Pericardii, Case of.

Mr. Scott, of the Haymarket, aged about forty-seven, had, for three or four years, been declining in health, but had not been under regular medical superintendence, till a few weeks before his decease: no regular history of the complaint, therefore, could be obtained. He stated, however, that his appetite and strength had gradually declined, but his chief complaint was *a fluttering, a palpitation, and a sense of anxiety about the region of the heart, with disturbed sleep and frightful dreams.*

'When seen a few weeks before death, his countenance was like that of a person in a state of anæmia, except that there was also a chloritic tinge in the skin; the pulse was full, quick, and irregular; there was a tendency to œdema about the ancles; the appetite was almost entirely gone, and the patient felt approaches to syncope on using any exertion, or ascending stairs. His mind was desponding, and temper irritable; the motions from his bowels were perfectly healthy; the chest in every part resounded remarkably well, and, in the region of the heart, *percussion* elicited as clear a sound as in any other part; the *impulse* of the heart against the ribs was very feeble, and scarcely audible; it was also irregular, in correspondence with the state of the pulse.'

The patient died suddenly in February last, and the following appearances are recorded by Dr. Johnson, as having been observed on examination after death; he was himself present.

'The body extenuated, but still there was some peculiarly yellow fat on the chest and abdomen; the muscles, though wasted, were of a vivid red colour; all the organs in the abdomen were sound;

on opening the chest, the lungs presented a beautiful blue appearance, sparingly mottled with white; they were very sound. Between the lungs there presented itself a pellucid membrane distended with air. This was found to be the *pericardium*, reduced to a most extraordinary degree of tensity, and distended with a considerable quantity of *air*. The heart was small, not half filling the pericardium, and extremely degenerated in substance; a great part of its muscular structure being converted into a kind of fat; the whole was so lacerable, as scarcely to bear handling; the parietes of the left ventricle were not more than a quarter of an inch in thickness; the internal surfaces of the cavities were pale, wasted, and not containing a single drop of blood; neither was any blood to be seen in the large vessels issuing from the heart; there was nothing particular in the vascular structure of this organ.'

Dr. Johnson adds, " That he has met with several cases where the heart was in this degenerated condition, but never before observed *such a distension of the pericardium by air*,' that it is quite evident, from the size of the pericardium, and its extreme tensity, that this collection of air must have been of some standing, 'and that this phenomenon accounts for the region of the heart being as sonorous as any other part of the chest, which is not usually the case.'—*Med. Chir. Rev. Ap.* 1825, p. 465.

Note.—This report is highly interesting, on account of the rarity of the disease to which it relates; so rare, indeed, that Morgagni says he never saw an example of it, and Dr. Baillie seems to have been equally unfortunate.

Uterus, Extirpation of.

'The operation for the extirpation of the uterus has, since the beginning of the present century, been performed in Germany no less than six or seven times. The first of these operations was (in 1808) successfully performed by Osiander in Gottingen, on a woman from whom he had, seven years before, removed a cancerous tumour of the uterus.

'In 1813 the operation, or rather only the removal of a tumour from the *cervix* uteri, was performed by Professor Rust of Vienna, but unsuccessfully, as the patient only survived eight days after it. In 1817, Langenbeck extirpated a *prolapsed* uterus, and with success. In 1822, Santer performed the still more difficult operation of removing an *unprolapsed* uterus, and since that time the same operation has been attempted in Berlin, Hanover, and Vienna. Of these attempts, two at least were unsuccessful — the result of the third is not yet published.

'This operation, though of late years revived, is not one of modern invention. In *Sue*, (*Hist. des Accouch. Par.* 1786,) we find an account of the extirpation of the uterus having been successfully performed as early as the year 1560, by Andreas à Cruce, physician and professor at Venice. Nay, the removal of the pro-

lapsed uterus was successfully effected twenty years before that period (in 1540) by one Carpus; and, in the beginning of the seventeenth century, the same operation was also performed by Zacutus Lusitanus. In the same author also (*Sue*) are to be found several other cases, both successful and unsuccessful, of this operation, which prove that it is not one of modern date.

'These accounts, however, are not very explicit, and contain neither a description of the operations, nor a very accurate statement of the circumstances under which they were performed; and it is to Osiander, undoubtedly, that the merit belongs, of having improved this part of surgical science, and of having first systematically described the manner in which the operation should be effected.'—*Edin. Med. Journ. April*, 1825, p. 397.

Uterus, Laceration of, in Parturition.

In the years 1819-20-21, 8600 patients were delivered in the Lying-in Hospital of Dublin, and of this number *twenty* suffered *laceration of the uterus.*

Of these twenty cases, *five* occurred in women parturient with *female* children, and *fifteen* in women parturient with *male* children. The *sex* of the infants, therefore, would seem to have a considerable influence in the production of this accident — a circumstance doubtless connected with the greater *size of the head* in the generality of *male* infants.

Thus, of sixty *male* and sixty *female* infants, born at full time and examined by Dr. Clarke, the averaged circumference of the *head* in the former was found to be *fourteen* inches, and in the latter only *thirteen and five-eighths;* and of 120 infants examined by the same physician, the circumference of the head exceeded *fourteen inches and a half* in six only, all of whom were *males.*

From examination after death, it would appear that the *neck* of the uterus is the part most frequently lacerated, and that the rent is generally in a transverse direction.—Vide *M'Keever on Laceration of the Uterus, &c.* Lond. 1824.

Wounds received during Dissection.

Mr. Shaw, of Great Windmill Street, in a recent communication on this subject, strongly urges, from personal experience and from observation, the adoption of a *stimulant* plan of treatment in cases of this nature, in preference to the *depleting* system, hitherto so generally adopted; and adds the following interesting remarks with reference to the prevention of injurious consequences from such accidents occurring in dissecting-rooms:—

"Every student, on commencing dissection, is much alarmed when he cuts or scratches his finger; but in the rooms in Great Windmill Street this fear soon ceases, and of late years serious consequences have rarely occurred. This exemption I attribute to the bodies being now invariably injected with a solution of *nitre* and *salts* (*bay-salts*) previously to their being dissected. If the part is not to be preserved as a *dry* preparation, there is not

single objection to the use of these salts, while the advantages, independently of the effect which it seems to have on the morbid poison, are considerable. Indeed, it is now common for students to keep a body for eight or ten weeks; and even after this time there is scarcely any smell, and the muscles of the limbs appear fresh and florid.

'Previously to our practising the plan of injecting bodies with the salt solution, very serious consequences frequently resulted from pricks or wounds, and particularly in spring, when the students had become a little enervated from the effects of a winter in town.

'The only cases that have occurred during the last three or four years have proceeded from the dissection of the ligaments, after the limb had been kept for some time in water, or in preparing bones that had been macerated; being, in short, the only occasions on which the student is subjected to putrid matter not corrected by the solution of *nitre* and *bay-salts*.'—*Lond. Med. Journ., May* 1825.

It is proper to add, that the use of *saline* solutions, as here recommended, has been objected to on the grounds of their destroying the edges of the knives employed in dissection; and ardent spirits (*whiskey*, for example,) has been, it is said, substituted in America with great advantage.

Section II. — Foreign.

Note on the Structure of the Nerves, read to the Academy of Sciences, Paris. By M. Bogros.

Reil, to whom we are indebted for almost all that we know of the structure of the nerves, had demonstrated that they consist of two distinct parts, the neurilema and the pulp; and he pointed out the manner in which both may be satisfactorily shewn. By means of dilute nitric acid, the neurilema may be destroyed; and the medullary threads will be observed crossing each other, and anastomosing in the form of real commissures, which may be compared to that of the optic nerves. Bichat, who traced these threads to a considerable extent, had remarked that their direction is very variable, owing to these anastomoses, so that those which, at one place, were superior, became, at another, either central or inferior. A different manner of experimenting, undertaken by Reil, confirmed the results of his former researches. After plunging the nerves into an alkaline solution, he observed that the pulp was destroyed, the neurilematic envelopes remaining empty, and presenting a multitude of canals communicating with each other, giving them, according to M. Béclard, the appearance of a reed.

The researches of anatomists had led to no more precise knowledge than this, when M. Bogros commenced his inquiries; from which inquiries it seems to result, that besides the neurilema and pulp, there exists a central canal. By the aid of tubes somewhat resembling those which are employed in injecting the lymphatics,

but having a much finer extremity, M. B. attempted to inject the nervous fibriles. The experiments were performed in both living and dead animals, and preliminary preparation was found to be unnecessary to their success.

When a nerve is punctured by the properly prepared point of a tube filled with mercury, the injection traverses all the fibriles furnished by the nervous chord, to their remotest extremities, and may be traced even into the papillæ of the skin and mucous surfaces, in the muscles, &c. The injection proceeds also towards the origin of the nerve; and, even when introduced into a single fibrile, it passes into several others, by means of the canals of the anastomoses which exist in the commissures, of which we have spoken.

If, after this injection has been made, the nerve be divided, a round and regular opening may be seen in the centre of the pulp. With attention, also, and without any previous injection, an obscure point may be observed, in the centre of the pulp, after a transverse section of the fibrile. This is the opening with which M. Bogros has concerned himself: upon placing the point of the tube here, the nerve is injected.

When the nerve is deprived of its neurilema by means of nitric acid, the same results are obtained, proving incontestably, in M. B.'s opinion, that the canal is open in the pulp. When, on the contrary, the pulp is removed by means of an alkaline ley, the injection, under the same pressure, proceeds badly — it is frequently arrested, and presents not the same regular and cylindrical aspect as is observed in the other circumstances of the experiment. Finally, if the essence of turpentine be injected into the nervous fibriles, and these be afterwards dried, the canaliculated structure then becomes manifest to the eye.

The mercury also traverses the fibriles of the great sympathetic, and there demonstrates the existence of canals similar to those in the nerves of animal life. From the fibriles the mercury passes into the ganglions, and out of ganglions into other fibriles. Thus the injection pushed into the inferior cervical nerve traverses the cardiac nerves until it arrives at the heart, and from the great sympathetic it passes into the semilunar ganglion and the fibriles proceeding from it.

When the injection reaches the ganglions, they are seen to swell, and to assume the appearance of a multitude of small tubes opening into each other, and folded and contorted upon themselves.

The injection of the intervertebral ganglions present peculiar appearances. At first they swell, afterwards the injection penetrates into the venous reticulum, situated between their proper surface and the envelope furnished them by the dura mater, and thence into the veins of this membrane itself. Finally, the injection is seen passing through the roots of the nerves, and falling into the cavity of the dura mater, owing either to the easy rupture of the pulp at this part, where it is very soft, or to the existence of natural openings in it. The injection cannot be made to pass into the roots of the spinal nerves; and, consequently, it cannot reach

the spinal marrow. Of the injection which has passed into the veins, some globules have been found as far as the right auricle of the heart. But none of the mercury was ever detected in any of the arteries or lymphatics.

The anastomoses take place by the conference of the medullary canals and the confusion of the pulp: towards the point where the anastomoses have place, the nerve increases in volume in the ratio of that of the two fibriles forming it. The injection has been performed in the nerves of living frogs: when it began to be introduced, convulsions ensued in the muscles which receive their fibriles from the points which contained the mercury: when it was finished, there was a complete paralysis, which was not increased by dividing the nerve.

The preparations thus made could not be preserved, because the nerves, in drying, became contracted and horny, and expelled the mercury from their cavities.—*Revue Méd., Mai* 1825.

Cases of Diabetes. By Professor Franceschi.

Case I.—John Boreschi, aged 57 years, came into the hospital on the 20th April, 1820. He said that he had been ill for a month. He attributed his complaints to mental causes, after which an erysipelatous inflammation attacked his knee. This inflammation gradually disappeared: but he soon afterwards began to lose flesh, to complain of dryness of the lips, gnawing sensation at the stomach, which was painful on pressure, and when he took warm aliment; inextinguishable thirst; abundant discharge of urine, depositing a copious sediment; vertigo; and a harsh dryness of the skin.

April 22d.—Symptoms as above. Pulse feeble and slow. (*Pure opium, four grains in the twenty-four hours; substantial food; two pounds of wine; four pounds of barley-water.*) 23d.—(*Opium, six grains; the rest as before.*) 24th.—Urine nine pounds, milky, and sweet. (*Opium, sixteen grains in the day.*) The thirst being more intense, his drink was increased to six pounds.

25th.—The urine is decidedly saccharine: pulse slow and feeble. He has had one stool every two days, as before. (*Opium, twenty-four grains in three boluses; the same quantity of drink.*) 26th.—The urine is in less quantity, and its appearance less milky. (*Opium, thirty grains in six boluses—one every two hours; four pounds of water; spirit of wine, four ounces; simple syrup, three ounces.* 27th.—The urine is limpid, and in natural quantity. Hunger and thirst much less intense. (*Opium, thirty-six grains in six boluses—one every two hours. The same drink.*)

28th.—The urine equals the drink. (*Opium, forty-eight grains in eight boluses—two every four hours.*) 29th.—(*Opium, sixty grains, in eight pills—two every fourth hour.*) 30th.—Three pounds of urine in fifteen hours. (*Sixty grains of opium, as yesterday.*)

May 1st.—The same quantity of urine as yesterday. (*The same prescription.*) 2d.—(*Seventy-two grains of opium, and four pounds of drink.*) No change. 3d.—(*Idem.*) 4th.—Three pounds and a

half of urine. (*Opium, eighty grains. The same drink.*) 5th.—Three pounds of urine. (*Idem.*) 6th.—Two pounds and a half of urine. (*One drachm of opium. The same drink.*) 7th.—Idem. (*Idem.*)

8th.—The patient was considered convalescent: the hunger and thirst had disappeared, and the urine was natural. The opium was diminished to forty-eight grains; but, after two days, there was a slight increase of urine. Opium was again given, to the extent of sixty grains; but, after two days, was diminished to fifty. The quantity of this medicine was lessened five grains each day, and a strong decoction of bark was prescribed. On the 26th of May the patient was discharged, cured; and, one year afterwards, he enjoyed good health.

Case II.—P. P., aged 32, a farmer, came into the hospital of Lucca, on the 20th of January, 1820. His skin was dry, rugous, furfuraceous: countenance pale: body emaciated: mouth dry; tongue white in the middle, and red at the edges: appetite voracious; thirst insatiable: urine most abundant, insipid, and limpid. The patient attributed his illness to sleeping in damp clothes, while fatigued and perspiring.

24th.—Pulse small and slow; obstinate watching. (*Opium, six grains—one grain every three hours. Six pounds of barley-water, and three ounces of honey.*) 25th.—Pulse still languid; urine eighteen pints. (*Ninety drops of laudanum, and half a drachm of anodyne liquor, in mint-water and syrup of orange-peel.*) 26th.—Urine considerably diminished. (*Laudanum, 120 drops, in mint-water; anodyne liquor, three drachms. For drink, three pounds of water, with three ounces of spirit of wine, and two ounces of syrup.*)

27th.—The patient passed, by the mouth, four lumbrici: the pulse is enfeebled: the urine is increased. (*Laudanum and anodyne liquor, of each two drachms, in six ounces of mint-water, in divided doses.*) 28th and 29th.—Nearly the same treatment. The urine is more abundant: that passed on the 29th amounts to eighteen pounds.

30th.—The patient having passed several worms, half a drachm of calomel was prescribed in six doses, one of which was taken every two hours; and a dose of castor oil was thereafter exhibited. 31st.—Debility and nausea increase. (*Three grains of camboge every three hours.*) Worms are passed both by the mouth and anus.

Feb. 1st.—Strength much depressed. (*Cinchona, with laudanum.*) 2d.—Worms again passed by the mouth. (*Castor oil, three ounces; thirty drops of laudanum at bed-time.*) 3d.—The urine exceeds, by several pounds, the weight of both the fluids and solids taken. Nausea and vomiting almost constant. The urine now presents all the characters of diabetes mellitus. (*Six grains of aloës every two hours.*) 9th.—Symptoms of worms again appear. The diabetes is unabated. (*Ten grains of Venice turpentine every three hours.*) 10th.—(*Two drachms of turpentine in infusion of chamomile, as an enema.*) 11th.—Urine is still saccharine. (*Two*

drachms of turpentine, and twenty-four grains of opium, in divided doses, during the twenty-four hours; double quantity of bread, meat, and wine.) 12th.—The same state: eighteen pounds of urine. 13th.—Idem. (*Two drachms of turpentine, and half a drachm of opium, in the twenty-four hours.*) 14th and 15th.—(*The same prescription.*) 16th.—(*Half a drachm of opium in the twenty-four hours.*) 17th.—The urine diminished. (*The same prescription as yesterday.*) 19th.—Diminution of the urine. (*Idem.*) 21st.—Nausea; pulse weaker; the quantity of urine augmented. (*Pure opium, forty-eight grains in the twenty-four hours.*)

22d.—Worms are passed by the mouth: nausea: loss of strength: augmentation of the urine. (*Opium, thirty-six grains.*) 23d.—Urine diminished. (*Sixty grains of opium in the twenty-four hours.*) 25th.—The quantity and quality of the urine natural. (*One drachm of opium in the twenty-four hours.*) 26th.—The patient goes on well. (*Idem.*) 27th.—Urine natural: the hunger and thirst diminished. (*Same prescription.*)

From this time the patient's health, flesh, and strength returned. The opium was gradually diminished; and he was discharged, cured, on the 7th of March. A year afterwards he was reported to be in good health.—*Professor Franceschi's Work on Clinical Medicine.*

Case of Cæsarian Operation. By Dr. Schönberg, of Naples.

(*Salzburgh, Medicinisch-Chirurgische Zeitung, May* 27, 1824.)

Elizabeth Hugh, twenty-eight years of age, of very short stature, and when a child affected with rickets, had for several years past been subject to very severe attacks of convulsions, and on the 7th of August, 1823, towards the end of her first pregnancy, labour-pains came on. At the same time she was seized with convulsions, which resisted every means I could try, and continued for thirteen or fourteen hours, wherefore I determined on delivering the woman. On a close examination, I found that the mouth of the womb was dilated, that the waters had escaped, and the head of the child was foremost, but that the pelvis between the rami of the ischiæ and pubes was extremely narrow, not more than two inches in width. Under these circumstances, I called in a physician-accoucheur, who found the woman in this state, but had not an opportunity of ascertaining if the child was alive or not; a circumstance which was to decide whether we should have recourse to the Cæsarian operation, or the perforation of the head of the child. In consequence of the uncertainty whether the child was alive or not, and the frequency of the labour-pains, we determined to wait till the following morning. August 8th.—The woman rested the whole of the night, and this morning felt considerably refreshed. In our examinations we could distinctly feel the motions of the child, which lay with the face foremost, and thus we decided on the Cæsarian operation, which was performed at two in the afternoon by H. Leuch, one of the Surgeons to the hospital. An incision was made in the course of the linea

alba, from about an inch below the navel to the pubes, and with a second the uterus was opened when in a state of contraction, a labour-pain having occurred at this step of the operation. The fingers were then introduced, the opening in the uterus enlarged, and the placenta detached. The membranes were now ruptured, and the child in part removed from the womb; but just as the head was about to be withdrawn, the uterus contracted round the neck of the child, and it was with some difficulty that the head could be extricated. The intestines now fell forwards, and were obliged to be kept back by an assistant; the placenta was then withdrawn, but no arteries were secured, as the bleeding was very slight. The uterus was rendered as clean as possible, all the coagula being removed, and the parts were placed in their natural position. The integuments were kept together by means of sutures, and strips of adhesive plaster; and over these, compresses and a broad bandage were applied.

The child, when removed, was alive, since it moved, and made continued efforts, during half an hour, to breathe; but, notwithstanding all our efforts, it shortly died. The woman went on remarkably well; the lochial discharge appeared in the usual quantity; and, in forty-eight days from the operation, she was perfectly well.

Case of Poisoning by Laudanum. By Dr. OLLIVIER, of Angers, and Dr. MARYE.

(Journ. de Chimie Méd. Mai 1825.*)*

M. B. P., aged twenty-eight, of a robust constitution, and sanguine temperament, in despair at having lost considerable sums at play, determined to poison himself, and swallowed an ounce and a half of laudanum at once. He at first felt slight nausea, which did not last long; and in the course of an hour became lethargic. Drs. Ollivier and Marye saw the patient *five hours* after the accident, and it would seem that no means had yet been used for recovery. They found him profoundly lethargic, so as scarcely to be roused by being spoken to very loudly. The face was pale (*décolorée*), and there were some yellow spots on the lips, tongue, and skin of the fore-arm, attributed to the laudanum. *The pupils were excessively contracted;* the intellectual faculties unimpaired; the answers to questions were made slowly, but distinctly; pulse 109, hard and full; respiration tranquil, with intervals of prolonged blowing. No pain of epigastrium or abdomen; no nausea or vomiting; no dejections, and no urine passed. A slight tremor of the whole body was observed from time to time; no convulsions; no impairment of sensibility. Three grains of tartar emetic were administered in half a glass of warm water, and a purgative enema was injected.

After some hours, the symptoms remaining the same, and the narcotic effects of the laudanum being increased, twelve ounces of blood were taken from the arm. A considerable quantity of strong coffee was given. The pupils continued *excessively contracted:* no evacuations: the coffee was continued; sinapisms were applied,

and purgative enemata repeated. There was no particular change in the symptoms at eight in the evening, which was twelve hours after the poisoning, except that the respirations were only four or five in a minute, the pulse less frequent, and *the contraction of the pupils so great that the patient could not see those around him.* The infusion of coffee was continued, and a strong æthereal spasmodic draught given. In the course of the night there was delirium, high fever, and profound somnolency.

The next morning, twenty-four hours after the poisoning, there was a decrease of the lethargic symptoms; the respiration was more frequent; the pulse 116, full and hard. The patient was bled to fourteen ounces, and vinegar and water and lemonade were given as drink. The symptoms remained nearly stationary all the day, but a small quantity of urine was passed. *The pupils continued contracted.* In the evening there was a gradual diminution of the lethargy; several purgative enemata were administered: the night was passed calmly; the sleep was natural; and the next morning all the effects of the poisoning had disappeared.

The successful termination of this case does not seem to warrant any unfavourable remarks on the treatment. The narrators dwell with complacency on the consequences of what was done, and particularly on the advantage of the venesections. One of the symptoms which is particularly noticed throughout the case is of much interest, when it is recollected that at the trial of Dr. Castaing, for poisoning an individual with the acetate of morphine, M. Chaussier gave it as his opinion, that in cases of poisoning from narcotic substances, the pupil was *necessarily dilated;* and M. Orfila, on the contrary, affirmed that the pupil might be contracted, or dilated, or in its natural state.*

The physicians by whom the above case is related took the opportunity afforded by it, of making researches respecting the presence of morphine in the blood and in the urine, and were led to believe in its presence in both. Neither of these gentlemen appear to have heard a word of the cold affusion in such cases, or of the stomach-pump.

Effects of Morphine, and of the Acetate of Morphine.

(From the late Researches of M. Orfila, *concerning Opium.)*

The following details will be perused with additional interest, on account of their connexion with some of the phenomena noticed in the case of poisoning above detailed. We select them from the Journal de Chimie Médicale.

Effects of Morphine on different Animals. — I. When introduced into the human stomach in a solid state, its action is similar to that of the acetate, it being apparently converted into a soluble salt, by means of the acid juices existing in that viscus. If it has been

* For some remarks on this singular trial, we beg to refer the reader to the Repository for January 1824, p. 87. A fuller account of the trial is inserted in the Appendix to Dr. Gordon Smith's Analysis of Medical Evidence, p. 368.

given in a dose large enough to produce disturbance, but not so large as to occasion serious symptoms, the following effects are remarked: — Transient headach, coming on sometimes immediately after it is taken; frightful reveries; vertigo; dimness of sight; *contraction* of the pupil in nineteen cases out of twenty, excepting where its action is violent, in which case the pupils are sometimes dilated; subsultus; violent agitation; obstinate vomiting, if it is given in a dose of two or three grains. One individual, after taking two grains of acetate of morphine, vomited almost incessantly for the space of three days. Along with these symptoms there is more or less pain in the epigastric region, and in the course of the intestines; constipation, sometimes suddenly succeeded by diarrhœa; the pulse is generally reduced below its natural state (*état physiologique*); the respiration, except where hæmoptysis is occasioned, is not affected; in man, there is difficulty in discharging the urine, and sometimes total retention. *Pruritus* of the skin is so constant a symptom, that Dr. Bally (Mémoire inédit, lu à l'Acad. Roy. de Méd.) does not hesitate to regard it as the most important symptom of poisoning by morphine. "I durst not," he says, "affirm that an individual had been poisoned by a preparation of morphine, who had not experienced *pruritus* of the skin." The pruritus is often accompanied with small, round, colourless, and very minute elevations.

II. If from forty to a hundred grains of acetate of morphine are given to dogs or cats, the hind-quarters are, in a few moments, observed to be weakened, and the gait becomes unsteady; the animals appear to be sleeping; tremble or remain quiet, but are awoke by the least noise; after some time they become agitated, and run swiftly round the laboratory; when they are touched, they drag the pelvic extremities after them, which seem to be paralysed; the action of the heart is forcible, slow, and intermitting, but sometimes frequent, particularly at first; the pulse is constricted and intermitting; the respiration slow; the temperature of the body diminished; *the pupil is dilated, contracted, or in its natural state*; vomitings, dejections, and a more or less abundant salivation now and then occur; and the animals utter plaintive cries. At the end of one or two hours they evince convulsive motions, try to get up, and fall down again; in a few moments they are again agitated and convulsed; the mouth is now and then full of foam. In the instances where the poisoning is fatal, it is not uncommon for the animals to have one or two paroxysms towards the close, in which they lie down on their bellies, with their feet wide apart, the head held back, the eyes fixed, the respiration noisy, and the limbs convulsed. Strong and full-grown dogs can bear large doses of acetate of morphine, and still recover; but forty or sixty grains of the poison will kill a young half-grown dog, in the space of four or six hours. It appears, therefore, that the effects of this poisonous substance are the same upon dogs as upon man, except that the latter requires a much larger dose to produce death. No changes are detected after death, in the alimentary canal, or in other organs, probably, because

the animals have not been long enough under the influence of the poison.

If thirty or forty grains of acetate of morphine are injected into the cellular tissue, in the inside of the thigh of a middle-sized dog, the animal dies in five or six hours. Shortly after the application of the poison, the hind-quarters are weakened, and the same symptoms are successively observed, as those produced by that salt introduced into the stomach. For about an hour before death, the animal drags itself along on its belly, stretching out its hind feet, and moving the fore-feet as if in the act of swimming: it is also convulsed. No marked alteration is found on examination after death.

M. Orfila considers that the poisonous qualities of *opium* depend on a salt of morphine, narcotine, *(principe de Derosne,)* and a poisonous matter which is volatilised during the distillation of opium with water; its action being the result of the combined action of these three principles.—*(Journ. de Chimie, Mai,* 1825.)

Upon the Disinfection of Fosses d'Aissance.

R. M. PAYEN and CHEVALIER have paid some attention latterly to this subject, for the purpose of employing some cheaper means than have hitherto been used; and an account has been given of their success by M. Bricheteau. The chloruret of lime, the former author states—in a memoir read to the Royal Academy of Medicine—possesses the important advantages of enclosing a considerable quantity of chlorine in a small volume, of suffering only a small portion of the gas to be disengaged, and consequently not incommoding the workmen; and lastly, of acting with the energy of the whole chlorine contained. It can hardly be necessary to state, that chlorine has been found very successful in destroying the baneful properties of the gases developed from animal putrefaction. The price of chloruret of lime appears, however, an obstacle to its use, and it was, therefore, thought that lime itself might be employed as an auxiliary. This substance previously employed will saturate the greatest proportion of the the hydro-sulphuric acid, free or combined with ammonia, by disengaging and forming a sub-hydrosulphate of lime. The chlorine will then act upon the carbonated hydrogen, and the semi-putrified matter to which the gas serves as a vehicle, and the quantity of the chloruret of lime required, will be diminished. Having found it successful on a small experiment, they proceeded to try it upon a larger scale, and the necessity of some such means in Paris may be pretty well understood from the fact, that the *fosses d'aissance*, upon which the experiment was tried, was very large, and had not been emptied for eighteen years. It emitted an odour so disagreeable, that many of the nearer places had been deserted in consequence. The paint of the surrounding walls had been altogether blackened by the action of hydro-sulphuric acid upon the lead contained in it. Some pieces of silver, although enclosed in a press, and distant from the place, had received a

black tinge; the dread also which it inspired was increased by the knowledge of the students having thrown in animal matter.

Two days before they proceeded to the emptying of this privy, they threw two bushels of lime in, at several times, agitating it afterwards with a long pole; too short, however, to reach to the bottom of the *fosse*. During this operation, a most vivid ammoniacal odour was disengaged. The next day the odour was much diminished; the chloruret of lime was now thrown in, and the whole mass agitated as before. The odour was less striking, and from this time, till the nightmen began to empty it, little inconvenience was experienced. It was completely emptied in two nights, without accident, and without further precaution. None of the numerous inhabitants of the house (*la maison de santé orthopédique*) were incommoded by mephitic odour, which was not indeed sensible; the nightmen themselves were surprised that the 'fosse' had so little odour.—*Journal de Chimie Medicale, etc. Avril*, 1825.

Case of Asphysia, caused by emanations from a Fosse d'Aissance.

In the same journal, a R. Labarraque has given an account of a case of asphysia, caused by the emanations from a *Fosse d'Aissance*, in which the chloruret of soda (*chlorure d'oxide de sodium concentré*) was apparently useful. A napkin steeped in a solution of this salt was placed under the nose of the individual, and in less than a minute an acute and peculiar moan was emitted. The stiffness of the limbs ceased, and he opened his eyes, closing them again however, almost immediately. The tetanic stiffness re-appeared with all its frightful accompaniments. Ammonia, æther, and vinegar, were tried without success; and again a cloth steeped in the chloruret was placed over the mouth, and under the nostrils. In less than a minute the stiffness of the legs ceased, the patient gave forth a piercing cry; but this cry was partly stifled by the cloth laid over the mouth. A deep inspiration ensued; the air, to penetrate into the lungs, necessarily traversed the cloth saturated with chloruret of lime, and the 'disinfection' of the gas contained in the chest was complete. The patient walked into the air, holding still the chloruret under his nose. His countenance became more natural; two spoonsful of another medicine were given him, and he was able to resume his work, which was not, however, deemed prudent immediately. He entirely recovered. In this history, several circumstances render it questionable how far the chloruret of lime was efficacious. We deem it, however, our duty to give information of all remedies, which appear to have the slightest prospect of relieving such fatal accidents as those in which asphysia occurs. In the present, it should be remembered that the affection was produced by the effluvia of putrid animal matter; and it is against these particularly that this remedy is recommended.—*Journal de Chimie, etc., Avril*, 1825.

Of the Relative Proportions of Male and Female Births.

M. Bailly announces that, from an examination of tables made with a reference of the number of male and female births during particular months, together with a consideration of the peculiar manners and habits of the people, so far as they influence the strength or weakness of each season, that the conception of the greatest number of males is coincident with those periods in which men enjoy the best health, while the greatest number of females are conceived when the total conceptions are the fewest, *i. e.* when debilating causes act upon the economy, and diminish the fecundity. There appears much fancifulness in all these. When, however, M. Bailly's paper is published, we pledge ourselves to consider it more fully, and to give an account of the real extent of our knowledge on this subject.—*(Revue Medicale, Avril,* 1825.*)*

Of the Morbid Appearances observed in the Stomach in Phthisis Pulmonalis.

R. Andral, whose researches in pathology are well known, has lately employed himself in investigating the morbid anatomy of the stomach in phthisis pulmonalis. This last disease is so various, and the title so vague—for many and very different diseases of the lungs are comprehended in it—that it would have been well worth while for so eminent a pathologist, to have explained exactly what he understood by phthisis pulmonalis. We believe, however, that the affections of the stomach which he has described are more or less common to all chronic diseases; and we are much deceived if the facts here announced as new are really so to English pathologists. M. Andral states, that his observations lead him to the following conclusions:—

First, That in a number of cases, a vivid injection of the mucous membrane exists, generally, only at the cardiac end of the stomach, *(le grand cul de sac)* without any remarkable modification in the consistence or thickness of the subjacent membranes. This injection, which was uniformly situated in the capillary system of the mucous coat, (the veins of a greater calibre, lying in the subjacent cellular tissue, being undistended with blood) could not be confounded with an injection purely mechanical, the result of difficulty of respiration; it was an injection purely mechanical.

2dly,—In other cases, the mucous membrane was not redder than usual, but had a brownish tinge, and was then in general thickened and indurated.

3dly,—Much more frequently, this membrane was softened in different degrees, at one time being also reddened, at another reduced into a pulp, and nearly white.

4thly,—Ulcerations of the stomach were of rare occurrence in the mucous membrane of the stomach.

5thly,—Alterations in the subjacent membranes were rare. Occasionally, however, the cellular tissue appeared indurated, and in two cases the mucous membrane was raised in many hundred points, by tubercles similar to those which are so frequently met with in the small, and less frequently in the great intestine. In both cases

there were round the tubercles unquestionable marks of inflammation; swelling and redness in one case, ulceration in the other. — *Revue Medicale, Avril,* 1825.

Of the Preservative Treatment of Hydrophobia.

Dr. Wendt, whose name is well known as a zealous contributor to the advancement of medical science, has lately published a tract in support of the preservative treatment which has been adopted in the hospital of Breslau against this dreadful malady. The prophylactic measures pursued by Dr. Wendt are the same as those which were first adopted at the hospital of Breslau, by Dr. Kruttze, in 1797. These consist of the application of cantharides on the wound, of the internal exhibition of calomel, and of the external inunction of mercurial ointment, until salivation shall have produced ulceration of the gums. In support of the efficacy of this treatment, M. Wendt appeals to an experience of twenty-eight years, and to the guarantee of its success, which may be furnished by the most eminent physicians in that country. — *Darstellung einer Zweckm' assigen und Durch, &c.* 8vo. Pp. 87. Breslau, 1824.

Note on the Employment of Mercurial Æther in the Treatment of Syphilis.

Dr. Cheron, of Bilboa, and, after him, M. Lagneau, whose experience and writings on syphilic complaints entitle his opinions to the utmost deference, recommend the following preparation as well deserving the attention of practitioners: —

(1.) Take of the superoxygenated muriate of mercury, sixteen grains; of sulphuric ether, one ounce.

(2.) Take of white sugar, one pound and a half; of distilled water, one pound. Dissolve at a gentle heat, and, after the solution is perfectly cold, add — of mercurial ether (No. 1), one ounce.

The dose is from two to four drachms morning and evening. This dose may be progressively augmented. — *Archives Génér., Mai* 1825.

New Method of Treatment in Diseases produced by Lead. By M. Ranque, Physician to the Hôtel Dieu of Orleans.—(*Arch. Gen. de Med.*)

It seems scarcely credible, that the treatment of *colica pictonum* at the hospital of la Charité in Paris, should at this day be conducted according to the precise rules of the founders of that institution, rules which leave nothing to be performed by the mind of the practitioner, but bind him down to apply particular means at particular hours, without regard to the particular case of the person to be treated. Notwithstanding the ambiguity of this method of treating a complaint *by the clock*, it is not pursued at the neighbouring hospitals. At the hospital *Beaujon*, local bleedings and laxatives are trusted to; and at the *St. Anthony* the cure is sought chiefly, if not entirely, from the sulphates of antimony.

M. Ranque informs us, that in Prussia the disease is combated by the administration of large doses of oily and fat substances; and that the practice in Austria, like that of the English, consists chiefly in giving opium freely, either alone or combined with purgatives. M. Ranque considers all the affections produced by lead, if unaccompanied with pyrexia, thirst, or dryness of tongue, as neuralgic; and when those symptoms are present, he considers them as consequent on the neuralgic affection. He traces *all* the varieties to a primary affection of the ganglionic nerves of the *abdominal* viscera, (*des plexus de la portion abdominale du trisplanchnique*,) and the simple practice which he follows is founded on the power of modifying pathological states of these nerves, by acting on the portion of the cerebro-spinal nerves, which is spread over the cutaneous and gastro-intestinal surfaces. With this intention, which he thinks has been fulfilled in more than three hundred cases, he applies epithems to the abdominal and lumbar regions, and an anti-neuralgic liniment and lavement, giving the patient demulcent and mild drinks. The composition of the abdominal epithem is as follows: —

Diachylum gommé (composed, we believe, of mucilage, litharge, decoction of the *gladiolus communis*, pitch, turpentine, wax, &c. &c.) ℥ss.
Theriaca ℥ss.
Emplastrum Conii ℥ij.
Camphora ʒj.
Sulfur (pulv.) ʒss.

Mix these well together, with the assistance of a moderate fire; spread the amalgam on a skin the size of the abdomen, and powder the surface with

Camphora
Antimonium Tartarizatum āā ʒiss.
Sulfur (Flor.) ʒss.

previously mixed together.

This epithem is renewed in two days, unless the pain is previously relieved; but is taken off as soon as any pustules appear.

Another epithem is applied on the lumbar region, extending from the last dorsal vertebra but one down to the sacrum: it is composed of one part of the conium plaster, and two parts of the diachylum *gommé*, with the addition of camphor and sulphur; and is directed to be worn five or six days. The liniment prescribed by M. Ranque consists of

Aqua Lauri Cerasi ℥ij.
Æther Sulphuricus ℥j.
Extractum Belladonnæ ʒij.

These applications, it is probable, are serviceable, inasmuch as they may possess both sedative and counter-irritant properties. The enema employed by M. R., with the intention of overcoming the spasm of the lower intestines, and so removing the obstinate con-

stipation, consists chiefly of oil of almonds or of olive oil; to which is added an ætherial tincture of the leaves of belladonna. The mucilaginous drinks are intended to sheathe the mucous membrane, with the object of preventing inflammatory action and paralysis. When the pain is seated in the head, M. Ranque sometimes directs the abdominal epithem to be applied behind the neck, and causes the temples to be rubbed with the liniment. If the chest is chiefly affected, the epithem is applied to the back, and the liniment is rubbed into the axillæ.

There does not appear to be much novelty in this 'new method' of treating diseases produced by lead, except in the *form* of the applications; but, as the adoption of the form may occasionally be serviceable in these troublesome affections, we have thought it worth while to give some account of it.

Of the Healthy Appearance of the Mucous Surface of the Digestive Organs. By M. Billard, M.D. &c.

The conclusions which M. Billard deduces from his observations on this subject are the following:—

1st. The internal surface of the intestines offers certain differences of appearance, according to the age of the individual, and according as it may be examined during or after digestion; but these differences are only modifications of the colour, and of the natural texture of the membrane.

2d. The mucous surface is of a beautiful rose-colour in the fœtus, of a milky whiteness in early age, and of an ash-colour, or greyish white in the adult and advanced age.

3d. In individuals who have died during digestion, the mucous coat of the stomach and duodenum, and the commencement of the jejunum, is almost always slightly rose-coloured.

4th. It may be said, as a general result, that the mucous coat of the digestive canal is, when healthy, of a whitish colour, or white approaching to an ash-colour.

5th. The mucous membrane of the stomach never presents a morbid aspect in health, nor black or dark-coloured spots.

6th. The muciparous glands are either not apparent, or are so in very small numbers, at the internal surface of the stomach and intestines.

7th. These glands may be naturally developed in considerable number, without the health being injured. — *De la Membrane Muqueuse Gastro-Intestinale, dans l'état sain et dans l'état inflammatoire, &c.* 8vo. p. 564, *Paris*, 1825.

Paralysis of the Tongue.

M. Bouillaud, in a memoir chiefly relating to this subject, expresses it as his opinion, founded on very numerous cases occurring within his own experience, and related by others, that the anterior part of the cerebral lobes particularly presides over the movements of the tongue. Whenever there has been paralysis of this organ, he has found more or less extensive alteration of this portion of the encephalon.— *Arch. Gen.*

PART IV.

INTELLIGENCE RELATING TO THE MEDICAL SCIENCES.

M. Béclard.

There is scarcely any kind of writing which is at once so interesting and useful to the reader, as the biography of eminent men. A thousand exertions of talent, which all the eloquence of precept would never have excited, have been called forth by the power of example. The ambitious student, endowed with the peculiar sensibility to impressions so frequently the attendant on genius, would sink under the labours, the difficulties, and the disgusts which beset his path, if he were not cheered by the recollection of the great men who have mastered all these obstacles, and attained the 'bright temple' of renown. The warmest conceptions of a noble and aspiring mind, would be chilled by the cold and common-place atmosphere of worldly converse, if they were not now and then cherished and vivified by the sun of glory which shines for ever on the busts of the departed great. The business, and the anxieties, and the necessities of life would utterly choke and destroy the good seed of industry, beyond what the short existence of ourselves might require, if there were not something attractive in the idea of being remembered after we are dead, and spoken of with praise; and if we did not occasionally contemplate the immortal fame of men, whose earthly hopes and fears have long been ended, and whose bodies have long been mouldered into the dust of the earth from which they sprung.

A biographical account of men distinguished in medicine and surgery, would, on every account, be an acceptable present to the profession; but its execution would require more extensive knowledge than is usually possessed by one individual, and a share of 'retired leisure,' which few are happy enough to enjoy. Such a work, whilst it might be made the best History of Physic that has ever been compiled, would have the effect of attaching men more strongly to a profession, adorned in every age by so many bright examples of united wisdom and virtue, and, by holding up the best examples of all that is requisite to form an estimable medical reputation, would both encourage and direct the inexperienced and the young.

France has to deplore the recent loss of M. Béclard, the greatest, perhaps, that, since the death of Bichat, has been sustained by Surgery. The journals of that country have tendered their various homage to his public and private virtues, and his honoured remains were attended to the grave by a crowd which excited curiosity even in the procession-loving city of Paris. A few particulars relating to his life, selected from the different periodical publications of that capital, will, we are assured, be read with interest.

Béclard was the son of a respectable tradesman of *Angers*, and

was born in 1785. His parents had several other children, and Pierre-Augustine was at first destined to the same rank in life as themselves. The talents which he very early displayed, and his remarkable attachment to study, led them however to promote his education to the utmost extent of their means. At that time Bichat was in the zenith of his glory, his name and his works were spoken of in every province, and the young Béclard felt that sort of envy, which both in generous and aspiring minds is more allied to virtue than to vice. His aspirations were, however, for some time suppressed, by the vain attempts of his father and mother to subdue the ambition of the future anatomist into something more suitable to a tradesman: but after one or two unsuccessful trials to make him first a dealer in hardware, and then a merchant, and then a clerk in a waggon office, being assured by his successive masters that they could make nothing of him, the despairing old people allowed him to become a pupil at the *Hôtel-Dieu* at *Angers*, In this situation, the passion for study, which had been so fatal to his prospects in pursuits unconnected with science, was soon productive of the greatest effects; and in 1808, after passing four years at the hospital of *Angers*, so as to acquire the esteem of all around him, he removed to Paris.

In the midst of the distinguished surgeons of the large hospitals of that city, his abilities soon became conspicuous; he gained one anatomical honour after another, and was successively selected by M. Roux for the office of his assistant-lecturer (*répétiteur*,) at *la Charité*; and chosen demonstrator to the *Faculty*, and *Chef des travaux anatomiques*. In 1813, on the occasion of being created Doctor in Surgery, he presented a thesis containing several original opinions in physiology and surgery. His progress was a little interrupted, by his failing to obtain the office of assistant-surgeon to the *Hôtel-Dieu* in 1815; but his merits were considered quite equal to those of M. Marjolin, the successful candidate, and three years afterwards he was elected by the votes of all his preceptors, and according to the wishes of all the pupils, to the chair of Anatomy in the Faculty of Medicine of Paris.

After attaining this important situation, he appears to have devoted his whole time and his whole soul to such a continued series of laborious studies, connected with his office of a teacher, as caused his lectures to be crowded with students, and eventually shortened his existence. Few men appear to have been more devoted to public duty, and more ardent in the pursuit of science, or more negligent of ornament, or more careless of the emolument which might have been derived by attending less to his pupils and more to the public. As a lecturer, he was clear and precise, without being ambitious in his style. His conception was rapid and powerful, his memory extensive, his judgment correct, and his elocution agreeable. His hearers forgot the professor amidst the richness and the beauty of science which he displayed to them; and some idea may be entertained of his industry by the fact, that, notwithstanding his great abilities and his long familiarity with his subject,

the preparation for a single lecture, often occupied him four or five hours. He seems to have had a pure passion for science, unmixed with any strong desire for personal distinction, to have welcomed knowledge, from whatever quarter or country it came to him; and to have been uniformly more desirous to *learn* the truth, than to be the *discoverer* of it—an undoubted feature of a great mind.

His principal published works are, a memoir *sur les Acéphales:* a memoir of considerable length *sur les Blessures des Vaisseaux:* a memoir on Osteology, the fruit of much observation and research: an essay on Embryology, published in the name of his brother: numerous experiments on local affections of the nerves, published in a thesis by M. Descot, in 1822: and a work on General Anatomy, for the use of his pupils. He was the author of many articles in the different *Dictionnaires de Médecine;* and of several papers contained in the *Bulletins de la Société d'Emulation;* and other collections. He also edited the second edition of Bichat's *Anatomie Générale*, adding many observations of his own: assisted by M. Jules Cloquet, he translated Mr. Lawrence's work on Hernia into the French language; and in conjunction with the same author he had commenced a series of anatomical plates.

It is gratifying to find that his private character was no less distinguished by virtues, than his public character by talent and labour. He was not naturally of a communicative disposition in conversation, but when a stranger had got over the coldness of his exterior, he invariably found him obliging, and ready to aid others by his advice, his knowledge, and access to his valuable library. As a public examiner of pupils, he was just, without undue severity; and, in that department of duty, repaired many abuses which had been greatly complained of. When it was thought proper, for political reasons, to *re-organise* the Faculté de Médecine in 1823, very general anxiety was felt for the probable removal of M. Béclard from his office; but, notwithstanding some intrigue and manœuvring, the commanding merit of the professor preserved him his chair in the newly-modelled school. As a son, a husband, a father, a brother, and a friend, he seems to have been rich in amiable qualities, and eminently beloved.

In the midst of his labours and his duties, in the height of his fame, and in the prime of his life, he was attacked by a disease which, in eleven days, deprived his family of his protection, and his pupils and his country of his services. His too great assiduity in his pursuits had, for some time, been apparently productive of a kind of chronic inflammation of the stomach; to this succeeded an acute cerebral affection, accompanied with erysipelas, which, notwithstanding all that art and all that friendship could suggest, was fatal. He is said to have described the nature of his complaint in a very collected manner to those around him, and his description was found correct, on examination after death. With every thing to attach him to life, and every capability of enjoying existence, he saw the sure approach of death, and met it with becoming firmness and resignation.

His funeral was attended by an immense concourse of students, all anxious to express their respect for the memory of a man whose life had been consecrated to their improvement. The Faculty of Medicine, deputations from the Royal Academy, and the different societies of medicine, and a crowd of colleagues and friends, accompanied the procession to the cemetery of Père La Chaise, and in this beautiful but fanciful place of repose for the dead, various honours were paid to the defunct, not without some admixture of that theatrical display which a Frenchman cannot help mixing with all affairs of life and death. For instance, first M. Pelletan, in the name of the Faculty of Medicine, then M. Pariset, in the name of the Academy, then M. Roux, in the name of the Section of Surgery, then M. Adelon, in the name of the numerous friends of the deceased; and, lastly, a young pupil, in the name of the rest of the pupils; deplored the end of a life which had been so useful and so short, and enumerated the talents and virtues of the dead.

M. Richerand was to have spoken for the Faculty of Medicine, but was unable to do so; and M. Pelletan being called upon on the spot, delivered a kind of funeral oration extemporaneously, and with much feeling. The following extracts are given in the *Revue Médicale;* and, making the necessary allowances for national taste and habitudes, are not without interest to all men who aspire to posthumous honours by honourable means.

'Béclard! thou hast been our colleague, our associate, our friend. The Faculty of Medicine had selected from among us him whom thou lovedst the most, to express in this place the feelings of us all. But he has been overcome by his grief, and unable to follow us; yet the regrets of the faculty shall not be silent, although his voice has been suppressed by tears. . . . . .

'How brilliant, but how short, hath been thy career! Distinguished among thy fellow-students whilst yet a pupil, thy reputation was established by numerous proofs. Early elevated to the rank of professor, thou wert a model for others to form themselves by. Justness of thought, excellence as a lecturer, wisdom of opinions, profound erudition, indefatigable zeal for science, — all these precious qualities, from which we were daily profiting, were united and ennobled in thee by their union with good faith, with disinterestedness, with humanity. . . . . .

'I see, in this immense crowd, more than one unfortunate being whom gratitude has brought hither, that through the close and far-extended ranks of thy pupils, he may at least catch a sight of thy tomb. . . . . .

'But what are my broken sentences—what are these words lost in the air, when all that they would convey is a thousand times more imposingly expressed by the spectacle around us! Thy colleagues and thy friends have been unwilling to part from thee until the last moment. The immense assemblage round thy grave, the faculty, with all its professors, with all its fellows, with all its numerous pupils, so many distinguished men, so many weeping

friends, declare the loss we have suffered, and the void which has been made among us. And when I turn from these to thy despairing family, where would they find consolation, if their private sorrows were not softened and mitigated by this great expression of the public grief?

'Farewell, then, Béclard! thou art worthy of our praises, for thy friends were many: we will preserve thy remembrance: thou hast bequeathed to us thy example.'

The pupils of the deceased professor, who had insisted on bearing his coffin on their own shoulders to the grave, relieving each other by turns, terminated their pious offices by covering the precious remains with earth, and closing the grave with their own hands.

Variation in the Boiling-points of Fluids.

It has been known for some time, that when certain kinds of extraneous substances are introduced into heated fluids, considerable effect is produced upon the *boiling-point*, vapour being formed either at lower points, or with much increased facility. Thus Guy-Lussac has shewn, that metal filings thrown into *water*, heated in a glass vessel, lower the boiling-point of that fluid 2° or 3°; and Mr. South pointed out the effect produced by putting platina wire, or slips of platina foil, into hot *sulphuric acid*, thereby causing it to boil readily, quietly, and at lower points by several degrees (in glass vessels) than it otherwise would have done.

Dr. Bostock has recently observed a remarkable fact of this kind in the extent to which the boiling-point of *æther* may be changed by the introduction of a small chip of wood, a portion of quill, bits of glass, or other solid matter, perhaps, of any kind. *Æther*, in a glass vessel, boiled freely with him at 112° (Fahr.), and with difficulty at 110°. On employing another glass vessel, it would not boil till the temperature had attained 150°, and this point was adhered to in other vessels.

On repeating the experiment, however, in a new vessel, the æther boiled earlier than before, but the vapour was observed to come off from one particular point, when some substance had adhered to the glass. This led to the introduction of a small *cedar chip* (a pencil paring), when the wood was quickly covered with bubbles, and the fluid brought rapidly into ebullition.

In this way æther boiled at 102°, which, without the chips of wood, required 150°. The chips acted best when perfectly dry, and were not so effectual after some time as when first introduced. When completely soaked with the æther, they sunk to the bottom, and the ebullition nearly ceased, but the introduction of a fresh piece renerved it. Fragments of broken *glass* also lowered the boiling-point of æther considerably; and a small piece of *metallic wire*, or *copper filings*, thrown into this fluid at 150°, caused a sudden and copious explosion of vapour, and reduced the boiling-point many degrees. Plunging a thermometer also into hot æther caused the production of bubbles, at a temperature many degrees

below the boiling-point, when no thermometer was present. After a time this effect ceased; but the instrument being removed for a little, its re-immersion produced a repetition of the same phenomenon.

Alcohol (*sp. gr.* ·848) boiled in a glass vessel at 182°, but by dropping in successive pieces of cedar-wood, the boiling-point was reduced as much as 30° or 40°.

The boiling-point of *water*, also, Dr. Bostock found, was altered 4° or 5° by chips of cedar-wood dropped into it;—this fluid requiring a temperature of about 217°, when heated in a glass tube by means of hot lime, before ebullition took place, but being brought down to the usual standard (212°) by the introduction of a few chips.

Similar facts have been observed by other persons; and the knowledge of them has even been applied to practical purposes in this country, as by the keepers of steam-engines—with some of whom, when the *steam* fails, it has long been customary to throw into the boiler a quantity of the residue of malt, after the soluble part has been extracted (denominated *cornings*), the immediate effect of which is the plentiful disengagement of vapour.

Professor *Oersted* also states, that he has employed a similar expedient (*experimentally*) in the distillation of brandy; and the result was, that *seven* measures of this liquor were distilled over with a degree of heat which otherwise would have only produced four.

We have entered into these details, because we have no doubt that the principle here developed may be advantageously applied to the preparation of many medicinal substances, which are often injured by the degree of heat to which they are exposed in the laboratory.—Vid. *Ann. of Phil., Feb. and Mar.;* and *Lon. Journ. of Science, April* 1825.

Animal Chemistry.

It has generally been supposed, from the similarity which the *harder* parts of *insects* bear in their external appearance to the *horny* structures of *vertebrated* animals, that they were also similar in their chemical properties. It would appear, however, from some late researches, that this is by no means the case; but that the substance, to the predominance of which they owe their peculiar properties, bears, on the contrary, a very close analogy to the *woody* fibre of plants. This substance has been called *chitine* by Mr. Odier, to whom we are indebted for our knowledge of it.—Dr. Roget's *Lectures, Lit. Gazette.*

Botany.

The *Herbarium* of the celebrated Govan, late Professor of Botany at Montpelier, has recently, it appears, been purchased by Dr. Hooker, Professor of Botany at Glasgow, together with his *Correspondence*, which, amongst other interesting articles, contains, it is said, forty original letters of the great Linnæus.

The botanical collection includes, it is estimated, about 7000 plants. It is particularly rich in the productions of the South of France, and of the Pyrenees; and likewise contains many valuable specimens from Egypt, Arabia, and Peru.—*Edin. Journ. of Science, Jan.* 1825.

Mode of preparing Moxa.

A PREPARATION very similar to the Chinese moxa, and equally effectual, may, it is said, be formed by dissolving one ounce of *nitre* in a quart of water, and therein saturating some fine cotton wadding; which, being afterwards dried and divided into small parcels, is to be enclosed in paper cylinders, about half an inch in diameter, and one inch in height. This preparation burns, we are told, in a very slow and gentle manner, and only requires being kept dry to be at all times fit for use.—*Boyle on Moxa*, 1825, p. 29.

Opium, Cultivation of, in England.

MESSRS. COWLEY and STAINES, surgeons at Winslow, Bucks, have been for some years in the practice of cultivating poppies for the production of opium; and the following details, extracted from a communication made by them to the Society of Arts, will shew with what success this branch of agriculture may be prosecuted in England.

In the year 1823, these gentlemen collected *one hundred and ninety-six pounds of opium* from poppies growing on twelve acres, one rod, and thirteen poles of land. The crop was very abundant, and the heads remarkably large; and the character of the opium was such in the market, that it sold at two shillings on the pound above the best foreign kinds.

The expenses attendant upon the cultivation of the poppies and a crop of turnips grown upon the same land, and the subsequent extraction and preparation of the opium, seed, &c. amounted to £274. 1*s*. 9*d*. The receipts were as follows:—

	£.	*s*.	*d*.
Opium, 196 lbs. at £1. 10*s*. 6*d*. per lb.	298	18	0
Seed, 25 cwt. 1 gr. 22 lbs. at 12½ per cwt...	15	5	3
Ditto unsold, about 5 cwt. worth.....	3	0	0
Extract, 381 lbs. at 1*s*. 6*d*. per lb.	28	11	6
Turnips, 10 acres, at £2. 10*s*. per acre	25	0	0
	370	14	9

leaving a profit of £96. 13*s*.

We add one or two important remarks with respect to the nature of the soil proper for the cultivation of poppies, from the same source.

'A porous *sub-soil* appears to us as a circumstance of the first-rate importance: for where it consists of *clay*, our crops have invariably been inferior to those which have grown on such parts as were situated upon *sand*, although assisted with more manure. So strong indeed is our conviction of the ill effects of an impervious

sub-soil, that we have no hesitation in saying, that however good the *soil*, or however dry it may appear, if it be situated immediately above *clay*, no profits can be extracted from it by the growth of poppies, so frequent will be the partial or total failures of the crop.

'A tolerably correct idea of the fitness of any particular soil for the growth of poppies may generally be formed, by observing the shape in which it produces the capsules of the poppies. On suitable land these generally assume the *oblate spheroid form*, while in unfavourable situations they constantly degenerate into an *oval shape*; an accident which may usually be traced to disease of the root, and which invariably diminishes the product of opium, and, in a lesser degree, that of the seed also.'—*Trans. Soc. Arts*, vol. xlii. 9, and *Rep. of Arts, Ap.* 1825.

Crystalline Lenses of Animals employed as Microscopes.

Dr. Brewster, so well known to the scientific world, has lately suggested the employment of the *crystalline lenses* of animals as single microscopes; in cases where high magnifying powers are acquired, no artificial lenses which we can obtain being, as he says, either in their external form or in their internal structure, so perfect as those which we receive from the hand of nature. The crystalline lenses of *fishes*, from their superior density, which renders them less liable to injury than others, are, Dr. B. says, the best adapted to this use; and the only precaution necessary in employing them is to place the lens so, that its optical axis, and the axis of vision in the eye of the observer, shall correspond, which may easily be done by adjusting the lens to a concave aperture in a small plate of metal, &c. A lens thus disposed will, it is said, preserve it transparency for some hours.

In cases where *high* magnifying powers are not required, the crystalline lenses of *quadrupeds* will, however, we may add, be found more convenient than those of *fishes*, as embracing a larger field of view, and as they are in general easily attainable, and often in situations where no artificial lens can be procured. A knowledge of this fact may frequently be of use to the naturalist.

Dr. Brewster's observations are contained in the Edinburgh Journal of Science for January last.

Sulphate of Soda, spontaneous Production of this Salt.

On the coast of Chili (S. America), near the bay of *Copiapo*, lies a valley known by the same name. This valley is about three or four miles across, and bears every appearance of having been, at some former period, the channel of a mighty river, which is now shrunk to a scanty rivulet, the waters of which are perfectly *salt*.

The soil of this valley is completely covered at every part by a *layer of salt several inches thick*, which has been ascertained to be *sulphate of soda*.

This salt looks like *snow* upon the ground; and even when made into roads, and beaten down, bears the same appearance.—*Hall's Journal in S. America*, 1822, vol. ii. p. 22.

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

[No publications will be announced under this head, except those which are actually received by the Editors, from the Author or Publisher.]

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1. Collections from the Unpublished Medical Writings of the late Caleb Hillier Parry, M.D., F.R.S., &c. Vol. I. 8vo. Pp. 590. Underwoods, 1825.

*** As soon as we shall have the whole of Dr. Parry's Posthumous Works before us, and consequently the whole of the materials on which he has founded his pathological views, we shall enter into a full and critical inquiry as to their correctness and scope.

2. The Study of Medicine. Second Edition. By John Mason Good, M.D., F.R.S., F.R.S.L., Mem. Am. Phil. Soc., and F.L.S. of Philadelphia. In five volumes 8vo. Baldwin and Co. 1825.

*** Dr. Good has made many valuable additions to this edition of the Study of Medicine.

3. The Lectures of Sir Astley Cooper, Bart., F.R.S., Surgeon to the King, &c. &c. on the Principles and Practice of Surgery: with Additional Notes and Cases, by Frederick Tyrrell, Esq., Surgeon to St. Thomas's Hospital, and to the London Ophthalmic Infirmary. Vol. II. 8vo. Pp. 460. (Plates.) Underwoods, 1825.

*** These Lectures, which are now appearing in a manner which is creditable both to their eminent and much-respected author, and to the professional reader, are illustrated by suitable notes and cases, by the editor.

4. A Treatise on the Different Methods of Investigating Diseases of the Chest, and of their Application to the Diagnosis in those Diseases. Translated from the French of M. Collin. With an Additional Preface, pointing out the most familiar and easy way of acquiring a knowledge of the Use of the Stethoscope. By W. N. Ryland, M.D., Member of the Royal College of Surgeons, London, &c. &c. 18mo. Pp. 70. Burgess and Hill, 1825.

*** We can recommend this pocket volume to the notice of practitioners and students.

5. Observations on Gout, Critical and Pathological; or, an Analytical Survey of the Views at present entertained of the Nature of that Disorder; with Critical Remarks on the Injurious Effects of Colchicum, and on certain Modes of Diet. By A. Rennie, Surgeon, &c. 8vo. Pp. 190. Underwoods, 1825.

6. Practical Observations on Hydrocele; with a view to recommend a New Mode of Operating for that Disease. Illustrated by Cases. To which are added, some Practical Observations on Bronchocele, and on Inflammation of the Mamma. By James Holbrook, Member of the Royal College of Surgeons in London, Surgeon to the Monmouth General Dispensary, &c. 8vo. Pp. 107. Underwoods, 1825.

7. A Letter to Sir Henry Halford, Bart., President of the Royal College of Physicians, proposing a Method of Inoculating the Small-Pox, which deprives it of all its Dangers, but preserves all its Power of preventing a Second Attack. By R. Ferguson, M.D., Member of the Royal College of Physicians of London and Edinburgh. 8vo. Pp. 38. Burgess and Hill, 1825.

8. Observations on Medical Appointments to Charitable Institutions; with Remarks on the System of Professional Education. By William Gill, Surgeon. 8vo. Pp. 37. Liverpool, 1825.

9. A History of the Schools of Medicine of Holland and Belgium. By Edward Jones, M.B., &c.

THE METEOROLOGICAL JOURNAL,

From the 19th of MAY to the 20th of JUNE, 1825.

By Messrs. HARRIS and Co.

Mathematical Instrument Makers, 50 High Holborn.

May.	Moon.	Rain Guage.	Therm. 9 A.M.	Therm. Max.	Therm. Min.	Barom. 9 A.M.	Barom. 10 P.M.	De Luc's Hygrom. 9 A.M.	De Luc's Hygrom. 10 P.M.	Winds. 9 A.M.	Winds. 10 P.M.	Atmo. Variation. 9 A.M.	Atmo. Variation. 2 P.M.	Atmo. Variation. 10 P.M.
20			53	62	49	30 08	30 04	79	62	E	ESE	Fine	Fine	Fine
21			60	68	46	30 00	29 94	69	70	E	ESE	——	——	——
22			60	68	50	29 90	29 90	67	62	E	S	——	——	——
23			66	72	55	29 81	29 64	60	61	SSW	SW	——	——	——
24			65	68	53	29 62	29 55	63	73	WSW	S	——	——	——
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26			61	63	44	29 50	29 54	73	81	NW	NE	Clo.	——	Rain
27		,14	51	56	42	29 57	29 67	71	60	NNE	ENE	——	——	Fine
28			43	50	40	29 72	29 67	59	73	W	SE	Fine	Rain	——
29		,17	55	57	45	29 73	29 80	68	77	SW	NE	Clo.	Sho.	Clo.
30		,5	52	58	42	29 75	29 96	62	69	ENE	ESE	Fine	Fine	——
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3			58	68	46	29 96	29 60	75	70	NW	W	Rain	Sho.	Fine
4		,11	56	58	47	29 43	29 20	76	72	WSW	W	——	Rain	Clo.
5		,18	54	58	42	29 30	29 68	63	71	NW	NW	Clo.	Clo.	Fine
6			56	64	52	29 80	29 80	66	72	WNW	SSW	Fine	——	——
7			60	68	55	29 75	29 76	65	68	SW	WSW	——	——	——
8	☾		63	68	52	29 79	29 83	72	65	SSW	WSW	Clo.	Fine	——
9			62	72	55	29 90	30 00	70	60	W	W	——	——	——
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12			63	76	60	29 99	29 95	57	63	SE	ESE	Fine	——	——
13			68	78	57	29 96	30 04	63	55	NE	NE	——	——	——
14			66	75	53	30 09	30 16	64	60	NE	E	——	——	——
15			63	72	49	30 13	30 08	61	56	NE	E	——	——	——
16	☾		65	76	55	30 00	29 95	63	65	ENE	ESE	——	——	——
17			62	68	49	30 00	30 00	75	65	ENE	NE	Clo.	Clo.	——
18			56	68	56	30 00	29 94	65	68	E	SE	Fine	——	——
19			61	71	55	29 92	29 65	63	58	W	NW	Clo.	Fine	——

The quantity of rain fallen in May was 1 inch and 75-100ths.

NOTICES TO CORRESPONDENTS.

The Readers of the Medical Repository may perceive, from this Number, that it is our intention to extend our monthly limits to at least six whole sheets, or 96 pages, and to print the greater part of the work in a closer and more uniform type than formerly, which will be equal to a still farther extension of the limits of the work.

Several Communications are received, and are under consideration. Original observations and important facts are solicited, on the part of the Editors, from the old correspondents and readers of the work.

Literary Notices, &c. cannot be inserted in the body of the work, unless with a very few exceptions, which will rest with the Editors.

Correspondents, and authors of works, or of papers in other Journals, who may wish to have their productions noticed, may send them under cover (post paid) to the Editors, 1 Bulstrode Street, Cavendish Square, or to the Publishers', Fleet Street.

The Index to the preceding volume will be delivered with the next Number.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the Editors, to the care of Messrs. T. and G. Underwood, 32 Fleet Street.

THE LONDON MEDICAL

REPOSITORY AND REVIEW.

No. 140. AUGUST 1, 1825. Vol. XXIV.

No. II.——NEW SERIES.——Vol. I.

PART I.

REVIEW.

I.

*THE ART OF DETECTING DISEASES.**

[Second Article.]

An Essay on the Symptoms and History of Diseases, considered chiefly in their Relation to Diagnosis. By Marshall Hall, M.D., F.R.S.E. 1822.

Symptomatology; or the Art of Detecting Diseases. By Alexander P. Buchan, M.D., F.L.S. 1824.

Novus Thesaurus Semiotices Pathologicæ, quem collegit atque edidit Maur. Hasper, Med. Chir. atq. Philos. Doctor. 1825.

Manuel de Clinique, ou des Méthodes d'Exploration en Médecine, et des Signes Diagnostiques des Maladies. Par L. Martinet. 1825.

Séméiologie Générale, ou Traité des Signes et de leur Valeur dans les Maladies. Par F. J. Double. 5 tom. 1811—1825.

The Thorax. — Pursuing our observations on this subject, with a view to the plan which may be followed at the bed-side of the sick, (and we wish it to be kept in mind that we purposely avoid, as far as it is at all practicable, to treat of *Prognosis*,) although the circumstance of pain formerly spoken of, especially if it exist in a severe degree, must determine our particular inquiries to the seat of it, whether in the head, chest, abdomen, or extremities; yet, as the seat of pain is not very unfrequently remote from the seat of disease (as in the very common case of severe abdominal pain throughout the whole course of pulmonary consump-

* Continued from page 20.

tion), and as most painful diseases, wherever situated, more or less affect the respiration, we shall go on to the consideration of the morbid conditions of that great function in this place. Indeed, whilst we are watching the attitude of a sick person, even where pain is a prominent symptom, it must, in the majority of cases, happen, that its effects on respiration, as well as the effect of the respiration on the pain, are simultaneously noticed. In diseases of the lungs, or within the thorax, a state of breathing different from the natural state is almost always striking; and where dyspnœa has supervened on diseases of parts remote from the thorax, it may be said to be always alarming.

A peculiar form of the chest, inasmuch as it may dispose to pulmonary disease, becomes a source of information to us; and we learn some particulars with respect to female patients by the development of the bosom; and are occasionally directed to spinal malformation by the unequal size of the mammæ, or the undue protrusion of one shoulder. Very slight habits of attention are sufficient to give us this kind of prefatory insight into the state of patients; and thus we soon learn to consider a man with a short neck and a red or purple face as in danger of apoplexy, and to look upon an unwieldy abdomen as a fruit of long habits of indulgence at table, or on a carbuncled face as a reflection of past conviviality, insomuch as to excite our suspicions concerning some disorders of the stomach, liver, and other organs of digestion. The only danger consists in our considering these outward appearances the absolute signs of specific affections, and, consequently, our being led to assume the existence of such affections on insufficient and uncertain proof.

In aid, then, of our examination into the general state of the thorax, we have the benefit of observation of its form and motions, of the degree and peculiarities of the latter, as conveyed to us by mediate auscultation and mensuration of the chest; and to these we may add the important help of percussion. M. Double farther insists, that external heat will be found to indicate the seat of the disease, not only generally, according to the observation of Hippocrates, 'quâ corporis parte calor inest aut frigus, ibi morbus est,' but locally and particularly.

'The external point of this cavity, where the heat is greatest, indicates,' he says, 'some injury of the internal part which corresponds to it. Avicenna advised this experiment should be tried, to ascertain on which side effusion had taken place in empyema: that a wet cloth should be placed upon the chest, and where it became

dry the soonest, there, he said, was the disease, and the empyema would be found on the same side.' *

Whatever other appearances of danger there may be, scarcely any violent disease will be found to exist in the three great cavities, as they are called, if the patient's respiration remains tranquil, and his voice firm and natural. Dyspnœa coming on in the course of inflammatory disorders not immediately concerned in respiration, as in enteritis, is an unerring sign of the dangerous increase of the malady; and the respiration remaining undisturbed, is sometimes the only good symptom when yet the patients recover. The author just quoted says, that, the respiration remaining natural, he has frequently seen patients recover from putrid and malignant fevers, after he had pronounced sentence of death upon them on account of their exhibiting the Hippocratic countenance, floccitation, and loss of pulse. † At every step of this inquiry, however, we are reminded of its futility, as far as relates to separate symptoms; and we cannot too often repeat our sense of it, or too strongly warn the student never to throw off the weight of his care on account of espying any *single* symptom, or to trust in any *one* as a safe guide in the labyrinths of inward diseases. After every observation which, out of the mighty mass of collections made by others, or out of our own experience, we think ourselves justified in making some allusion to, we feel disposed to repeat what has been, by some writers especially, said of some of them only — *cæteris consentientibus*. Exceptions occur to the mind, as soon as any symptomological axiom becomes the subject of thought. Every reader of experience will be able, no doubt, to recollect cases in which the respiration was laborious, the voice diminished and puerile, and the general appearance of the patient that of distress, and yet in which there was no pulmonary affection, or, indeed, serious disease of any kind: — we speak of some forms of hysteria; but in these, the state of the tongue, of the skin, of the pulse, and, perhaps, the visible perturbation of the mind, or some or all of these circumstances, assist us in forming a correct judgment. On the other hand, examples of severe, spreading, fatal disease of the lungs — examples more insidious, and infinitely embarrassing, are sometimes met with, in which the whole substance of the lungs gradually becomes unfit for the purposes of respiration, almost without any warning symptoms either of the precise seat or extent of the danger, until death is actually at the gate.

* *Double*, Vol. I. p. 360. † Vol. II. p. 14.

In general, we find a febrile state of the system accompanied with a quickened respiration; and when there is inflammation as well as fever, we often remark an instructive transference of action, by which the labour of breathing is avoided by the part diseased, and thrown on such parts as are better able to bear it. Thus, in inflammations within the chest, we see the abdominal muscles called into unusual action, and the parietes of the thorax comparatively tranquil; and when parts within the abdomen are inflamed, we find the muscles of the abdomen kept still, and the thoracic muscles labouring.

'By an attentive observation of the modifications of the respiration, inflammation of the pleura is distinguished from inflammation of the peritonæum covering the liver, &c. Inflammatory pain within the abdomen is, in the same manner, distinguished from spasm or colic, in which there is a state of breathing altogether *incompatible* with inflammation attended with acute pain and tenderness.'*

Sometimes all the parts which can by any means be brought to take a part in carrying on respiration are exerted together, with evident and painful effort, for the purpose of overcoming or remedying some terrible obstacle to easy breathing either in or about the lungs themselves — a state which affords little hope.

Slowness of the respiration indicates oppression of the brain, as in apoplexy, or after severe injuries of the head, or in cases of poisoning by laudanum; (as in a case detailed in the last Number of this Journal, in which the respirations were only four or five in a minute;†) and in some examples of paralysis, in which the respiration has been said to resemble a succession of sighs. Frequent interruptions, occasionally renewed efforts, long intervals between the act of expiration and the next inspiration, with an increasing sonorousness, tell us that disease has gone too far to be checked, and mark the departure of life from the body.

Even when there is little or no ordinary impediment to the act of breathing when the patient is undisturbed, we sometimes require him to take a deep inspiration, or to rise up suddenly, and gather information from the effect thus produced. When a full deep inspiration can be taken, without exciting either pain or cough, we generally consider the lungs to be sound, and that there is no acute inflammation within the chest, or in the portion of the abdomen in the vicinity of the diaphragm: but we are not hastily to assume the converse of this, or to forget that a full inspira-

* Hall, sect. 322, 323. † Page 78.

tion may be impeded by pains which are merely muscular. Dr. Hall considers the effect of a deep *expiration* still more important, and has occasionally gained information from other actions of the respiratory organs. He observes —

'In some instances of *chronic inflammation of the larynx or trachea*, I have observed that the patient is incapable of performing the action of snuffing up the nostrils, so as to draw in the alæ nasi; this was not observed in some cases of *ulcer of the larynx*. The remark may not only lead us to determine the *degree*, but the *diagnosis*, of the morbid effects of *laryngitis*.' *

An increased frequency of respiration is often one of the earliest tokens of a phthisical habit; 'an effort is *early* visible in the respiration, and its effect seen in a movement of the alæ nasi.' † The quickness of breathing is only an accompaniment of another constant symptom of phthisis, a quick pulse. A sudden dyspnœa sometimes occurs in dyspeptic patients, in which a sense of weight is felt at the sternum, and the respirations are increased in frequency: Dr. Hall looks upon this as a commencement of asthma. When the respiration, which was tranquil whilst the patient refrained from motion, becomes hurried, anxious, and difficult as soon as he moves, we have to fear effusion into the chest, or some organic disease of the lungs, heart, or large thoracic vessels.

In cases of pneumonia terminating in *sphacelus*, M. Double says he has seen the character of the respiration suddenly altered, from painful and difficult to perfectly easy, not long before death. We may observe, however, that Laennec, who scarcely considers gangrene of the lungs one of the terminations of inflammation, but looks upon the degree of inflammation subsisting as rather an effect than a cause, does not appear to have noticed the peculiar change of symptoms alluded to by M. Double; and in some of the cases related by him, the respiration was even not much affected until a few days before death.

Connected with respiration, we have to attend to the character of the cough, when any is present, and to that of the expectoration. We shall not attempt to describe the peculiar sounds of different kinds of cough, which become with the experienced practitioner indications of the cause from which they proceed; they are, indeed, to be considered as more relating to prognosis than to the distinction of diseases, although the violence of cough, the facility or pain with which expectoration follows it, and the effort made to repress it, are often serviceable to us, and the latter circum-

* Sect. 338. † Hall, sect. 325.

stance is in a particular manner instructive in the pneumonia of children or infants; because it indicates a degree of pain that in all probability arises from an inflamed state of the pleura. Cough may exist without disease of the lungs; it may be occasioned by a temporary plethora, in the absence or in the suppression of habitual discharges, by distant irritations, as from worms, or substances within the ear, sometimes from an unexplained sympathy with the stomach, and sometimes, perhaps, from mere debility; but in all these cases the lungs may eventually become really diseased, so that the duration as well as the kind of cough is to be inquired into. From the expectoration, we learn the nature of serious and doubtful pulmonary diseases; and we are greatly assisted by it in our diagnosis between some cases of peripneumony and bronchitis, and cases of true phthisis pulmonalis, as the excretion of tenacious, adhesive matter in the former differs very strikingly from the frothy, aqueous, unadhesive expectoration of phthisis, even when the latter is mixed with detached nuclei of thicker matter, and presents no purulent character. Copious and tenacious expectoration may be a result of mere gastric irritation: in some individuals this is a very troublesome consequence of recent excess in wine or spirits; and it appears to be in this way that relief is afforded by expectorant medicines. The expectoration of blood always gives the patient some alarm, but it may be expectorated in small quantities without danger: when a considerable quantity is suddenly brought up without effort the case is much more serious, at least, where, by the inspection of it, we are assured it comes from the lungs. It now and then happens, that in persons who have an habitual determination to the head, a natural attempt at relief is made by the rupture of a vessel at the back of the nostrils; the blood is swallowed, and after some time vomited in a coagulated state: if the case is also complicated with hæmoptysis, we may easily be deceived in our diagnosis. In pleurisy, asthma, and pneumonia, a slight expectoration of blood has long been considered rather a favourable symptom. M. Double says—

'I have known cases in which there was bloody expectoration and even actual hæmoptysis, where, from the whole history of the patient, and the whole progress of the complaint, and examination after death, these symptoms were demonstrated to arise from irritation of the bladder, and to be produced sympathetically.'*

Expectoration is not an essential symptom of phthisis. That fatal disorder is also often so far advanced as to make

* Vol. III. p. 93.

death certain before any expectoration takes place, and this again is occasionally suppressed for some time previous to dissolution. We are enabled to explain some of these circumstances if we admit the justness of Dr. Duncan's division of this malady into the catarrhal, apostematous, and tubercular; the two latter being frequently only attended with expectoration, when their progress has already been considerable; whilst in the first of the three an expectoration of mucus or of pus, or a mixture of both, exists from the beginning. It was probably both to the tubercular and apostematous kinds that Hippocrates alluded, when he said, 'post sanguinis sputum, puris sputum malum,' purulent excretion being, of course, a symptom of the most advanced stage of both these forms. It is now well known that purulent expectoration may exist without phthisis; and it should be remembered, that in dangerous inflammation of the pleura, and even of the lungs, the cough may be dry. The length of time that an expectoration has lasted may sometimes help our diagnosis, as between simple but severe catarrh, and catarrhal phthisis. The black matter noticed by Landré-Beauvais, as occurring in the expectoration of some individuals, would appear to be the *black pulmonary matter* of Laennec, secreted in the bronchial glands, and increased by different irritations in the lungs: this is not to be confounded with *melanosis*, in which, although the black and broken down fragments are sometimes seen in the expectoration, this circumstance is of rare occurrence.

Those who are attentive to the sound of their own voice are able to note almost daily variations in its tone consequent on accidental circumstances of air, diet, and the state of the health, and in a more marked degree on unavoidable fatigues or occasional imprudencies; and on this principle we are enabled, if we know the natural sound of a patient's voice, to ascertain how far his strength has sunk under the influence of disease; and so far the voice is of use as a symptom. We find the voice generally weakened and depressed in acute diseases; and it often acquires a querulous character from long-continued suffering. The exaggerations of patients who feign severe acute disorders may often be detected by these circumstances; for they can easily imitate the lamentable tone of chronic invalids, but are less skilful in concealing the undiminished force of their speech.

'The voice,' says Dr. Hall, 'is also modified in some cases of *typhus fever*, *cholera morbus*, and *dysentery*, in which it is apt to become feeble and *husky*; in *phthisis* and *diseases of the larynx and trachea*, in which it frequently becomes extremely *hoarse*;

and in *hysteria*, in which it is often suddenly and long *lost* and inaudible.'*

Sometimes a material change in the tone of the voice is the effect of a bronchocele, in which case the cause is visible enough; but it is said also to be caused by an enlarged heart, or by an aneurism of the aorta. An observation of more importance occurs in M. Double's work, quoted apparently from M. Rampont, *De la Voix et de la Parole:*—

'The voice is constantly altered in tetanus: it is whistling and falsetto. It is often only necessary to cause the wounded to speak, in order to discover that they are menaced with this affection, so much does it affect the voice from its very commencement, and even when it is merely threatened. In some tetanic patients the voice is no longer to be recognised; it is elevated three or four notes, often an octave, or at least a fifth; and it is seldom afterwards, even when the disorder is removed, restored to its natural character.'†

The circumstance here so strongly stated has not, it would appear, excited general attention: modern writers do not notice it. Aretæus had perhaps observed it, for he describes the voice of patients in tetanus as plaintive, and accompanied with deep sighing. It has generally escaped our own observation.‡

We have noticed very profound huskiness of long continuance, apparently depending on the generation of worms in the intestines. There is without doubt a very peculiar modification of the voice in most cases of mania, and we think we have been able to foresee paroxysms of violence by the help of this observation better than by any other. In some lunatics it acquires amazing power, and in others becomes capable of wonderful variety of modulation, so that a listener would feel quite sure that he heard a conversation between two or more mad people of different sexes, rather than the ravings of one. The slighter accessions of delirium are, for the most part, first discernible in an accelerated speech, and a lively disposition to talk. Loss of voice and difficult articulation are occasionally dependent on determination to the head, and should be looked upon as warnings not to be despised.

* Sect. 364. † Semeïologie, Vol. II. p. 119.

‡ Upon referring, however, to the notes of two cases of tetanus, wherein the progress of the disease was carefully watched by us, we find it noted, in one of them, that the voice was considerably changed the first day on which we saw the patient. He then complained only of pain and constriction under the sternum and in the throat, and was able to walk to our house for advice. The other characteristic symptoms of tetanus were not present until the following day.

Fætor of the breath, sneezing, hiccough, and any other modifications of respiration, whatever may be their real or imaginary value as omens of good or bad import, tend so little to facilitate the distinction of diseases, that we think it quite unnecessary to speak of them.

The examination of the thorax comprehends an attention to the action of the heart, including the diffusion of the sensation conveyed to the hand, the measure of its force, its regularity, and the rhythm of its auricular and ventricular contractions. Serious derangement of the respiratory organs seldom exists long without some embarrassment or disturbance of those concerned in the circulation of the blood. Any considerable disease of the heart may generally be recognised without much difficulty by the eye and hand alone, extending our notice to the arteries and veins of the neck, and they may be distinguished with singular accuracy by means of the stethoscope. Yet we have known an immense aneurism of the thoracic aorta the subject of doubt, and even of lively disputes, which were only put an end to by examination after death. Of mediate auscultation we must say no more in this place, than that we believe it to be impossible by any other means to obtain decisive information concerning many diseases of the chest. We should be doing great disservice to the student if we led him to believe that he could gain a perfect mastery over that instrument by any other method than daily use of it, combined with attentive study of M. Laennec's Treatise on Diseases of the Chest, of which so faithful and, at the same time, so spirited a translation has been made into English by Dr. Forbes. The useful little manual of M. Martinet contains a concise but correct description of the manner in which diseases of the chest may be explored by the stethoscope, mensuration, percussion, &c.; and as we have great reason to believe that even the simplest and easiest of these, percussion, although it is unquestionably of great utility, is very little resorted to, and, when employed, is apparently very imperfectly understood: we shall insert M. Martinet's brief instructions relating to it: —

'If we wish to examine the anterior part of the chest by the method of percussion, the patient must be in a sitting posture, his arms being directed backwards. If we wish to ascertain the state of the lateral regions, the patient's arms must be raised above his head: and if we wish to examine the back, the arms must be carried forward and the body slightly bent. We then proceed to the employment of percussion in the following manner: — The thorax is to be struck perpendicularly with the (ends of the) united fingers, the integuments being previously tightened on the opposite

side by the other hand: we are then alternately to strike corresponding points on each side of the chest, with the same degree of force and at the same angle of incidence; and to avoid exciting pain, the hand must not be held stiffly.'—P. 74.

The information to be thus derived depends upon the capacity of the healthy chest to return a clear sound when thus struck, the sound being, of course, less clear where the muscles are thickest, or where there is a thick covering of fat, as well as at the lower portion of the right side of the chest, which is usually somewhat encroached upon by the liver. This sound becomes obscure in several diseases of the lungs, and is lost when there is an effusion of fluid between the lungs and the hand. Further into this subject we cannot go with propriety, but must refer the reader to Avenbrugger's treatise, which has been translated into French, with copious notes, by Corvisart; both having been recently published in English by the translator of Laennec.

As we naturally compare the action of the heart with that of the pulse, and draw material conclusions from their agreement or disagreement, as well as from the proportionate frequency of the pulse and the respiration, this seems to be the properest opportunity for making a few observations on the pulse, regarded as a diagnostic. And here we must repeat an observation already made by us, that, without denying that the pulse is valuable as a symptom when taken along with others, it is often, we could almost say generally, fallacious when taken alone. The great and almost exclusive credit attached to the pulse by many practitioners, makes us glad to shelter this scepticism under the authority of M. Double, not that we ourselves want his authority for a fact daily confirmed at the bed-side, but because some may be influenced by his opinion who would consider our simple assertion as hasty and inconsiderate.

'In reading the following corollaries on the significations of the pulse,' says the able author just mentioned, when beginning to treat of this division of his subject, 'as well as in making a clinical application of them, it must not be forgotten that the conclusions to be drawn from this part of symptomatology are very uncertain, and that here, more than in any other branch of the subject, it is necessary to compare the signs deduced from the pulse with the collective evidence of all the symptoms of the disease.'—Vol. II. p. 149.

In some of the most important inflammations, and in some of the most violent disorders to which the human frame is liable, we have great authority for stating that very little practical advantage is to be derived from the nature of the pulse: Galen made this observation in pestilence; Sydenham

verified it in fevers; Pemberton applies it generally to acute inflammatory diseases; numerous authors have so expressed themselves of phrenitis; and almost all who have treated of tetanus. Even in phthisis, in which frequency of pulse is often regarded as decisive of the nature of the complaint, and, perhaps, in conjunction with two or three more circumstances, is really so, we are exposed to some uncertainty by the same symptom being often, temporarily at least, a feature of bronchitis. We do not deny that some persons are gifted with so fine a sense of touch as to be able to discriminate shades of difference in the character of the arterial pulsations, where others would perceive no distinction. Dr. Rush appears to have been very eminent in this particular; and we remember reading a remark in some of his writings, that he always found his power of discriminating pulses greatest, and the delicacy of his sense of touch most perfect, when he led a life of rigid abstinence. Yet there is seldom much advantage derived from this individual excellence, on account of the conflicting testimony given by those asserting for themselves equal accuracy of sense, and on account of the unsettled meaning of the terms in which the results are usually expressed; an inconvenience which, unless the wish of Galen could be accomplished, and ideas conveyed from mind to mind without the encumbrance of words, is likely to be of some duration. As regards the absolute frequency of the pulse, it is in innumerable instances a circumstance not deserving of exclusive consideration: there are individuals whose pulse is *always* hurried when it is felt; there are others who have a pulse when in health invariably above 100; and many in whom it does not exceed 60: we are acquainted with a gentleman whose pulse sunk gradually, and with much agitation, about his sixty-third year, from 80, which had been its usual standard, to 30, where it remains at this day, slow, regular, full, and even *hard*, without any known organic disease of the heart, or any apparent functional disturbance. With all these drawbacks, however, the comparative frequency of the pulse in the same person in sickness and in health is a symptom that should not be passed over; but we should not be so much engrossed in the mere circumstance of the *number* of the pulse, as to neglect what is of much more importance in almost all cases, its *nature*. It cannot be denied, that the custom of noting the minutest variations in the number of the pulse has a tendency to produce this kind of neglect, and that it is scarcely less futile to criticise the arteries, than to criticise a soliloquy, by the *stop-watch*.

Very far are we, at the same time, from being able to

assent to Dr. Buchan's remarks on the importance of the character of the pulse: and we should, at the very outset, be led to question its certainty and value as a diagnostic aid by his own remark, that the ancients, though ignorant of the circulation of the blood, and unacquainted with the nature of the pulsations they felt in the chest, or of the vessel they compressed with the finger, drew equally accurate deductions from the pulse with ourselves; a remark which, however, is not to be taken without limitation. Hippocrates notices the pulse much less particularly than it is to be supposed he would have done if it had been an intelligible phenomenon to him; the opinion expressed of it by Celsus was alluded to in a former part of this review; Galen, who wrote voluminously on every thing, was certainly voluminous on this, and, drawing largely upon his brilliant imagination, came to be considered the creator of the medical doctrine of the pulse. Another suspicious circumstance is, that the Chinese, it seems, go far beyond all other nations in their pretensions on this subject. Of the four different kinds into which they divide the pulse, the *superficial*, the *profound*, the *quick*, and the *slow*, the first and second are not very intelligible, and the third and fourth are often, as we have said, mere accidents. The connexion of these with the supposed temperaments, the choleric, the sanguine, the phlegmatic, and the melancholy, is as imaginary as the temperaments themselves are ill defined and ill understood; though Dr. Buchan seems inclined to take this venerable doctrine under his patronage, as well as the Chinese feelers of the pulse. What definitions, indeed, can be clear and satisfactory which are founded on hypothetical opinions, involving an unnatural limitation of the diversities of human constitutions — diversities as infinite as those of the mind and character — under *four* descriptions!

But to return to the Chinese. Nobody who knows any thing of that mystifying and dishonest nation will feel any surprise at the imposing directions of their doctors on the subject of feeling the pulse: there is, however, a story inserted in a note to the passage describing these mysteries, which appears to us to be not undeserving of some examination: —

'In Barrow's scientific account of the Chinese embassy, there is a relation of a medical gentleman attached to the corps, who, being affected with chronic diarrhœa, determined to put the skill of the native doctors to the test in his own person. Having sent for a professor of the healing art, he put his hand out of bed, and requested to be informed what was his complaint. After a minute and attentive consideration of the pulse in various parts of the body,

conducted in profound silence, and accompanied with all proper professional solemnity, the doctor declared to him the nature of the disease. Then taking from one of the loculi of his medical chest, which always accompanies the doctor, carried by a servant, a small quantity of powder, tendered it to him as a remedy. The English surgeon, whose faith was strengthened by the truth of the prognostic, swallowed the drug, and speedily recovered.'*

Now, without any disposition to be heretical in medicine, we really have not faith sufficient to bear, as above, the suspicion that the worthy surgeon was, in his state of sickness, the dupe of the grossest delusion. Granting that the Chinese practitioner was a man of great experience and penetration, which, of course, he might be, it is not difficult to imagine several sources from which he could not help gaining information during the performance of this solemn pantomime; or to imagine means by which the history of the case might very properly be completed. For a full belief of the story as a tale of wonder, for which it is told, we must forget that the native doctor could learn any thing from the sick surgeon's countenance, from his voice, from his attitude, from his respiration, from the temperature, state of the skin, and sensibility of different parts of the body; — from all which he would be gaining information during his hyperdiligent exploration of the pulse; and, even then, we leave out what was, in all probability, the principal source of his certainty — the *servant* who was sent to fetch him. Such a story would not be worth refuting if stories of the like kind, and inconsiderate boasts concerning the wonders of the pulse, had not often led young students to waste some valuable time, and to rely more on that one symptom than was either instructive to themselves or serviceable to their patients. In the great difficulty of laying down general rules that may be followed with safety, it is something to abrogate those which are fallacious.

As for the organic pulse, indicative of a crisis, the *pulsus myuris*, or creeping pulse, 'tapering away under the fingers like the tail of a rat;' and all the varieties depicted in the Semiotice Pathologica of Gruner — that is to say, the cephalicus, the pectoralis, the *nasalis*, the uterinus, the splenicus, and half a dozen others, of which, no language being equal to express them, Dr. B. has obligingly given *a plate*, — we fairly confess our utter ignorance of any thing about them. We do not dispute that Gruner, and Mercatus, and Solano, and De Bordeu, and many others who might be named, knew what they meant themselves, or rather, had peculiar and distinct ideas attached to the inadequate terms

* Symptomatology, p. 46.

they were under the necessity of employing, but we are quite sure that nobody else was ever able to understand them, and that they were not able to understand one another, and that their peculiar ideas, however distinct they might be in the individual minds which conceived them, have always been, like lost memoranda, ' of no use to any body but the owner.' All practitioners have made their own observations on the pulse; but here, even more remarkably than in any other division of this subject, we find that the products of one man's senses are not available to another: a glance at the strange *picture* of pulses appended to Dr. Buchan's work will shew every physician varieties which he never met with, and omissions, we are inclined to think, of some that he occasionally notices. On the whole, we cannot withhold our astonishment at finding a book, published in London in 1824, and addressed to students, in which the puerilities and fantasies of dreaming men, which have for years been in the quiet grave of oblivion, are exhumed, revived, and produced, as worthy of serious attention.

Passing over these refinements, then, as only calculated to ' puzzle the young, and be of no use to the old;'* keeping in mind the slight circumstances of diet, temperature, time, position, medicine, and mental emotion, which may have affected the circulation before our visit; remembering, also, that the pulse is not confined to the radial artery; we may proceed to consider its real value as an indication of different diseases. Dr. Hall has very judiciously confined his remarks to such varieties of the pulse as are of practical importance. He observes, that it is generally much more frequent in the early periods of idiopathic fever than of symptomatic fevers; that it is unnaturally slow in idiopathic fever with congestion of the brain, and quicker where idiopathic fever is complicated with inflammatory affections. The following remarks may be of use to those, if any there be who answer to the description, who make *frequency* of pulse the measure of depletion; and we may add to them, that in chronic affections of the uterus, and perhaps of other organs, it is necessary for the practitioner to be prepared for an appearance of increased strength of pulse, as well as frequency; for if he endeavours to counteract these states by what is commonly called bold practice, he will reduce his patient, but not the disease.

' The pulse is generally more frequent as the disease is more advanced, unless its violence has been subdued;—the peculiarities in the cases of *phrenitis* and *enteritis* have been already noticed.

* Dr. Mason Good.

In the later stages of inflammatory diseases, the pulse is also apt to become, or to remain, unnaturally frequent, as an effect of the *loss of blood* from repeated venesection; it is, therefore, important to observe every symptom, not to be misled by a continued frequency of pulse.

'It is not unusual to observe, that, in various diseases, the frequency of the pulse remains, when the morbid actions have apparently subsided; in such a case it is necessary to continue our attention, and watch and wait for the diminution of the frequency of the pulse, and, if this event do not take place in a moderate space of time, to ascertain whether the disease be in fact subsided, or only mitigated, and pursuing its course in an insidious form. This watching is particularly necessary in cases of *pleuritis* and *peritonitis*.'*

The instance of fever might have been added here, in which frequency of pulse will often remain for a week or two after every other symptom has subsided; and during the presence of which peculiarity it has been observed, and we think justly, that slight circumstances will produce a relapse.† There are cases, however, in which, during convalescence from fever, the pulse is morbidly slow. An intermitting pulse, in the beginning of fever, is stated by Dr. Fordyce to be a very bad symptom: it is one which excites uneasiness in the mind of the practitioner in any stage of the complaint. It is in obscure organic diseases that our suspicion is roused by permanent frequency of the pulse, as in phthisis, and chronic affections of the uterus and other organs; although the liver and ovaria are noticed by Dr. Hall as exceptions to this rule.‡ This frequency has been thought seldom to exist before some degree of diurnal febrile excitement is observable, but is, in fact, often perceived before the hectic stages are fully developed. We sometimes observe a patient's constitution giving way, in consequence of former intemperance, before a very advanced age; the stomach and bowels losing their power, emaciation proceeding, but the pulse neither feeble nor frequent: as if in these cases a good constitution had been only partially destroyed; and the abdominal viscera were for the most part ruined, whilst the heart remained sound. The importance of feeling the pulse after the patient has recovered from the slight hurry attendant on first seeing the medical practitioner, a precept which has been a thousand times repeated after Celsus, but never in more elegant language, is very obvious: by feeling the pulse twice or thrice during the visit, we often learn how singularly its first state differs from that which succeeds when the nervous emotion has

* Hall, Sect. 377, 378. † Double, Vol. II. p. 171. ‡ Sect. 384.

died away. M. Martinet gives very minute directions relating to this particular: the arm of the patient being placed in extension, and the fore-arm pronated, so as to rest on the cubital edge with the radial border a little elevated, the practitioner is to feel the pulse with the hand opposite to that of the patient.

'The four last fingers are to be placed in a parallel direction, on the same line, all bearing on the radial artery; the index being next the wrist; whilst the thumb is applied to the dorsal face of the hand, and furnishes a *point d'appui* to the other fingers. The first impulse of the blood is to be received by the little finger, which rests lightly on the vessel, the others compressing it more or less strongly at the same time. This should be continued for a minute or two, and both arms should be carefully examined.'*

M. Double, who is even more particular, is also a little satirical on the physicians of his country, who place 'one or two fingers negligently on the artery, whilst the rest are gracefully elevated, or at least affectedly, either to shew a beautiful hand, or the splendid rings with which the fingers are ridiculously loaded.'† The ancients used to place the hand on the region of the heart: M. Martinet advises the application of the stethoscope over the aorta and the crural arteries; and it is unquestionably often expedient to ascertain the state of the circulation at the ancles, as well as at the wrists. An irregular pulse, which may escape notice until after ten, twenty, or more beats, and which is often a sign of serious organic disease of the heart, and not an uncommon attendant on a chronic complaint in the liver, is often a mere idiosyncrasy, connected with a state of health in some individuals, and supervening on the slightest deviations from health in others: it is, in many instances, the consequence of causes of a temporary kind, as pregnancy, worms, acidity in the stomach; so that this symptom, like the rest, is of very little service by itself. A small and irregular pulse, the action of the heart being at the same time violent or laborious, is almost always a sign of valvular disease of the heart. Weak action of the heart may indicate thinness of its walls with debility, or accumulation of serum in the pericardium; and a strong diffused action, with a strong pulse, may be produced by enlargement of the heart with thickening of its walls; but if we would form an exact opinion of these cases, and ascertain all the varieties of disease that may occur in the auricles and ventricles of the heart, we must diligently employ the stethoscope. When the pulse of one arm is stronger than that of the other, there

* Manuel de Clinique, p. 89. † Vol. II. p. 133.

probably exists some cause of obstruction between the radial artery and the heart, as an aneurismal tumour, &c., and thus diseases have been feigned by tying a ligature round the upper part of the arm. The same effect may be produced by partial paralysis. M. Double thinks that inflammation of either side of the chest produces a corresponding increase in the strength of the pulse on that side. With the *dicrotic* pulse, or what the French call *martelé*, and which is said to indicate hæmorrhages, we cannot say that we have much acquaintance. After repeated attacks of hæmorrhage, it is not, we think, very rare to find the pulse bounding, and feeling as if enlarged, the patient at the same time requiring, and being benefited by, a stimulant or tonic treatment. Dr. Hall observes, that 'the most extraordinary degree of palpitation, and of pulsation in the carotids, and even of the abdominal aorta, is observed in some cases of *exhaustion from reiterated loss of blood:*' here it is very evident, that too great a deference to the deceptious strength of the pulse would be fatal to the sick person.*

Thus, although the evidence to be drawn from the pulse, when *compared with that of other circumstances*, becomes of first-rate importance, we see how little exclusive information is to be obtained even from so pervading and palpable a symptom as arterial action; one, the peculiarities of which have been so long and so diligently watched, so largely treated of, so much relied upon; and the ordinary characters of which are universally supposed to convey continual and peculiar information to the practitioner: we see, that, in reality, the information to be obtained from this fabled fountain of diagnosis is nearly limited to the indication of general strength or debility, and that only in the absence of some acute and of some chronic diseases; and that almost every attempt to deduce general rules concerning it is unfortunate. There can be no doubt, for example, that the following, laid down by Dr. Buchan, is of this description:—'If the beating of the artery imparts a sensation similar to that of an elastic cord twitched under the fingers, whether slow or quick, the quantity of circulating blood may always be artificially diminished with safety and advantage.' And M. Double, after venturing at least to say that frequency of pulse is especially connected with the febrile state, has this curious, and perhaps inadvertent observation:—'Of all the semeiological conclusions to be derived from this state of the pulse, this is perhaps the most important; *it is, however, vague, and full of uncertainty.*'† Yet we are inclined to

* Medical Repository, Vol. XX. p. 16. *Old Series.*

† Semeiologie, Vol. II. p. 168.

venture thus far into general observation on this matter, and to say, that a feeble pulse in acute diseases, or a strong pulse in chronic affections, is a symptom of an unfavourable nature; that a rapid pulse can never be a good symptom, and that a small and rapid pulse is always a bad one. We fear it would be less difficult to discover exceptions to these rules than to add to their number. There is one other rule relating to the pulse, however, which we think is invariable, and of great importance; we mean that laid down by some writers on the subject of midwifery, that if the pulse remains upwards of 100 for twelve hours after delivery, there is some danger to be apprehended.

It is our duty to acquaint the reader, that we find, in Dr. Hasper's Thesaurus, a thesis published at Leyden by a Dr. Thyssen (Thyssenius), De Pulsûs Doctrina, in which one hundred and fourteen pages of small print are expended in the enumeration of all the observations and fancies of the ancients and moderns. The probable and the improbable, the useful and the useless, the good, bad, and indifferent, the true and the untrue, are collated in this work with surprising labour, and as surprising a want of discrimination. This kind of performance, than which nothing can be more easy, (as, for instance, Dr. Thyssen might have copied, we by no means say he did, from Ploucquet's Literatura Medica Digesta, nearly the whole matter of his dissertation,) is generally looked upon with more favour than it deserves. In regarding the degree of exertion, we overlook the demerits of the application; as, in our admiration of brilliant talents, we sometimes forget their lamentable profanation. After taking the trouble to wade through this sea of mingled absurdity and cleverness, in which the absurdity immeasurably preponderates, the mind is left in a state of fatigue and dissatisfaction, without being indemnified by the added wealth of a single new or true idea. The fallen fortunes of the once celebrated school of Leyden demand our respect; but other schools may learn, in that decay of fame, the danger of the *endemic* malady of compilation, and the fatal reward of being distinguished in a *Thesaurus*, purchased by the exertion of a dull animal industry in providing food for the fatuitous appetite of men who love to read and dream rather than to think and act, and who must be gorged with *quantity*, no matter of what.

The Abdomen.—Supposing that the state of the chest has been sufficiently scrutinised, or that we are led, in the first instance, to ascertain the condition of the abdomen, we are still to keep in mind that the seat of pain is often a source of fallacy. The existence of pain in the abdomen,

throughout the whole course of phthisis, is, it has already been said, very common; and if we repeat the observation, it is because it is a circumstance for which the student is seldom prepared. Pain in the situation of the sigmoid flexure of the colon is often a not well explained symptom of amenorrhœa; and pains in various parts of the abdomen may be the mere result of constipation or flatus. A disorder of the liver may create pain in the epigastrium, or in the *left* hypochondrium; and an affection of the spleen may induce sympathetic pain in the *right*.* Pain at the lower part of the abdomen is sometimes the most conspicuous symptom in disease of the heart,—a circumstance particularly noticed by Dr. Ferriar: and pain, midway between the ilium and umbilicus, is frequently occasioned by disease of the kidney.

The following directions of M. Martinet, for the examination of the abdomen, though chiefly taken from Double, yet, as being more concise, seem the most proper for insertion here:—

'The patient lying on his back, the abdomen being uncovered, the head supported by pillows so as to bend upon the chest, the arms extended at the sides of the body, the thighs and legs bent so as to relax the abdominal muscles as much as possible,—we are to proceed to examine the abdomen in the following manner. If we wish to judge of its temperature, we are to begin by ascertaining the degree of heat of the other parts of the body, and then to place the hands upon the abdomen. But if we wish to discover its sensibility, the hand is to be applied broadly on the middle of the abdomen, and successively moved over all the regions of it; a moderate, but increasing pressure, being exercised, and the expression of the patient's countenance being watched.'

It is unnecessary to copy M. Martinet's directions for ascertaining the presence of fluid in the abdomen. The effect of pressure on the part where pain is described as existing, and, what is nearly the same thing, the effect of attitude, are generally important. Pressure is more or less useful in diagnosis according to the skill with which it is made; as, if we wish to ascertain the sensibility of the peritoneum, it should be gentle; if of the mucous membrane of the intestines, more profound; and it should be made upwards or downwards according as we would discover the state of the stomach, of the colon, of the liver, &c.: when pressure upwards produces much embarrassment with respiration, we are led to suspect thoracic effusion or pulmonary obstruction. During this kind of examination, we are to remember how

* Double, Vol. I. p. 429.

various the organs are which may be affected,—the spleen, the stomach, the liver, the mesentery, the omentum, the small intestines, the colon, the rectum, the bladder, the kidneys, the ureters, the uterus, the ovaria, the peritoneum investing the whole, not forgetting the common integuments, besides, in extraordinary cases, the blood-vessels, nerves, lymphatics, and lacteals;—an enumeration more than sufficient to make us cautious in our investigations.

Auscultation can seldom be of service in diseases of the abdomen; it may be employed to ascertain the state of the aorta; and it has been used to ascertain the existence of tympanitis, percussion being made at the same time: we entertain some doubts respecting its facilitating the detection of pregnancy. If any tumours are described by the patient, they should always be seen. Three or four remarkable instances have occurred to us of tumour, great pain and tenderness, with much general distress and irritation, and even febrile symptoms, arising entirely from immense collections of fæcal matter, apparently in the colon: in two of these, great alarm had been excited, from uncertainty concerning the nature of the swelling. M. Double says, he has known the projecting spinal column mistaken in a thin subject for a scirrhous tumour in the abdomen. The young practitioner also should be warned, that the abdomen may be tumid, and even unequally hard, for some time, in consequence of the last pregnancy. In many instances, where an examination which ought to have been made at the first visit has been deferred for months from feelings of spurious delicacy, it has at last led to very unexpected discoveries, and often corrected the erroneous narratives of the patient: thus we have seen spinal disease detected, hernia found out, and ascites proved *not* to exist in patients who believed themselves to be dropsical, and who, according to their own account, had been treated as such. General tumidity of the abdomen, with great pain, is frequently met with in severe abdominal inflammation, but is never to be depended upon, unless there are other evidences of inflammation, in the skin, tongue, &c. Some of the most serious diseases of the liver are unattended with enlargement: and in inflammation of the concave surface of this viscus, which is more serious than that of the convex, pressure may produce very slight inconvenience.* Fulness of the epigastrium, and about the umbilicus, may depend on derangements of the stomach and duodenum of no very serious nature. Pulsations in that situation are not uncommon; and although they may often

* Double, Vol. I. p. 432.

be supposed to be produced by the aorta, there is sometimes much uncertainty about them: they are not unfrequent in dyspeptics, and in hysterical patients, but are also found to be violent in more serious diseases, as in dangerous attacks of hæmatemesis; the symptom altogether is of little or no use to the practitioner. Pains along the edges of the ilia, and about the head of the femur, and down the thighs, are sometimes symptomatic of inflammation of the uterus, sometimes of sandy particles passing along the ureter, or lodged in the bladder; sometimes they indicate disease of the lumbar vertebræ; sometimes they depend upon an infarcted state of the rectum, and sometimes on scirrhus of that bowel: in all these cases, it is obvious that we can only proceed correctly by taking many other circumstances into consideration. Pain in the loins, a very common symptom, may arise from causes which are so numerous as to defy enumeration: it may depend on serious or on very trifling affections; on disease of the kidney, or on constipated bowels; on lumbar abscess, or on lumbago. We are led to apprehend lumbar abscess when the pain is long continued, aggravated by walking up stairs, by stooping, or by rotation of the lower extremities. Very severe pains of the abdomen and lower part of the chest sometimes accompany an inflamed testis. Retraction of one or both of the testes is mentioned by many writers among the symptoms of diseased kidney: M. Double says he has seen an exemplification of the remark of Hippocrates that it is also an occasional symptom of poison: he observed it, along with a general state of convulsion, in an individual who had taken thirty grains of opium.* In cases of severe injury of the spine and its membranes, as in concussion, or fracture of part of the bony canal, with inflammation of the membranes, the patients are often found to make no complaint: all power over the lower limbs may be lost, gangrene may have commenced, and the patient may be visibly dying, and yet, if asked how he does, will reply that he is quite well.

Our observations on the volumes before us have been already drawn out, we are aware, into undue length, although our chief care and labour has, it will be seen, consisted in the abbreviation and selection of such remarks as were worth recording in the particular point of view in which the subject is regarded by us. To make our notice of the value of symptoms at all complete or useful, some other divisions yet remain to be considered,—as, the symptoms indicative of the state of the alimentary canal, the skin, the uterine system, and the functions of the brain; but we shall endeavour to compress these into as small a space as possible.

* Vol. I. p. 442.

II.

REVIEW OF MEDICAL THEORIES.

Article II.—History of the Theory of Hoffman.

Commentarius de Differentia inter Hoffmanni Doctrinam Mechanicam et Georgii Ernesti Stahlii Medico-Organicam. A Frederico Hoffman.

That Hoffman was among the first to abandon the exclusively humoral or mechanical doctrines, and to teach that the animal system is composed of different parts, mutually influenced by, and influencing each other, is no small title of recommendation to our esteem. Yet, great as this unquestionably is, he rises still higher in our estimation, from his candour in adopting, without hesitation, some of the opinions of Stahl, and his great gentleness and urbanity when arguing against others. Another remarkable characteristic of both these great men, and, indeed, of many of the more eminent physicians of that time, is the unaffected tone of piety that runs through their writings, and their frequent reference to the great Creator of the universe, as the origin of all the phenomena of nature. From this awful source the theories of both take their origin, and both lay down, in plain terms, that their physiology contemplates no more than secondary causes.

In the account which we are entering upon of the principles of Hoffman, it cannot be expected that we shall, in every instance, remark particularly in which we agree, or from which we dissent. Where, however, we consider his opinions as leading to any thing dangerous in practice, we should not excuse ourselves did we omit to notice them.

Hoffman proceeds farther in the process of creation than Stahl for the commencement of his theory; and in this, more, perhaps, than in reality, consists the difference between them. According to the latter, matter is perfectly passive, and motion is an immaterial substance (*rem immaterialem*), and which is the cause of all living actions. The former, on the other hand, begins with matter already in possession of those qualities which the anima of Stahl bestows; and his opinion is, that no substances are created merely passive, free of all action and operation upon each other, nor that motion is any thing immaterial. For that God, a being of infinite power, wisdom, and goodness, has willed that matter should exist, when created without his perpetual interference, ‘ extra se,’ and should execute, as it were of necessity, varying movements, and produce accordingly various phenomena and effects. These corporeal sub-

stances are of two kinds,—some simple, homogeneous, invisible,—which are the elements and principles of those compound bodies, that strike upon the senses, and which are extensible and divisible. Both the simple and compound bodies mutually act and re-act upon each other, and by this means change their situations, and effect that motion which is the cause and origin of all the phenomena, qualities, and effects of life, nutrition, and decay; and, in short, of every change in corporeal things. The Deity, however, according to his infinite wisdom, has prescribed certain laws, by which the moving and resisting powers are perpetually and constantly governed, so that they produce certain effects, not according to their own will or design, but according to qualities inseparable from their very existence. After laying down, in ten axioms, the laws of motion; such as, that the greater force must always overcome the less,—that bodies, in which the resisting and impelling forces are equal, are quiescent,—and, in short, the common laws of motion, as applicable to hydraulics, mechanics, hydrostatics, and optics; he observes, that from these laws we learn by experience, that the moving powers of bodies can be changed, increased, or diminished, by the substraction or addition of the corporeal mass; and hence, he says, we may most accurately conclude, that the moving power is an essential and inseparable affection of bodies. The idea, indeed, of the passiveness of matter may be conceived in the mind, apart from motion; but certainly, what can be divided, increased, or measured, can neither be immaterial nor spiritual, and, consequently, the *vis motrix* inherent in the mass, and inseparable from it, cannot be so called.

Into this dissertation upon motion, Hoffman has been led by a desire of refuting Stahl in a point which does not appear to us of very great importance; and, though he is tolerably successful in shewing that motion cannot be recognised without matter, he is not very clear in explaining his own views. Stahl urges the necessity of a principle of motion; and Hoffman appears to assert that there is no such principle, but that motion is the consequence of different bodies impinging or acting upon each other. But, in thus leaving the matter, he has only eluded the question; because, though we may thus consider it, when bodies are once in action, from what source does this action originate? Hoffman, if we rightly understand him, says, from qualities rendered inherent in matter, by its Creator. Stahl, on the other hand, by a moving power, principle, *vis motrix*, or *anima*, having its origin also in the fiat of the Deity. That both these are assumptions, is very manifest; and, as we

observed in a former article, on the theory of Stahl, the important question for us is not these general assertions, but the particular manner in which these qualities, or this *anima*, is exhibited in particular parts. To proceed, however, with the account of the principles of Hoffman. Having explained his own notions respecting matter, he proceeds to define what he understands by spirits, which he terms those other substances that execute their functions neither by motion nor resistance, which can neither be divided, changed, nor diminished, but are immaterial, or rather incorporeal, and whose nature, essence, and actions, are most distinct from the actions of bodies; and these are intelligent substances, free agents, and are usually named spirits. As he endues these substances with intelligence, he appropriates them to man alone, asserting, that all organic animate brute bodies are destitute of the spirit,—'quæ mens et anima rationalis vocari solet.'* Thus, then, is man described by Hoffman as composed of body and soul, but the soul is not the source of life nor living actions. For the cause of the vital functions exists equally in the lower animals, and therefore is it necessary that the sensitive and locomotive power should be derived

* It must be confessed, that in thus defining the rational soul, and limiting it entirely to man, Hoffman has ventured upon dangerous ground, and his opinions certainly are unsupported by proof. That he has been induced to pursue this plan, in a great measure, from a desire of adapting his doctrines to the truths of revelation, there can be little doubt; nor is there less, that he has thus given great handle to its enemies. We would fain hope, that the flippancy with which Mr. Laurence has spoken upon this subject, has a reference rather to those who, like Hoffman, attempt to be 'wise above what is written,' than from any real disbelief. The evidence upon which physiological doctrines and the doctrines of religion rely, are very different in kind, and admit not, by any means, of the same mode of investigation. From Scripture, and Scripture only, can the latter be drawn; and while, upon the testimony it affords, we believe in our own immortality and responsibility, to this belief we must be confined. In what manner the resurrection shall take place, we know not, nor has this been revealed; and consequently, whatever may be our opinions respecting the immediate nature of the rational principle, it never can be inconsistent with the belief of a future life. There has, indeed, been too much and too little said upon this subject by some late authors; too much, so far as it appears to have been perfectly unnecessary, as well as unbecoming, to have raised important doubts, not by reason, but by ridicule; too little, because, when thus entered upon at all, care ought to have been taken, that deductions might not be drawn by the reader, which were never intended by the author. We do not believe that Mr. Laurence, against whom many serious charges on this subject have been made, is a sceptic in revelation; and we would rather give him credit for being misunderstood, than suppose him possessed of so little candour as to condemn what he had not examined, or guilty of so much presumption as to prefer, what must be manifest to all, has been at most a very superficial examination, to the convictions of the best, and ablest, and most erudite men of the last two thousand years.

from a far different cause than the immaterial and spiritual essence; and this cause is a specific force, impressed in their first formation upon the different component parts of the body, in consequence of which they act as if by law and rule, not from knowledge or intention, but of mere necessity, which necessity is continued by his omnipotent decree. Life, therefore, if rightly considered, is not correctly defined as the union of the rational soul with the body, but its essence is to be sought for in the body alone, which is common to both, *i. e.* in the functions that are carried in the machine of the body, most artfully constructed as it is, of elastic and innumerable tubes, of various forms, figures, and magnitude. As long, therefore, as the fluids act upon the solids, and the solids execute the accustomed actions, as long as the fluids circulate, the necessary and useful matters are secreted, and the useless or hurtful rejected, so long is the body said to be alive, and so long is life present; but when these motions fail altogether, so that they can no more be recalled, death is at hand, and all the functions dependent upon these motions, together with the visible actions and operations of the rational soul, intelligence, knowledge, external and internal sensibility, cease.

This definition of life may well satisfy the greatest advocates of Bichat and the French physiologists, since with them it asserts, that we have no knowledge of life but from the vital functions, or, in the language of Bichat, that life is the collection of the functions that resist death,—'la vie est l'ensemble des function qui résistent à la morte;' or, in that of Cuvier, equally unintelligible and indefinite, that it only indicates the *ensemble* of the phenomena which have given rise to its formation,—'ce nom ne puisse jamais indiquer, que l'ensemble des phénomènes, qui ont donné lieu à sa formation.' It would really be a waste of time, and almost an insult to the good sense of our readers, to detain them by any lengthened disquisition upon these definitions, which are not a little similar to an explanation of punch, which we once heard in a song:—'Punch is—punch, and, I think, that's the best definition.' The real truth of the matter may, we believe, as indeed it has often been before, be contained in a very few words; and if the celebrated French philosophers, whom we have just quoted, have failed in making it clear, as it must be confessed that they have done, it is to be attributed to an endeavour to define that which is not capable of definition. It is like the endeavours of metaphysicians to prove their own existence, which, however little any one may be inclined to question in his own case, is yet insusceptible of logical proof. Neither can life be defined; we know that

we live, we say that life yet remains while the individual breathes, even though longer and more difficultly drawn is each succeeding inspiration. We can describe the phenomena of living bodies,—we can state them to exist in a state in which their functions are not visibly active, but are capable of becoming so,—and we may say, that this capability is owing to a peculiar principle; and perhaps this may be rightly inferred; but yet, as we cannot detect this principle, supposing it to exist, as we know not its properties, we must be content either to define life as this principle, which at last would be only defining one indefinite term by another equally vague, or we must be satisfied not to define it at all, which is much the safest method, and study only the manifest phenomena of animate bodies, carefully deducing from them nothing more than the data will legitimately permit. That Hoffman has done this exactly we cannot indeed assert, yet this has evidently been his object; and, as a preliminary, he considers more at large the general structure of the body, and the functions of its several parts.

As life consists in the performance of the several vital functions, so does health consist in the *due* performance of the same functions, *i. e.* in their perfectly fulfilling the offices for which they were instituted. Now, the principal, and, it may be considered, the most important, is the secretion of the chyle which is made from the ingested aliment, which in the villous coat of the intestines is first separated, and by the lacteal vessels conveyed to the thoracic duct, and thence not only supplies the blood, but the whole fluids of the body. Neither less important is the circulatory motion of the fluids, upon which, indeed, very principally life depends, and this motion is effected by the simple contractions and dilatations of the heart, the arteries, and various tubes of the body. It is manifest in all the canals that carry fluids, very visible in the heart and arteries, more obscure in the other vessels, and in the secretory and excretory ducts. By this motion are all the fluids of the body governed, the body itself preserved from decay, life continued, and health maintained; but should it become inordinate, then direful diseases ensue, the functions of the soul are injured, and death is the consequence of its cessation. In all this exposition, there is not much different from Stahl; but Hoffman now proceeds to state, that, instead of considering these actions as excited and governed by a peculiar principle, he believes them to be purely mechanical, having their origin in mere corporeal causes, ‘ exclusâ animâ,’ which influences only in the voluntary actions; and that contraction and dilatation depend, in the first place, upon the elastic quality of the solids or fibres,

'solidorum seu fibrarum,' of which not only all the canals of the living body partake, but every other part, as the skin, the muscles, the heart, &c. But this elasticity is not alone sufficient to effect the different contractions and dilatations, and to move the fluids, and there is, consequently, a necessity for another cause to produce and invigorate it; and this consists in the influx of the blood and the nervous fluid, by which not only the substance of the heart, but the structure of all the canals in the body, nay, of all the muscles and fibres, are strengthened and animated; insomuch, that all tunics composed of arteries and fibres, and possessing considerable contractile and expansive power, are pervaded by arterial blood, and furnished with nerves or nervous membranes.*

Of the existence of the nervous fluid, Hoffman makes no doubt; and refers for a proof, to the consequence of tying or dividing the nerve proceeding to any particular muscle. If, in the room of terming it nervous fluid, he had called it nervous influence, there would be little, perhaps no difference, between his physiology and that of the present day, in this respect. He seems to have been thoroughly aware of the mutual dependence of the nerves and blood-vessels upon each other; and, consonantly to this opinion, he explains syncope by the generally entertained hypothesis, that the diminution of sensation is the consequence of a decreased afflux of blood to the head, the nervous fluid not being secreted in sufficient quantity, from a deficiency of material. And again he infers, that something is secreted from the blood in the brain, because compression of the brain, however induced, is followed by the abolition of sensation and voluntary motion, the compression preventing the free approach of the blood.

It appears to have been thought necessary generally, when Hoffman wrote, to leave nothing unexplained; and hence the ingenuity of authors was taxed to an extent, of which, at the present day, we have no conception, when it is permitted us, occasionally at least, to acknowledge our ignorance. Thus does Hoffman, not satisfied with investigating the visible

* What were formerly called 'nervous membranes,' appear to have been nothing more than condensed cellular membrane; at least, modern anatomists admit of no such structure. Haller enumerates, among the coats of the stomach, a first cellular coat, lying under the peritoneum, a muscular coat, a second cellular coat, a nervous coat, a third cellular coat, and a villous; while Mr. Bell gives only two coats, or at most three, considering those parts which have usually been considered such as not entitled to the name. With the term of nervous coat, however, as used formerly, an idea of peculiar properties, somewhat similar to what Hoffman has attributed to them, was connected.

phenomena of the nerves and brain, the consequences of disease, experiment, or accident, as exhibited in them, attempt to shew us the nature of the fluid itself; and he asserts it to be no other than that universal æther (catholicum æthereo—aërium,) whose power and force in producing motions and admirable effects have been demonstrated both by the air-pump and chemistry. From his stating immediately afterwards, that no organic body, whether plant, brute, or man, can exist without it, and that it enters into the innermost pores of the body, we may suppose that he considered it the same with the intro-aërial spirit of Mayow, which was either oxygen itself, or a compound of oxygen. Mayow, in inquiring what is that aërial substance, which is so necessary to the support of life, that without it life cannot exist a moment, says, ' that most probably some intro-saline particles, very subtile, agile, and highly fermentative, are separated from the air by means of the lungs, and transmitted into the mass of the blood. And so essential to life does this aërial salt appear, that even plants will not vegetate if the access of air be precluded.' Here, also, we cannot but notice the opinion of the celebrated Willis on the same subject, who, after discussing at some length the nature of the ' anima brutorum,' and exhibiting the names of Hippocrates, Plato, Pythagoras, Aristotle, and Galen, as supporting the opinion that the soul is a fire, or something analogous to it; together with certain arguments drawn from fire itself, as consisting of subtile contiguous particles, in constant motion, &c., concludes that there is nothing paradoxical in maintaining that the soul, dwelling in the blood or vital fluid, is a certain fire or flame—' animam in sanguine aut liquore vitali gliscentem, aut ignem aut flammam quandam esse.' Such are the wild hypotheses in which great and powerful minds have at times indulged. And how humiliating is the contemplation! Gifted with more than the common share of that high intellect which allies human nature rather to heaven than earth, we find a point, beyond which they are not more able to penetrate than the uneducated and unthinking clown, and every attempt they make serves but to encircle them in error and absurdity. It is indeed an excellent illustration of the labours of those who, in the language of Lord Bacon, ' conjectis paulisper in res et exempla et experientiam oculis, statim quasi inventio nihil aliud esset, quam quædam excogitatio, spiritus proprios, ut sibi oracula exhiberent, quodammodo invocarunt.' The phenomena of mind are certainly fully as legitimate objects of investigation as any of the other phenomena of nature; but when opinions are pronounced respecting them, it is to be

expected that they shall be the deductions of rational inquiry, and not the mere idola of wild speculation. How far we may be able to advance in the knowledge of those secondary causes, whence the visible operations of the intellect proceed, we do not now know, but this is at least certain, that a real progress can only be made by patient and humble diligence, and that every endeavour to proceed in any other way will most assuredly be attended by error, defeat, and mortification.

The source of this nervous fluid is originally the blood, which he very expressively terms the 'promus condus omnium virium et liquidi etiam cerebri ac nervorum,'—the great distributor of the powers both of the agile fluid of the brain and of the nerves. It is unnecessary to consider much at large the arguments by which this is supported; for while in one sense this is true, but scarcely more so than that the food we eat supports and strengthens all the animal system, in another sense it may be equally predicated, *mutatis mutandis*, of the nerves themselves. For as yet no arguments have been brought forward to prove that the circulation can equally well proceed in a part, when the communication between it and the brain, by means of the nerves, is intercepted, for we do not consider the experiments of Dr. Wilson Philip as sufficient for this purpose; and most assuredly a limb wastes as certainly and as quickly under such circumstances, as when the free efflux of blood is prevented. The principal object of Hoffman, however, in pressing this point, is to shew that the vigour and tone of the heart depend upon material and external moving causes, and not on any immaterial, much less on a rational essence. For it appears almost necessarily to follow, that if the functions be entirely dependent upon the blood, and that from it even the *partes fluidæ mobilissimæ* of the brain and nerves be separated, that then the actions of life have a material cause. And, so far as we can trace them, this is correct; but there is a very early point, at which, when we arrive, all explanation fails, whether we attribute the different phenomena to one cause or another. It is true, indeed, that a superficial consideration seems to afford us light, when we suppose something, as the *anima* of Stahl, to be perpetually influencing them; but it is scarcely necessary to do more than state the fact, that, in reality, whether we adopt Hoffman's theory of vital properties, or Stahl's essence or *vis motrix*, we are not better acquainted with the series of causation in the one case than in the other, so as to obtain implicit credence for either. We have only, in the latter case, brought forward an additional agent, whose mode of effecting its various functions it is not pos-

sible for us to ascertain; neither if all the functions be carried on by means of certain properties are we better informed. We can trace the blood into the secreting organs, without being able to follow up that animal chemistry, by which what was lately blood is now bile or urine, or bone or muscle.

So far, therefore, as the theories of these two authors touch upon those subjects which are not visible, the proof, perhaps, is equally favourable to both;* but inasmuch as Hoffman abides much more steadily by manifest phenomena than Stahl, and is altogether less closely bound to a peculiar system, he has considerable superiority in his physiology over his rival. In attempting to state more precisely the opinions of these two great men, we feel more difficulty than we can express, from the imperfection of language, or from our own inadequate knowledge of its resources. It does not, however, appear to us that even Hoffman himself altogether rejects the idea of some principle or nature, or by whatever other title it may be designated, separate from the organic body, since in different parts of his works he alludes to the processes of nature; but that he rejects the anima of Stahl only, and endows matter itself with properties sufficient to carry on the vital function from a kind of necessity; which very necessity is a something not originally inherent in matter, but imposed upon it: and, because the former opinion bore upon its face a more deep source of the existence and providence of God, according to the belief of some, he asserts, that if the subject be more profoundly reflected upon, so far is it from being favourable to such a conviction, that it rather tends to atheism. 'For if bodies,' he says, 'are of their own nature merely passive, and of themselves can effect nothing, certainly it must follow that the operations of corporeal things are the operations of God, and, consequently, that no difference exists between the creature and the Creator'—an opinion which led Spinosa to believe that the world itself was God, and that its various operations and modes of operating are divine attributes. The learned Cudworth, equally beset with these difficulties in his intellectual system of the universe, and strongly attached to the doctrines of immaterialism, 'insists largely upon an artificial, regular, and plastic nature, devoid of express knowledge and understanding, as subordinate to the Deity;' . . . 'for without such a nature, either God must be supposed to do all

* When we make this observation, we except that part of Stahl's system which supposes intelligence, unless we may use the same license as Bichat has done in attributing sensibility where there is no sensation.

things in the world immediately, and to form every gnat and fly, as it were, with his own hands, which seemeth not so becoming of him; or else the whole system of this corporeal universe must result only from fortuitous mechanism, without the direction of any mind.' In all this, certainly there is something praiseworthy from the anxiety evinced for the honour of the Almighty; yet we cannot but think, that the talents and ingenuity of these celebrated philosophers might have been better employed, than in attempting to limit the operations of the Creator by their own finite intelligence. From the one general and expanded truth, that all the universe is under his superintendence, none but a madman can dissent; but of the subordinate instruments which he employs, or of the manner in which they are employed, we know only those which are corporeal; nor is it of much importance, perhaps, to us to know more. Certain it is, that the laws he has imposed upon us are equally binding, whatever opinion is held, and as much as though we were well acquainted with every minute link in the chain of creation. We have been led into this digression very much farther than we originally intended. We would, however, hope, that in having done so, we have not been employing ourselves uselessly; but that, by having shewn that a determination to investigate only the palpable phenomena of the vital functions is not necessarily connected with any dangerous religious error, nor the belief in the existences of certain substances or principles separate from the body necessarily connected with religious truth, we many induce the advocates of either opinion to treat each other with more candour than they usually do, and impugn the reasoning of their adversaries, without misrepresenting their motives.

With respect to the phenomena of disease, Hoffman denies the doctrine of Stahl, that they have a salutary tendency, but asserts that their actions are neither elective, nor wise nor rational, but rather erroneous, confused, and tumultuary, and only accidentally, or when directed by the physician, salutary. Neither does he admit plethora as a very general cause of disease, but contends that many very severe maladies arise from deficiency of blood, and likewise frequently when there is no manifest change in the quantity from that of health. Nor does any thing more clearly prove that plethora is not the universal cause of disease, than the severe evils which follow long-continued hæmorrhages, as cachexia, dropsies, atrophy, hectic fever, &c. The arguments upon this part of the subject are scarcely ever conclusive against the theories of Stahl, and rather elude the question, or attribute opinions to that author, which do not

appear to us in every case fairly deducible. We are not, however, very willing to discuss this part of the subject at length; and we recommend very earnestly to our readers an attentive perusal of the posthumous volume of Dr. Parry's Works, which is just published. There is a clearness in his statements, and such a general precision of thought, as we do not very frequently meet with; and though occasionally inclined to dispute the accuracy of his opinions, we have seldom read a work from which we have derived more instruction. The illustrations it contains, with the reflections attached to them, form an admirable commentary upon the circulating system.

Plethora, nevertheless, is occasionally the source of disease; nor is excess in quantity the only way in which the blood and humours may be productive of evil. For if we consider how many and great complaints arise from bile, rendered corrosive and acrid, as cholera, diarrhœa, dysentery, inflammations of the stomach and intestines — that the urine, &c. is secreted from the blood — and that, if this secretion should be retained, the blood itself must be vitiated, — we cannot but acknowledge that disorders may ensue as well from the quality as the quantity of the humours and the last-mentioned fluid.

Whatever may be the causes, however, which invert or injure the functions of our bodies, they principally affect those parts in which the principal moving power resides, upon which the action of the heart and arteries, and the formation and circulation of the fluids, depend; and these parts are the nerves, the membranes, and the vessels and canals, which they form. If, therefore, these nervous parts, membranes, and canals, are rightly constituted, *i. e.* are in a moderate state of tension and relaxation, and exercise an equable oscillatory motion, then the whole economy of the system is vigorous and healthy; but when they suffer any violence externally, by distension, compression, contortion, or any other means, or internally are vehemently agitated by their fluids, a derangement of their actions immediately ensues, and disease is at hand. This derangement is so much the greater as the exciting external causes are more powerful — and this is especially to be remarked, that where the morbific cause is situated, there the greatest disturbance of the functions is observed, and the symptoms are most marked. And again, it is to be regarded as a law, similar to those by which the universe is governed, that all sensitive and nervous organs sympathise with each other, those, indeed, first which are supplied from common nervous trunks, and afterwards those which are more remote. The

knowledge, therefore, of these sympathies, and of the causes by which they are acted on, he asserts to be the foundation of all rational pathology and therapeutics.

These causes he has enumerated at some length, and lays particular stress upon the function of digestion, which he designates as 'locus fœcundus et aptus procreandæ materiæ, quæ morbos, et functiones secundùm naturam turbat,' a fruitful and well-adapted place for producing that matter, which causes disease and disturbs the natural functions; an opinion which neither Dr. Philip nor Mr. Abernethy could express in stronger terms. Of the other causes affecting the nervous system, some are, as it were, diseases themselves, as plethora, calculi, flatus, &c.; others are external excitants, as impure air, metallic exhalations, poisons, &c. He does not, however, appear very clearly to have distinguished between the various modes by which these different excitants necessarily act.

As he entirely denies that morbid actions are *per se* and at all times salutary processes, so likewise he dissents, *in toto*, from the opinions of Stahl respecting the determination of blood to different parts at different ages, that it may find a path for escape from the system. With this limitation of his opinion few, perhaps, will disagree, although they may be disposed to think, that though not carried to the head and nostrils, for the purpose of evacuation, yet the loss of blood from the nose may not unfrequently be a salutary process, and that a similar assertion will hold good of other local determinations.

Hoffman was also the author of the explanation of fever, afterwards more fully developed in our own country by Cullen, and he denies that this general affection of the system is, as taught by Stahl, instituted by nature, partly to exhaust the too abundant blood and humour by the increased heat, and partly to eject the excrementitious matter into which the humours are resolved through appropriate emunctories. It may not, perhaps, be improper to give Hoffman's theory of fever in his own words:—

'I believe,' he says, 'that fever is an affection of the whole nervous and vascular system, which consists especially in this, viz. that the contraction and tone of these nervous and fibrous parts become, from a strong spasm, increased and more intense, with a great disturbance and inequality of the vital actions, viz. the circulation of the blood, and the secretions and excretions; while at first the blood and humours desert the external parts, and are carried in greater quantity to the heart, great vessels, and the head. But afterwards, on account of the greater afflux of blood in the heart, arteries, and membranes, the contraction of the arteries and the

pulse becomes quicker, and the circulation of the humours is accelerated throughout the body, either for good or ill, either for the restoration and preservation of the body, or for its destruction. This motion of the blood to the surface of the body depends on the action of the heart and arteries, excited by the greater quantity of blood impelled inwards, and continues so long as the spasm occupies the vessels and fibres. It ceases when this ceases, and then the febrile action is ended. Lastly, the stronger the spasm, the greater is the subsequent debility or atony.'

It cannot require much conversance with the phenomena of fever to perceive that most of them may be, in this manner, accounted for; and though the doctrine of spasm, as it has been termed, is far from being universally assented to, no theory of fever can be hitherto said to have superseded it. It would seem that Dr. Parry, than whom a more competent judge has seldom existed, considered the opinion that there is an inequality in the distribution of the blood in all fevers as proved. After enumerating synocha, typhus, &c. he says, that 'they all imply some defect of blood in one or more parts, and, consequently, excess in one or more others; and it is probable that the defect producing, or produced by, excess about the heart or brain, may be the exciting cause of the increased action which follows, by the stimulus of that excess.'

The great superiority, however, of this theory over that of Stahl, Hoffman has himself noticed, and this is, indeed, a practical superiority. From Stahl's strict adherence to the operations of nature, and from his conceiving that they were all originally instituted to a good end, he refused, in many instances, to interfere with processes of disease, where to have done so would have been highly serviceable. Thus, as we mentioned in our paper upon his theory, he did not admit of blood-letting, because the anima or vis motrix sought to dissipate the superabundant humours by perspiration. Nor would he admit of any method of preventing the continuance of fever, lest nature should be disturbed in her salutary processes. But Hoffman inculcates, not, indeed, to restrain those actions which are beneficial, and which are known, from experience, to tend towards a cure, but to endeavour as quickly as possible, and safely (*tutò et celeriter*), to remove the exciting causes of fever, by appropriate and opportune remedies; no regard whatever being had to the period of the disease, which may be successfully, and without any ill consequences, overcome in its first commencement. With this exception, however, of cutting the fever short, as it has been termed, his treatment is equally simple with that of Stahl's, and with him he disapproves of the use of tonics, and especially of the

Peruvian bark, during the paroxysms. Emetics he recommends as sometimes preventing the continuance of the fever, and bleeding he advocates as sometimes called for.

Hoffman's opinions respecting the actions of remedies do not, by any means, appear to us in good keeping with the general caution evinced in his doctrines. He asserts their action to be purely mechanical, and that it is so, he states, is either evident to the senses, as when oily, moist, and tepid remedies lubricate, relax, and soften hard and constricted parts; or is proved by this, that the composition of medicines remaining unchanged, their effects are modified or prevented by the presence of other substances in the body, as when mucilaginous and oily substances, besides their emollient virtues, reduce the acrimony of the humours, and moderate their stimulating properties. Of the insufficiency of this theory, it would be useless to enter into any long discussion. No one need now to be told, that the effects of medicines can never be explained upon the supposition of their actions being all mechanical; nor is any one now so ignorant as to believe that a correct idea can be entertained of the effects of drugs from their manifest qualities. Who would imagine that the hot and fiery taste of croton oil belonged to the most active purgative with which we are acquainted?

In considering what is the peculiar excellency of Hoffman's medical principles, we may state them as principally characterised by his comprehending all the systems of the body, and teaching that diseases are not exclusively nervous, nor exclusively originating from the sanguiferous system, but that every system is more or less affected, though the affection of some one, in particular, will generally predominate. Of the general value of his writings we have formerly spoken, and again we repeat, that his system of medicine is a treasure of correct observation and practice. The phraseology is, indeed, frequently old, the treatment is too often combined with theoretical speculations, the medicines are frequently far too composite; yet are his histories most admirably clear, and scarcely inferior to the highly finished drawings, we can hardly call them descriptions, of our own Cullen. To the industrious and intelligent student, Hoffman may be safely recommended: he will find in him much most valuable matter; and not seldom, perhaps, will he be indignant at the shameless and unblushing manner in which some moderns have built up their own reputations at his expense, without acknowledging their obligations. The more, indeed, generally that we become acquainted with the older medical literature, the less do we find novel among the moderns; (in this, however, we except surgery, which has unquestionably

been greatly improved in these latter times.) The phraseology has, indeed, been changed, but we could almost say of the various medical theories what Lord Burleigh said of learning a brace or two of foreign languages, that we have but the same victuals served up in so many different dishes.

III.

THE MATERIA MEDICA.[*]

[Second Article.]

A Manual of Pharmacy. By William Thomas Brande, F.R.S. Lond. and Edin., Professor of Chemistry to the Royal Institution, and to the Society of Apothecaries, &c. &c. 1825.

Phytographie Médicale, ornée de Figures Coloriées de Grandeur Naturelle, &c. &c. Par Joseph Roques, Doct. en Méd., Ancien Médecin des Hospitaux Militaires, &c. &c. &c. Paris. 2 Tom. Quarto. 1825.

Before we proceed farther in taking a practical view of the articles of the materia medica of the London College of Physicians, we may premise that their list by no means includes nearly all the *best* medicinal substances that have been employed in former times, or that are frequently used at the present day. Allowing, however, for the desire not to overload and swell unnecessarily their materia medica, and admitting the propriety of it to a great extent, we cannot but think that it has been too strictly adhered to. It would, perhaps, have been more desirable, and certainly not less useful to the more deserving part of the profession, if the College had retained, in a separate list, such articles as have been, or are still, very generally used, in this and other countries, giving merely their pharmaceutic appellation and their scientific names, thus leaving it to the commentators on such a list to furnish the details respecting the mode of preparing and using them, and permitting the pharmaceutist and chemist to keep them for use or not, as might seem advisable to them.

The truly splendid and valuable work of M. Roques, which we have taken occasion to place at the head of this article, contains a number of medicinal plants, which are not generally used in this country, although they have been long constituents of the older materia medica. Many of these are indigenous to this country; but as we intend to take particular notice of some of those which we think might be advantageously added to these already in use, we shall not make farther allusion to them at present.

[*] Continued from page 44.

Before we resume, however, the subject, at the place where we left it last month, we may remark, that we have been particular in giving the names by which the different articles were known by the old writers on medicine, and in the references to the ancient pharmacological works. The advantages of this have been already pointed out; but perhaps the greatest of any is, that it will enable the reader to comprehend much of what would be otherwise unintelligible to him when perusing some of the best productions of the old authors.

ANISI SEMINA. The seed of the *Prinpinella Anisum.* * — Aniseed are a useful carminative, and form an excellent adjunct to tonic or aperient medicines. The following infusion is a good carminative medicine in spasmodic flatulencies occurring in weak habits, and is a good vehicle for tonic and aperient remedies: —

℞ Seminum Anisi ʒss.
Foliorum Melissæ Officinalis ʒj.
Aquæ communis Calidæ ℔ij. infunde per quadrantem horæ: cola et adde
Sacchari Albi, quantum libet.

Aniseed are also useful corrigents to other medicines,

* *Class. Ref.*—Ἄνισον, Græc. — probably from *ἀνίημι, relaxo*, with reference to its carminative properties, which were well known to the ancients: *ὅτι ἀνίησι τὰς ἰμπνιμπρωσις*: or from *ἄνισον, inæquale*, on account of the inequal size of its leaves. — Theoph. Hist. Plant. VII. 3.— Cels. II. 72. — Plin. XX. 17: oris habitum jucundiorem facit, fœtorem tollit manducatum.— Diosc. III. 65. — Gal. de Simp. VI. — Columel. XII. 15. — Pallad. Feb. 14. — Theodos. Prisc. de Diæta. c. X. — Oribas. Med. Col. XI. — Paul. Æginet. de Re Med. VI. 3. — Myrep. de Antidot. I. 23, &c. — Scrib. Larg. 119. — Serapion de Temp. Simp. IV. 242. — Mesuai, III. p. 199. Ed. Sylv. Paris, 1542. — Parkinson, Theat. Botan. p. 911.

The following *recipe*, from Scribonius Largus, 'ad coli inflationem,' illustrates the manner in which the remedy under consideration was combined by the ancients with other carminatives, in flatulent colic: — 'Apii seminis pondo selibram, anisi pondo quadrantem, castorei pondo sextantem, myrrhæ pondo quadrantem, spicæ nardi Indicæ pondo sextantem, opii pondo quadrantem, croci pondo sescunciam, piperis longi pondo sextantem, piperis nigri pondo sextantem semiunciam, petroselini pondo sextantem. Hæc omnia contusa cribata, melle attico decocta miscentur. Datur ex hoc medicamento, quantum nux abellana media patet, ex aquæ cyathis tribus calidæ.'— P. 14 of the Princeps edition.

The science of the present day can scarcely contrive a carminative combination that is more likely than the above to fulfil its intended purposes, in cold phlegmatic habits, or when there is no risk of inflammation supervening. See *Scribonius Largus de Compositionibus Medicamentorum, liber unus, antehac nusquam excusus. Joanne Ruellio, Doctore Medico Castigatore. Simon Sylvius, typog. Paris*, 1528.—The work of Scribonius Largus, although frequently quoted, is extremely scarce, this (the first) edition particularly. Scribonius was physician to Claudius, and accompanied him in his campaigns in Britain.

and are generally combined advantageously with cathartics and purgatives, with anthelmintics, and with vegetable tonics.

ANTHEMIDIS FLORES.* Flowers of the *Anthemis nobilis.* — Several other species of the genus *Anthemis* possess medicinal properties, as the *A. cotula*, and the *A. tinctoria*, the former of which, more particularly, is stimulant and antispasmodic. The flowers of the *Anthemis nobilis* are now seldom used in powder. They were, however, frequently thus employed by Cullen, Selle, and other eminent physicians, in the dose of about half a drachm. Sprengel speaks very highly of Selle's 'Pulvis Ecphracticus,' in which the powdered flowers are an ingredient,† in a weak or inactive function of the abdominal viscera, complicated with hæmorrhoids; and upon his recommendation we have often prescribed a similar formula with advantage. Before the introduction of the cinchona bark into Europe, they were more employed as a febrifuge remedy than perhaps any other.

The infusion of chamomile is an excellent medicine in colicky and flatulent pains, and hysterical affections, especially when sulphuric æther and oil of fennel, anise, or cinnamon, are added to it. When the infusion is made with a smaller quantity of the flowers, and with the addition of some liquorice root, or gum-arabic, it will be found very useful in the slighter cases of diarrhœa and dysentery, more particularly if a few drops of opium be superadded.

The following compound infusion of chamomile is very useful in several nervous complaints, more especially in the nervous affections which occasionally supervene in the course of low continued fever, and as a vehicle for other medicines in these diseases: —

℞ Flor. Anthemidis ʒij.
Pulv. Rad. Valerian. ʒiij. infunde
Aquæ Fontan. Calidæ ℥viij.
Macera paulisper, et cola.

* *Class. Ref.* — "Ανθεμὸν, Theoph. Hist. Plant. VII. 13. — "Ανθεμὶς, Diosc. III. 145. etiam χαμαίμηλον, Diosc. et *chamæmelum*, Plin. XXII. 21. — Pallad. VII. 10. — Oribas. Med. Col. XI. 15. — Æt. Tetr. II. 1. — Paul. Æginet. de Re Med. VI. 3. — Considered to be emmenagogue by Galen, and to be the usual remedy resorted to by the ancient Egyptians in fevers. See Simp. Med. III. 10. — Apuleius de Virib. Herb. XXIV. et XXVI. fol. 22. Ed. Paris, 1528. — Oribasius, II. 490, 724. Edit. Basil, 1557. — Serapion, de Simp. Med. XXXIV. — Parkinson, Theat. Bot. p. 1282.

† Christiani Theoph. Sellii, Liber de Curandis Hominum Morbis. Berol. 8vo, 1798, p. 598. — *Pulvis Ecphracticus*, compositus è floribus chamomillæ, radice rhei, tartaro depurato, magnesia usta, sulphure depurato, et elæosaccharo fæniculi — partibus æqualibus.

℞ Hujus Infusionis ℥vij.
Tinct. Camphoræ Comp.
——— Castorei, āā ʒij.
Syrup. Aurantii ℥ss. M.
Capiat æger qualibet hora cochleare plenum.

The following formula will be found beneficial in dyspepsia accompanied with flatulence, and in other derangements of the stomach and bowels arising from debility:—

℞ Infus. Calumbæ ℥iv.
Aquæ Menthæ Piper. vel
——— Anethi ℥iij.
Spirit. Anisi ʒij.
Liquor. Ammoniæ, vel
——— Potassæ ♈ij.
Syrup. Cort. Aurantii ℥ss. M.

Chamomile appears to produce, in addition to its tonic and antispasmodic effects, some degree of irritation upon the mucous surface of the stomach and intestines. Hence the vomiting and diarrhœa which occasionally follow large doses of it when taken uncombined with a narcotic. The good effect of the medicine will, therefore, when these latter effects are not intended to be produced, be best obtained by combining it judiciously with such other substances as the circumstances of the case may point out, and by giving it in moderate doses, or in conjunction with aromatics, and occasionally with a few drops of the tinctura opii. The infusion may often be administered in the form of enema with much advantage.

Armoraciæ Radix.* The root of the *Cochlearia Armoraciæ*.—This root possesses greater powers as a stomachic than as a diuretic medicine; and, in our opinion, would be more serviceable as an adjunct to more permanently tonic remedies than to those possessed of deobstruent or diuretic

* *Class. Ref.*—The Ῥαφανὶς ἀγρία of Theoph. et Diosc., the *armoracia*, *raphanus* and *radicula* of the Romans. Galen. de Simp. Med. VIII.—Alimen. Facul. II. 70.—Plin. XIX. 5; XX. 4.—Columell. VI. 17; IX. 4, 5.—Pallad. Oct. XI. 4.—Catull. XV. versu ultimo.—Paul. Æginet. de Simp. VI.—Serapion de Temp. Simp. IV. 297, p. 170. Ed. Ven. 1550.—Recommended as a gargle in relaxations of the fauces, by Dioscordes.—See cap. CIII. p. 250. Edit. Marcel. Virgilius, 1529, and by Dr. Cullen.—See Mat. Med. Vol. II. p. 441. It was a frequent constituent of the stomachic and aromatic electuaries and antidotes of the ancients, by whom it was also employed as an emetic, and in smaller doses as a remedy for agues. For the latter of which purposes it has subsequently been employed by Sydenham and others. Whilst the ancients recognised fully the diuretic properties of this medicine in cold and passive forms of dropsy, they used it more on account of its stomachic and stimulating effects. See the authors quoted above.

properties. Mr. Brande says, that ' its medical uses are too insignificant to require any description.' Without attempting to divine what is here to be understood by its ' uses,' we can assert, without inferior means of knowing the fact to those possessed by Mr. Brande, that its properties, when judiciously directed, are not insignificant. The ancients had, we are much inclined to think, a correcter idea of the medical uses of this plant than some amongst ourselves, who, *ex cathedra*, thus decidedly pronounce upon its virtues. What Sydenham confirmed by his powers of observation, Mr. Brande will excuse us for assenting to, albeit that he is himself sceptical.*

* We are more inclined to adopt the authority of our old friend John Parkinson, who saith, that it ' provoketh much urine, being boyled with hony and vinegar into an electuary: it is also a good remedy to procure women's courses that are stopped: the same, also, by provoking vomiting and sweating, is often given before the fit of the *quartane* ague to alter the course: the juyce given in drink is held to be very effectual for the scurvy: it killeth the wormes in children, being drunke, as also being laid upon the belly: the root bruised and laid to the place grieved with the sciatica-gout, joynt-ach, or the hard swellings of the spleene and liver, doth wonderfully help them all.' — See the Theatrum Botanicum of John Parkinson, Apothecary of London. Tr. VII. ch. xxiv. p. 861. London, 1640.

The works of Parkinson and Gerarde on Medical Botany, the former particularly, are the best we possess, even up to the present day, as respects a full but concise view of the medicinal purposes to which each plant may be applied. John Gerarde was born in 1545, and was a surgeon in London. He seems to have relinquished surgery early in life, and to have devoted his whole attention to botany. He had a botanic garden in Holborn, where he resided. This was one of the earliest in Europe. His General History of Plants was first published in folio, in 1597. The publisher obtained the numerous and well-executed wood engravings which illustrate the work from Frankfort, and which were executed for the German Herbal of Tabernæmontanus. The text was evidently founded on the *Pemptades* of Dodonæus; and Lobel says, that a Dr. Priest having translated this work, and died soon after, the manuscript fell into Gerarde's hand, who used it without acknowledgment. He died in 1607. Dr. Thomas Johnson published a second edition of Gerarde's great work in 1636, and made many essential corrections and additions to it. The first edition is now not to be had, and the second is scarce.

John Parkinson was almost contemporary with Gerarde. He was born in 1567, and brought up as an apothecary in London. He was a man of great eminence in his profession, most highly and, judging from his writings, most deservedly respected. He became apothecary to James the First. Eleven years after the appearance of his Paradisus Terrestris, he published his great work, the ' Theatrum Botanicum.' This is an immense folio volume, of 1780 pages, with innumerable wood-cuts; it came out in 1640. Parkinson's learning was much greater than that of Gerarde, and his account of the plants, their medical uses, and the preparations made from them, are much more copious and satisfactory. The names of the writers whence he obtained much of his knowledge of the virtues of plants are generally mentioned by him, but he has furnished no facility for reference to these writers themselves. Dioscorides, Galen, Mesue, and the commentaries of Mathiolus, are the sources whence he has derived much of his materials on this topic.

ARSENICI* OXYDUM. *Arsenious Acid.*—Mr. Brande inveighs against the retention of arsenic in the pharmacopœia, and with some degree of justice. And certainly, did we believe, as he appears to do, that to this circumstance is alone to be attributed the numerous evils and self-murders which are committed by it, we would partly agree with him in this matter; as we certainly think, that it is the means of destroying more lives than it saves. But, even provided that arsenic could not be obtained either from the druggist or from the grocer, he who is intent upon murder, whether of himself or of another, will not be at a loss for other means by which it may be perpetrated.

As to the use of this mineral in disease, it may be justly said that its effects in agues are very considerable: but we still prefer, even in the most obstinate cases, the use of bark. And we can add, from what we have seen of intermittents in the most noxious climate in the globe, that if bark be judiciously combined with other means, a case will seldom or never occur wherein recourse must be had to arsenic. As respects the employment of it in other disorders, as in chorea, epilepsy, lepra, elephantiasis, &c., it seems to us that these diseases will generally be much better treated by other means. We have prescribed arsenic in each of these disorders, but, with

But in justice to him we may state, that he has also added much useful information, which cannot be referred to these or any of the older writers on the materia medica now generally referred to; and, therefore, although probably derived from sources which cannot now be rendered available, or resulting from contemporary authority, or the practice of the eminent physicians of the time in which he lived, may be considered as original.

Gerarde was a mere compiler, and not always an honest one; Parkinson was judicious in his compilations, considering the period in which he wrote, was learned, frequently original, copious, quaint, and entertaining. There is not a work of the same description more deserving a place in the library of the physician than Parkinson's 'Theatrum Botanicum.' It entirely supersedes Johnson's edition of Gerarde, although the wood-cuts of the latter are better executed. The faults of Parkinson also exist in Gerarde, in addition to his own. These chiefly consist of the want of due distinctions between the species and genera of plants, varieties arising from change of soil, climate, and from culture, being described by him as distinct species. Parkinson appears to have been alive at the time of the publication of his great work, from the laudatory epistles addressed to him by the most eminent physicians of his time. The period of his death is not known.

* *Class. Ref.*—'Αρσενικὸν, the σανδραχὴ of Aristotle, the ἀῤῥενικὸν of Theophrastus;—called *orpimentum, auripigmentum, et arsenicum*, by the Latins. Chem. Ch. ⊂—⊃ $\overset{0}{\underset{0}{|}}$.—Arist. Hist. Anim. VIII. c. 24.—Cels. de Re Med. V. c. 5.—Plin. XXXIV. c. 18.—Dioscor. V. c. 121.—Galen. de Comp. Med. Sec. Loc. IV.—Oribas. Med. Coll. Vol. I. p. 42, 60; Vol. II. p. 730. Edit. Bas. 1557. Used chiefly as a depilatory, and as an application to indolent tumours and ulcers, by the ancients.

the single exception of ague, have never experienced much benefit from it; but, on the contrary, have occasionally seen bad effects follow its too long continued use, when they were not suspected by those who prescribed it.

The ingestion of small quantities of arsenic produces effects which have not been sufficiently attended to during the medicinal employment of this mineral: we allude to the well-marked inflammation of the heart and internal membrane of the large vessels, which has been observed to follow its poisonous or imprudent use. And we believe that few, who have paid attention to the phenomena resulting from a protracted exhibition of it, whether internally or externally, have failed to remark one or more of the following deleterious effects characteristic of its action, namely, — cardialgia, anorexia, sickness, palpitation, sense of heat and oppression at the præcordia, a quick, contracted, and irregular pulse, tenesmus, hæmorrhoids, vertigo, and sometimes an erythematous eruption on the skin: but, of all these, the most to be dreaded are the increased irritability of the heart, and the symptoms which may be referred to this organ and the rest of the circulating system. The symptoms arising from the ingestion of a very large quantity of arsenic at a single dose, need not be here enumerated. We refer the reader to Mr. Brande's work for these.

From a careful examination of the details of experiments made with the preparations of arsenic, by Dr. Jaegar, M. Orfila, and Mr. Brodie, it may be concluded, that arsenic produces its effects upon the animal economy chiefly from its being absorbed. Its local effects are not invariably observed; and, even when they exist to the greatest extent, they are not sufficient to occasion of themselves the fatal consequences which supervene. We have sufficient proofs furnished us by these experiments, and by the details of cases of poisoning by this mineral, that when applied to an abraded surface, taken into the stomach, introduced into the cellular tissue, or injected into the veins, it almost invariably gives rise to nearly similar phenomena, and produces effects which cannot be explained otherwise than by inferring its presence in the circulation. These effects may be briefly stated to be— inflammation of the mucous surface of the stomach and intestines, particularly of the duodenum and rectum; softening and ulceration of these parts, when the patient has lived for some time after the exhibition of the mineral; and inflammation of the mucous membranes generally. These effects upon the mucous surfaces, and upon those of the stomach and rectum particularly, are equally present, whether this mineral or its preparations be injected into the veins, or otherwise in-

troduced into the body. Another very important circumstance which should be kept in view, both as respects the effects of this substance, and the means which ought to be employed to counteract them, is the supervention of inflammation of the heart, which has been remarked in all the cases in which the patient has lived sufficiently long, after the ingestion of the poison, to give rise to it. In several cases detailed by M. Orfila, in which the more immediate effects of the poison were not fatal, the patients died, properly speaking, of inflammation of this important viscus,* complicated with more or less evident appearances of inflammation of the internal membrane of the large vessels, and of softening and ulceration of the internal surface of the stomach, duodenum, and rectum.

Another fact, which evinces both the mode of action of arsenic on the body, and the necessity of keeping the knowledge of this action in view, when we endeavour to counteract its influence, is the appearance of the blood in the bodies of those who have died of the effects occasioned by it. In every instance, it has been remarked that the heart was loaded with fluid blood, and that the blood in all the large vessels was also fluid.

From these, and other circumstances which our limits cannot allow us to introduce, it may be inferred, that the preparations of arsenic, when taken in moderate quantities, irritate the mucous surface of the digestive canal, are absorbed into the blood, and hence they excite the heart and blood-vessels, in which they thus circulate, and, through this medium, the nervous system and mucous surfaces of the body generally. If the quantities taken be either very considerable, or continued for too long a time, all these effects are heightened, until the excitation proceeds to irritation, inflammation or complete exhaustion of the vital influence of the heart and blood-vessels, and the nervous energy becomes quite overpowered, and the mucous surfaces inflamed, ulcerated, or even sphacelated.

As all the combinations of this mineral with the fixed alkalies render it more soluble, and also more readily absorbed, they should be avoided in the treatment of the noxious effects resulting from it; and it should be our object to protect the mucous surface of the digestive canal from its action, and to prevent, as far as we can, the solution of it in the secretions and contents of the stomach and intestines, at the same time that we procure its expulsion from the body as

* See the Medical Repository, Vol. XX. Old Series, p. 349.

quickly as possible.* When, however, these measures fail, and the symptoms indicate the supervention of inflammatory action in the circulating system, antiphlogistic remedies ought to be employed, and such other means adopted as the circumstances of the case appear to demand. We refer our readers to Mr. Brande's work, for an account of the measures that ought to be pursued in order to detect the presence of arsenic, in cases of poisoning by this mineral.

ASARI FOLIA. The leaves of the *Asarum Europæum.*†—This plant is a stimulant of considerable energy, increasing the discharge from the mucous surfaces, and exciting the action of the muscular parts in their vicinity. In the time of Mathiolus, the Germans used it in the cure of ague, and prepared a decoction of it with wine, to which some mace and cinnamon were usually added. They also adopted the treatment recommended by Mesue, of rubbing the back with its essential oil, in order to prevent the accession of the paroxysm. It was much employed by the ancients as an emetic, and as an ingredient in their class of antidotes. Dr. Cullen speaks highly of the powdered root of the asarum as an emetic and local stimulant; and says, that it cannot be excelled by any now in use. It appears to us to be a more certain and a more appropriate emetic in cases of poisoning by narcotics, than any other that can be chosen. The dose requisite to produce this effect, if the root be taken up at the proper season, and carefully dried, is from fifteen to thirty grains. The effects of this plant as a diuretic are not always to be depended upon.

* See the details of a case, which appears to have been judiciously treated according to these principles, by Mr. Buchannan, in the MEDICAL REPOSITORY, Vol. XIX. p. 288.

† *Class. Ref.*—"Ασαρον, νάρδος ἀγρία, *Græcis.* Asarum, nardus, &c., *Latinis.* Plin. XI. c. 13.—Dioscorid. I. c. 9.—Galen. Simp. Med. VI.—Oribas. Vol. I. p. 41; II. p. 492, 680. Edit. Basil. 1557.—Serapion de Temp. Simplic. IV. 244.

Mesuai recommends a vinous infusion of asarum in putrid fevers, in icterus, and dropsy. 'Oleum asari,' he states, 'cum ladano spinæ illitum sudores movet, et rigorem febrilem inhibet. Urinas movet, semen auget. Valentius agit cum sero lactis, spica et hydromelite. Mustum his radicibus conditum, post tertium mensem hydropes et splenum sanat. Mediocriter coqui et teri potest: *et quo tenuius est tritum, eo magis urinas movet, minus autem alvum ducit.* Datur infuso ab aureis duobus ad drachmam quatuor.'—*Lib. II. de Med. Simp. Purg.* cap. xxii. p. 72. Edit. of Sylvius. Paris, 1542.

Parkinson says, that 'it purgeth like unto black hellebor, it doth wonderfully helpe the obstructions of the liver and spleene, and is therefore profitable for those that are troubled with the dropsie and the overflowing of the gall, which is the jaundise, being steeped in wine, and drunke.'—*Theat. Bot.* p. 267.

ASSAFŒTIDÆ GUMMI RESINA.* *Assafœtida.* Obtained from the root of the *Ferula Assafœtida*, and the *Ferula Persica*.—This gum is stimulant, antispasmodic, and tonic. It increases the secretions of mucous surfaces, and allays the irregular action of the muscular parts in their vicinity. It seems to exert its influence principally upon the class of nerves which supply the blood-vessels and involuntary muscles; and, through the medium of their extensive and intimate connexions, this influence is exerted upon the organic functions more or less generally. We have not sufficient proof that it is absorbed into the circulation, although we generally find its odour pervading the fluids and secretions of the body.

Assafœtida is useful in dyspepsia, with a flatulent or an irritable state of the stomach; in flatulent colic, in deficient action of the liver, jaundice, hypochondriasis, and in habitual costiveness. In these disorders it may be combined with the blue pill, vegetable tonics, and gentle aperients, and tonic laxatives; and occasionally with carminatives. Its anthelmintic properties have been long known. The vermifuge pills recommended by Hoffman, consisting of assafœtida, calomel, myrrh, and saffron, deserve their reputation.

We have given this substance in the low state of mania or delirium, and after depletions or other lowering means have been used, with considerable benefit, and particularly when combined with opium and camphor. Whytt and Tissot praise it greatly, as a remedy in the majority of nervous

* *Class. Ref.*—The *concrete juice* of the plant was called λάσιρος, ὀπὸς Κυρήναικον (because gathered in Cyrene), ὀπὸς Συριακὸς, ὀπὸς μηδικὸς, *Græcis*. Lac Cyrenaicum, Succus Cyrenaicus, Laser, Laser Syriacum, Laser fœtidum, *Latinis*. The *assa* of the Arabians (Mesarugie). The *stercus diaboli* and the *assa fœtida* of the monks of the Schola Salernitana.

The plant was named σίλφιον, the root μαγῦδαρις by the Greeks; and the latter *laserpitium* by the Romans, by whom it was highly esteemed as a condiment. See Apicius de Re Coquinaria, passim.—Hippoc. de Morb. IV. p. 499.—Theoph. Hist. Plant. VI. c. 3.—Strabo, Lib. II. p. 89; Lib. XVII. p. 576. Edit. Casaub.—Arrian. Exp. Alex. Lib. III. c. 28. p. 145. Edit. Gronov.—Plin. XIX. c. 3.—Scribonius Larg. c. 16.—Dioscorid. III. 85.—Galen. de Simp. Med. VIII.—Oribas. II. p. 557. Bas. Edit.—Columel. II. 10; VI. 17.—Serapion de Temp. Simp. IV. 241; de Simp. Med. 86. At the time of Parkinson it was little used in this country. '*Garcias* saith the Indians use it to take away the loathing of the stomache to meate, and to strengthen the weaknesse of it also, and is much used by them to provoke unto venery, and causeth one to expell winde mightilie.'—*Theat. Bot.* p. 1570.

Mesuai recommends the following electuary, '*Electuarium ex Lasere*' (assafœtida), for intermittent fevers, &c. 'Recipit liquoris Cyrenaici (assafœtidæ), piperis, myrrhæ, foliorum rutæ siccorum, ana unc. dimidiam melle despumato excipe. Datur à drachma una ad aureum unum in febre, cum oxymellite per horam ante accessionem: contrà venenum, cum vino calido.'—Mesuæ, *Lib. III. de Antidotis*, p. 219. Edit. Sylvii. Paris, 1542.

diseases, more particularly in hysteria and epilepsy; and doubtless, when these affections result neither from inflammation nor determination of blood to the encephalon, and when there exists no irritation of the stomach and digestive organs, it is, perhaps, the best remedy belonging to the class of nervines which we possess for these disorders. In violent attacks of hysteria, with spasmodic constriction of the throat and imminent suffocation, and in colic attended with flatulence, a clyster of assafœtida will afford immediate relief.

Dioscorides, Galen, and others after them, advise the use of this substance, largely combined with vinegar, for epilepsy; and doubtless, as far as the combination of the most active antispasmodic we possess with a substance which tends much to reduce and prevent plethora is calculated to be serviceable, the practice is beneficial. The vapour arising from one part of this gum, and four of concentrated acetic acid frequently inhaled, is extremely useful to females who are subject to hysterical affections.

In chorea, in conjunction with tonics, preparations of iron (the mist. ferri comp.), and aperients, especially after the bowels and gall-bladder have been evacuated, assafœtida, in decided doses, will be found beneficial. The same treatment applies to hysteria, chlorosis, and difficult menstruation arising from debility. Its use, indeed, as an emmenagogue, especially when combined with myrrh, aloës, castor, and with aperients and aromatics, is much insisted on by the older writers, as well as by the best modern physicians.

In chronic affections of the mucous surfaces of the respiratory organs, as in peripneumonia notha, chronic catarrh, chronic bronchitis, when the more active stage of disease has elapsed, in the dyspnœa of aged persons, and in nervous asthma, assafœtida and its different preparations are often serviceable, and more particularly when judiciously combined according to the circumstances of individual cases. In nervous asthma it generally proves a good medicine, and relieves the flatulence frequently attendant on the disease, as well as the disease itself, especially when rubbed up with white of egg, or some mucilage, and suspended in the aqua fœniculi, or decoctum althææ. The following formula is recommended by Sprengel, in asthma:—

℞ Assafœtidæ ʒij. solve in
Liquoris Ammoniæ Acet. ℥j.
Aquæ Fœniculi ℥iij.
Syrup. Senegæ ℥ss. Mis.

We have found this, or a similar combination of assafœtida, exceedingly serviceable in hooping-cough, and have generally added the extractum conii to it with advantage.

In nearly all the spasmodic affections, especially those of the respiratory organs, and in certain inflammatory diseases which are generally attended with more or less spasm of the parts in the immediate vicinity of the seat of inflammation, after active depletions and emetics have been resorted to, assafœtida, either alone or combined with camphor, musk, &c. &c., and given in the form of an emulsion, will often prove of great advantage. But in those maladies, acute action of the capillaries must be previously subdued. It seems to us, that it is under similar circumstances to those now pointed out, that Dioscorides and others recommend it in angina, in the form of gargle, and in coughs, and in pleuritic and pulmonary complaints, combined with demulcents. We frequently meet in practice, especially in nervous, irritable, and hysterical persons, with pains simulating those of pleuritis, and with other affections about the chest and lungs which are clearly hysterical, wherein the exhibition of assafœtida produces almost immediate relief. These affections are often attended with flatulence, distension, and other derangements of the stomach, duodenum, and colon, and the relation between the relief of the one class of affections and that of the others is often striking.

In almost all the foregoing disorders, assafœtida may be given as an ingredient in enemas with nearly equal advantages to those derived from its exhibition by the mouth: but the dose must be much increased, and the combination of it judiciously conducted according to the circumstances under which it is thus exhibited.

We believe with Voltelen,* that assafœtida, as well as other nervine remedies, are given in too small quantities, and are hence continued longer than they ought. It seems more preferable to prescribe them in decided doses at once—to give them only when they are clearly indicated; and, if beneficial effects result not soon from their exhibition, to relinquish them altogether.

Assafœtida is combined advantageously with camphor, castor, opium, conium, hyosciamus, &c. in the majority of nervous affections;—with several of the terebinthinates and balsams, in some chronic disorders of the digestive and respiratory organs arising from debility;—with capsicum, conium, and the carbonates of the alkalies, in glandular obstructions and scrofula;—with galbanum, myrrh, vegetable tonics, and preparations of iron, in order to prevent the

* Ego sane, à quo tempore assam fœtidam liberalius ingessi sanatos aliquoties lætus vidi morbos nervosi generis, multùm diùque incassùm per exquisitissima remedia sollicitatos.—Voltelen, *Pharmacologia Universa.*

generation of worms, and in chlorosis, amenorrhœa, &c.;—with tonic laxatives and carminatives, when there exists much distension of the colon and small intestines;—and with tonics, the blue pill, and deobstruent salts, when the secretions are languid, and the bowels costive from deficient energy of the circulation. Its use is contra-indicated when the skin is hot and dry, when acute action of the capillaries, particularly of those of the mucous system, is present. When costiveness results from inflammatory action, and when pain or spasm proceeds from this, or a similar state of the blood-vessels, and more especially, when attended with general fever, assafœtida should not be exhibited until after the depletory treatment has been carried as far as it safely can: but when depletions have been judiciously practiced, and pain or spasm, or both remain notwithstanding, as they often do, then assafœtida, camphor, opium, &c. generally prove most successful.

The following pills will be found actively antispasmodic in the nervous affections, and irregular actions of muscles, depending upon debility:—

℞ Assafœtidæ ℈ij.
Camphoræ Subactæ gr. xvj.
Moschi gr. vj.
Mucilag. Acaciæ q. s. M.
Fiant pilulæ xvj. è quibus sumatur una omni bihorio.

Or the following:—

℞ Assafœtidæ ʒss.
Castorei gr. vj.
Extract. Hyosciami x.
——— Anthemidis ℈j.
Syrup. Papaveris q. s. M.
Fiant pilulæ xij. capiat ægra duas mane nocteque.

Balsamum Peruvianum. Balsam of the *Myroxylon Peruvianum*.—This balsam is stimulant and tonic. As it is composed of benzoic acid, volatile oil, and resin, it is probable that its constituents are separated in the stomach and small intestines, and that the benzoic acid existing in it is partly absorbed into the circulation. This inference rests partly upon the experiments of Dr. Woehler, who found that the benzoic acid may be detected in the urine a few hours after it is taken into the stomach, and partly upon our own observation of the state of this excretion after repeated doses of the balsam. From these considerations it may be inferred, that, in addition to the primary effects of this substance on the mucous surfaces to which it is more immediately applied, arising chiefly from the volatile oil and the benzoic acid, the latter ingredient is absorbed into the blood, where it imparts a tonic influence to the capillary vessels and mucous surfaces.

The balsam of Peru was much employed, both as an internal and external remedy, about the end of the sixteenth and the beginning of the seventeenth centuries: but, even at the later period, it seems to have been beginning to suffer that undeserved neglect which it afterwards experienced; for we find our very honest and intelligent friend Parkinson* say, and moralize at the same time, that when he wrote (before 1640), 'it was, for a time after its first bringing (from South America), of great account with all men, and bought at great prices; but as greater store was brought, so did the prices diminish, and the use decay, when as it was the same thing and of the same vertue it formerly was; such is the inconstant course of the world in all things,' but, in medicines, more particularly, he might have added.

This remedy has been long disused: but the very judicious observations of Dr. Carter† of Canterbury have lately directed the notice of the profession to its proporties, and led to a juster estimate of its virtues than was formerly entertained. Our own experience of its effects, since he turned our attention to it, fully corroborates his observations, and warrants us in stating, that it will be found serviceable in those chronic derangements of the mucous surface of the digestive and respiratory organs which are characterised by deficient tone of its vessels and nerves, and a relaxed condition of the secreting apparatus,—in short, in chronic diarrhœa, and chronic dysentery, and in the same forms of disease of the organs of digestion and respiration alluded to, when speaking of the uses of assafœtida: it is contra-indicated in similar states of the system as are there described. Cartheuser‡ recommends it in epilepsy, but we have had no experience of its effects in this disease; we have it, however, in our power to state, that it is a most useful remedy in blennorrhœa; and in fluor albus, when the discharge results chiefly from debility, and not from determination of blood to the uterus or its appendages.

In the majority of instances, it will be preferable to combine

* He states the medical uses of this balsam as follows:—'It helpeth the weaknesse of the stomache, the tissicke, and shortnesse of breath, those that are pursie, and the paines and difficulty in making water; it moveth also women's courses, and causeth a good colour and a sweete breath, rectifieth the evil disposition of the liver, openeth obstructions, and preserveth youthfullnesse even in aged persons [who can wonder that it was "bought at great prices?"] that have much used it, and helpeth the barrenness of women: it strengtheneth the stomach, dissolveth winde, easeth the spleene, and the sciatica, &c.'—*Theatrum Botanicum*, p. 1570.

† See Dr. Carter's very excellent and practical Hospital Reports, in the Medical Repository.

‡ Fundamenta Materiæ Medicæ, Vol. II. p. 307.

it with other appropriate remedies, and with aromatics, carminatives, &c., according to the quantity prescribed and the circumstances of the case. The following recipe is one which we have frequently employed, and varied according to circumstances:—

℞ Balsami Peruviani ɱv. ad ʒss.
Mucilaginis Acaciæ ʒjss. tere simul, et adde
Mist. Camphoræ ʒvj.
Spiritûs Anisi ʒss.
Aquæ Anethi, (vel. Aq. Cinnam.) ℥ss.
Fiat Haustus, ter quaterve de die capiendus.

Balsamum Tolutanum. (*Toluifera Balsamum.*)—It consists of the same ingredients as the Peru balsam, and is suited to the same species of pulmonary diseases. It is, however, less energetic than the latter, and less serviceable in derangements of the digestive organs. It, as well as the Peru balsam, ought never to be exhibited during increased action of the mucous capillaries, a dry and hot skin, or a febrile state of the system.

Belladonnæ Folia.—(*Atropa Belladonna.*) The *Solanum furiosum* of the ancients.*—It may be inferred, from the experiments and observations which have been made with the fruit, leaves, and root of the belladonna by M. Orfila, Gaultier de Claubry, and others, that its primary action is upon the stomach and other parts of the digestive tube, occasioning considerable irritation of the nerves and capillaries of the mucous surface; that it is soon afterwards absorbed into the circulation, and, through the medium of the blood, acts energetically on the brain, and on the blood-vessels themselves, modifying and speedily exhausting the functions they derive from the class of nerves that supply them;—hence the appearances of inflammation observed in the digestive canal, the morbid excitation of the cerebral functions, the irregular actions of the voluntary organs, and the rapid dissolution of the various textures of the body. It appears, however, that, besides its local action and its effects resulting from absorption, the morbid impression first made by it upon a part of the circle of the sympathetic class of nerves is, in some degree, propagated throughout, before absorption has fully taken place; and it is not improbable that, in addition to its effects upon the nervous system and the capillaries,

* *Class. Ref.*—It seems to be the στρύχνος μανικὸς of Theoph. Hist. Plant. VII. 14; XIX. 12, 14, &c.—*Solanum furiosum*, Plin. XXVII. 13; XXI. 31.—Celsus, II. xxx. fol. 25, 2. Edit. Parisiis, 1529.—Apul. c. 131, fol. 33, 2. Edit. 1528?—Scrib. Larg. c. 194, p. 23. Edit. Princeps.—Dioscorid. IV. 72.—Galen. Simp. Med. VIII.—Oribas. II. 565.—Serapion. de Simp. Med. III. 98.

after absorption has proceeded, it produces a considerable change on the state of the blood itself,—such change resulting either immediately from its admixture with this fluid, or through the medium of the blood-vessels, owing to its greatly modifying the vital influence they exert upon their contents. As to its more evident influence upon the brain and voluntary nerves, it may be considered as an indirect sedative.

The symptoms produced by a deleterious dose of this substance are thus described by M. Gaultier de Claubry (*Journal Général de Médecine,* tome xlviii. p. 355), who witnessed its effects in upwards of 150 individuals who were poisoned by it:—

'Dilatation and immobility of the pupil; almost total insensibility of the eye to external objects, or at least confused vision; injection of the conjunctiva with a bluish blood; prominence of the eye, which presents in some a stupid appearance, and in others is ardent and furious; dryness of the lips, tongue, palate, and fauces; difficulty, or even an impossibility of deglutition; nausea, not followed by vomiting; sense of debility, lipothymia, syncope; difficulty or impossibility of preserving the erect posture; frequent flexion of the body forward; continual movement of the hands and fingers; lively delirium, with an idiotic smile; loss of voice, or confused sounds uttered with difficulty; fruitless attempts to go to stool; insensible restoration of healthy function and of reason, without recollection of the previous state.'

When the dose of this substance is more considerable, the patient sinks into a state of fatuity; the face becomes red, livid, and tumefied; livid spots appear on different parts of the body; the pulse becomes rapidly low and feeble; the functions of the intestines are arrested; profuse colliquative sweats break out, and convulsions and death supervene.

The appearances observed on dissection are,—traces of inflammation in the mucous and submucous tissues of the digestive canal, particularly of the fauces, stomach, and duodenum; sometimes erosions or ulcerations at various points of the interior surface of the stomach; the liver is frequently more or less inflamed; the lungs are usually livid, sometimes inflamed, but oftener gorged with black blood, and present dark-coloured spots; the heart has also sometimes been observed to be livid. In a few cases, the viscera have presented but little change. Livid or bluish patches are often found on the back, abdomen, and extremities; occasionally a bloody froth issues from the mouth and nostrils; and the whole body swells remarkably, soon falls into putrefaction, and emits a horrible stench.

In order to counteract the baneful effects of this poison, affusions of cold water on the head and surface of the body; the removal of it from the stomach by means of the flexible tube and syringe recently introduced in practice; acid drinks; oxymel; small depletions; emeto-catharthisis; cathartic enemas, &c., should be resorted to, according to the circumstances of the case.

The belladonna has been much recommended in hooping-cough by Wetzler, Schœffer, and Hufeland. We, however, perfectly agree with Dr. Marcus of Bamberg, that this medicine should not be employed early in this disease: it certainly ought not to be prescribed for very young children. When, on the other hand, the first stage of hooping-cough has elapsed, it may be used in the manner of Wetzler, who recommends one part of the root, in powder, to be added to five parts of sugar, and to be given, night and morning, in doses of from a quarter of a grain to a grain of the root, according to the age and strength of the child. The powder of this part of the plant is less energetic than that of the leaves. Our readers are well acquainted with the encomiums bestowed upon it by some German physicians as a preservative against scarlatina.* The extract of this plant is a more uncertain and acrid preparation than the powder of the root, or even of the leaves, and should, therefore, be used with much greater caution.

Bergius recommends the belladonna in chorea; Hufeland gives it for the spasms and convulsions sometimes attendant on scrofula; Stoll praises it in mania, and particularly in epilepsy; Cullen, and many others, advocate the use of it in scirrhous affections, and in cancer; and its effects upon the pupil render it an useful adjurant in the treatment of irritis, and a preparative for several operations on the eye.

The following formula exhibits the combination of belladonna that may be adopted in various nervous diseases:—

℞ Extracti Fol. Belladonnæ gr. ij. ad iv.
Moschi optimi gr. vj. ad xij.
Sacchari Albi, satis quantum ut terendo obtineatur pulvis congener; deinde adde, paulatim miscendo,
Infusi frigidi Rad. Valerianæ ℥iv.
Spirit. Æther. Sulphur. ʒj.
Syrup. Papaveris ʒiij. M.
Capiat æger cochlear. ij. vel iij. larga 3tiis, 5tiis, vel 6tiis horis.

Benzoinum.—See the *Acidum Benzoicum*, and *Tinct. Benzoini Comp.*

* See the Medical Repository, Vol. XXI. p. 261, New Series.

Bismuthum. *Bismuth.* — Although bismuth was employed in medicine as far back as the time of Schrœder,* we had no precise information furnished us as to its effects in disease, until the publication of Odier's, Kercksig's, and Reil's experiments with it, in 1786 and 1792. Since then, the subnitrate of this metal has been much employed, and Dr. Marcet, Dr. Yeats, and Dr. Bradsley, have certified its beneficial effects. We conceive that we have derived benefit from it in gastrodynia, pyrosis, dyspepsia, and in a flatulent and irritable state of the stomach and bowels; but we confess that we have seldom trusted to it alone, having generally combined it with other means. Mr. Houlton, a practitioner of much scientific and practical knowledge, informs us, that he has experienced very decided advantage from it in these complaints. Schrœder says, that the combination of certain preparations of it, which he specifies, with the supertartrate of potass, 'serum purgat potentissime, hydropicos ad miraculum juvat.'—P. 460. Hufeland considers it to be anthelmintic; and Reil thinks that its sedative effects are considerable, both in spasmodic and painful affections of the digestive tube, and in those of other parts, as in hysteria, chorea, epilepsy, &c., and that, if judiciously administered, it tends to increase perspiration and the secretions.

Bistorta.†—The root of the *Polygonum Bistorta* is chiefly deserving notice as a powerful astringent in chronic diarrhœa, chronic dysentery, and in menorrhagia, and other hæmorrhages arising from relaxation of the capillary vessels and weakness of the mucous surfaces. The decoction is a good form of exhibiting it internally, and is a suitable injection and topical application in those cases of leucorrhœa characterised by debility and torpor of the vessels. A form of chronic aphthous disease occasionally occurs in children, wherein an infusion of bistorta, combined with simple infusion of roses, and small doses of the borax sodæ sweetened with the confection of roses, and given through the day, is an excellent remedy, particularly in the latter stages of the disorder, sufficient doses of hydrargyrum cum creta being

* Dr. Paris says, that its medicinal powers were first noticed by Jacobi, in 1697; but Schrœder treats much at length of its virtues in his Pharmacopœia, published in 1672, at p. 458, 459, and 460.

† *Class. Ref.*—The Πολύγονον ἄρρεν (à copiosis geniculis circa caules) of Dioscorides (IV. 4.) seems to be the *polyganum avicularia.* See Plin. XXVII. 12.—Columella, VII. 5, 9.—Scribon. Larg. 193.—Galen. de Simp. Med. VIII.—Oribas. II. p. 548.—Serapion. de Simp. Med. IV. c. 144. Parkinson says, that 'given before the fit of the ague, be it *tertian* or *quartane*, it driveth it away;' and that 'it likewise killeth the wormes in the belly or stomacke.'—P. 441.

also prescribed night and morning. Care should, however, be taken that this treatment be preceded by suitable evacuations, and that the more acute stage of disease shall have subsided before we put it in practice. The particular disease to which we allude, is that which has obtained the name of the mucous disease of Roederer and Wagler, the 'Désorganisation gilatiniforme chez les enfans,'* by M. Cruveilhier.

The bistorta root was generally an ingredient in the class of antidotes so much confided in by the ancients and old pharmacological writers, by whom it was usually given as a cure for intermittents and dysentery; and Giannini has recently strongly recommended equal parts of it and gentian against the agues which are so prevalent in the Italian states.

This root ought never to be prescribed during acute inflammatory action, or whilst considerable febrile commotion exists in the system, or when the skin is hot and dry, or the tongue white and furred.

Calami Radix. *Acorus Calamus.*†— Mr. Brande's account of this medicine is neither satisfactory in a pharmaceutical nor in a therapeutical point of view. As it is a remedy which has been undeservedly neglected, we shall take more than usual notice of it. We have frequently prescribed it, and in no instance have we been disappointed in the expectations we had formed from it. Its virtues, we believe, chiefly depend upon an æthereal oil, which amounts to nearly a drachm in the pound weight of the root; besides this, it contains a gummy extractive matter, resin, fæcula, and phosphate and muriate of soda. Part of its virtues are

* We have at present two cases of this disease under treatment at the Infirmary for children, in one of which small doses of the borax sodæ seem to be beneficial: in the other, the hydrarg. cum creta, every night, and the oleum terebinth. alternate mornings, have nearly effected a cure.

† *Class. Ref.*—"Ακορος. *Græcis.* Acorus, herba venerea, *Latinis.* Theoph. Hist. Plant. I. c. 17. — Celsus. III. 21; V. 23. — Apuleius, c. VI. 'Urinam mirifice deducit, et stranguriam sanat.'—P. 20. Edit. J. Guintere, Paris, 1528.—Plin. XXV. c. 13. Dioscorides, and, after him, Galen, says that it is aphrodisiac, diuretic, and emmenagogue, and beneficial in enlargements of the spleen. Diosc. I. c. 2. — Galen. de Simp. Medic. VI.—Oribas. vol. i. p. 41; et ii. p. 659.—Serap. de Temp. Simp. IV. c. 259. The *calamus* entered largely into the antidotes of Dioscorides and the ancients, and the aromatic electuaries of Mesuaï. See Lib. III. c. 5. p. 199. et sequent. Edit. Sylv. Paris, 1542. Mathiolus and Lobel first determined that the *calamus aromaticus* was the true ἄκορος of the ancients.

Parkinson recommends the *calamus*, with great propriety, in conjunction with cinnamon and wormwood wine, for indigestion. See p. 144 of the '*Theatrum Botanicum*,' where a full and instructive account of its virtues is to be found.

lost by infusing it in hot water, the increased temperature dissipating the volatile oil.

The calamus is gently stimulant, aromatic, tonic, and slightly astringent and anodyne. It excites the energy of the stomach and intestines, promotes the circulation of the liver, and of the organs with which it comes in contact, increases exhalation and secretion, and expels flatus. When combined either with preparations of iron, or with galbanum, assafœtida, aloës, &c., or even when exhibited alone, it proves serviceable in promoting the discharge, and preventing the accumulation, of the mucous colluvies which is the *nidus* of worms. After it is considered that these parasitic animals have been expelled by active anthelmintics, the calamus aromaticus may be occasionally combined with camphor, the sulphate of iron, and other tonics, in order to remove that state of digestive function in the intestines which generally lead to their regeneration. The vinous infusion, or tincture of this substance, will be found an excellent remedy in convalescence from low fevers. Horn strongly advises its use in asthenic fevers; Hoffman praises it in scorbutic disorders; and Weikard justly recommends it in scrofula. We have prescribed it in a few cases of this latter complaint with advantage, combined with capsicum, conium, and the carbonates of the alkalies. Trommsdorf's aromatic tincture, an excellent tonic and carminative medicine, is made from the roots of the calamus aromaticus, cloves, gentian root, angelica, and the seeds of fennel.

This indigenous aromatic is a most excellent remedy in diarrhœa from debility, and in an irritable state of the stomach and intestines; and may be advantageously employed in cases of this description in the form of tincture and infusion, combined with small doses of rhubarb, ipecacuanha, cinnamon, and gentle anodynes, as camphor, syrupus papaveris, &c. Swediaur strongly recommends an extract of it in dyspepsia; but the powder, or a cold infusion, seems to us to be preferable. Whatever preparation of it may be adopted by the practitioner will be found a most eligible means of allaying bilious vomitings and inordinate action of the bowels, and of removing the debility consequent on these affections. In the bowel complaints of children, we have found it an excellent remedy. Proof spirit extracts its virtues more fully than any other solvent; next to the powder and tincture, we prefer a vinous infusion of the powder, or of the bruised root.

It is advantageously combined with assafœtida, galbanum, capsicum, aperients, and carminatives, in a sluggish and flatulent state of the bowels: with aperients and antispas-

modics in colic, indigestion, &c.; with absorbents and anodynes in chronic dysentery and diarrhœa; and with other tonics and aromatics, as cascarilla, calumba, cardamoms, carraways, &c., in dyspepsia and debility accompanied with flatulence and distension of the colon. When this treatment is proceeding, small doses of deobstruents or laxatives may be given night or morning.

(To be continued.)

IV.

INTERTROPICAL DISEASES. — FEVERS.

Military Medical Reports, containing Pathological and Practical Observations, &c. By JAMES M'CABE, M.D., Cheltenham. 1825.

IT was certainly with some alarm that we found Dr. M'Cabe recommending, that 'every one to whom necessity or choice, or the obligations of public service, had afforded an opportunity of witnessing the diseases of tropical climates, should make public the result of their own observations.' Of writing of books there is no end, even now, when some few at least are still content to let their names pass away without being in print; and to what an overwhelming inundation would our author's advice subject us, were it to be acted upon? However, though thus *toto cælo* disagreeing with him on this point, we certainly do not regret that he himself has acted upon it; for he has produced a work, though perhaps rather too much encumbered with speculations on the vital principle, upon the whole creditable to his powers; and which will, we think, be serviceable to tropical practitioners. We should be mistaken, however, if we supposed, that to them alone it may be useful; for many of his observations are equally applicable to the fevers of this country. There is also another recommendation of the work, which has not often been attendant upon publications on tropical diseases, — we mean its size and price. These are both moderate; and the really practical part of the book is greatly superior to the theoretical.

The first part treats of yellow fever, — that dreadful and dreaded scourge of our West India possessions. After paying some well-deserved compliments to Dr. Jackson and Dr. Ferguson for the introduction of the depleting system, which he states most materially to have reduced the mortality, our author proceeds to give an account of the morbid appearances which are usually observed in this disease.

Of the yellowness of the skin, which has given the name

to the complaint, he says, that, 'although highly characteristic of the worst forms of this fever, it is not a constant nor even a very frequent occurrence. The skin is frequently pale, shrunk, and constricted, the blood appearing totally to have forsaken the surface of the body.' In his exposition of the state of the different organs, there is nothing different from what has been frequently before published; and all is indicative of a highly inflammatory action having taken place.

The explanation which he gives of the putrid effluvia, frequently manifest in persons afflicted with yellow fever, and 'when the unfortunate sufferer still retains the entire use of his intellectual faculties,' is rather too hypothetical; and though, perhaps, in our author's mind, it may be connected with many very useful facts, it is not of so much importance with us as to induce much attention. We are, however, too well aware of the fascinating allurements which such subjects possess, from the facility with which they may be written upon, to think unfavourably of him on this account. We do, however, most perfectly coincide with his opinion, that the presence of much blood in any particular organ, on examination after death, is no sufficient ground for concluding that blood-letting had not been carried to a sufficient extent. A much better ground, if derived from morbid investigation only, is the presence of coagulable lymph, &c. constantly, so far as our experience goes, the consequence of inflammation.

The second part of this essay embraces the causes of West India fever; and contains several reports, transmitted at the time to the Director-General of the Army Medical Department. Of these reports we can scarcely speak too favourably. They are very much superior in style to the other parts of the volume, and manifest a very considerable knowledge of, and attention to, the subject of which they treat. We could not well curtail them; and to those who practise in the West Indies, we recommend a careful perusal of them, as well calculated to point out many sources of danger, and these frequently avoidable.

Far the most valuable part of this volume, however, is that which is dedicated to the treatment of the disease. His remarks respecting mercury, which at one time was looked to by tropical practitioners as a specific, appear to us remarkably correct. He notices, that under this plan, unquestionably, the mortality was much less, than when a continual stimulating plan was pursued from the commencement to the termination of the disease; and he seems to refer this rather to its purgative qualities, than as at all consequent to its specific action of producing ptyalism; and states, that 'patients may be seen dying of fever, while under the influence of mercury—there may be observed the fatal termination of

the disease to take place, during any stage of the effects of this medicine, from a slight soreness of the gums to the most saturated stage of ptyalism.'—P. 89. Even when mercury has been used merely as a purgative, Dr. M'Cabe has seen such a degree of faintness and exhaustion succeed, ' that the pulse became almost imperceptible, and all the other functions were equally enfeebled. It was only by giving the patient frequently a little toasted bread, dipped in Madeira wine, that the action of the stomach was restored, that the pulse was raised, and that some degree of energy was again communicated to all the vital functions.' A few years ago, and blood-letting in fevers was considered in this country as very rarely called for, if at all admissible; and the recommendation of this treatment would have been considered as quite inapplicable to the diseases of Great Britain, however justifiable in tropical climates. It has, however, been generally found, and will, we doubt not, always hereafter be found, that the medical principles at home and abroad, entertained by British practitioners, may be slightly modified, but they will always have a similar foundation. Thus, certainly, has it been with the matter before us, while Cullen's principles, which, in effect, as Dr. M'Cabe has very well observed, were the same as Brown's, were prevalent, and which, though they did not absolutely prohibit blood-letting, yet threw such difficulties and dangers around it, that no proper period for practising it could ever be found, and neither at home nor abroad was recourse had to the employment of the lancet. And as the excessive stimulating plan of Brown appeared, and really was, occasionally attended with most admirable success, and persons were stimulated into, and stimulated out of, the very worst stages of real and genuine typhus fever, this plan obtained repute and influence in all parts of the world. We are acquainted with a physician, whose great boast has been of the quantity of wine he has compelled a patient to take within twenty-four hours; and we know of some instances, where, in young and delicate girls, upwards of two bottles of port wine have been taken within this period under his direction. It might, perhaps, be expected, with our present views of this subject, that such practice must have been equally injurious to his patient and his own reputation. But this is not the case. He has even the fair fame of being particularly skilful, as it is called, in the management of fever; and undoubtedly his neighbours have no few facts, as they deem them, favourable to him; for they have frequently seen fevers of the very worst type recover under his plan. Now, however, that blood-letting has once again obtained a sway among us, we run a risk of falling into the contrary extreme. No long time since,

we heard of a gentleman asserting, in a very flippant manner, that the use of wine was exploded in fevers, and that it was altogether a blundering practice, which more modern lights had proved injurious. From either of these extremes we have much pleasure in finding our author free. He neither fears blood-letting, nor recommends it in every stage; he neither deluges his patients with wine, nor entirely prohibits it. His practice is altogether rational and well founded, upon the proper understanding of the 'medio tutissimus ibis' of Ovid.

Having inferred from the phenomena of the disease, that 'the blood is accumulated about the heart, and the other vital organs,' he gives the following indications and directions for its treatment.

'The first indication is to lessen the quantity of blood in the general system; and the second is to direct the remaining mass from the internal and vital organs, to the extremities and extreme vessels. Blood-letting then must be the first step in the treatment of this fever, and the quantity may in general be pretty large, as it is much better to take away at once a considerable quantity, than to be obliged to repeat the remedy at any subsequent stage; so rapid is the progress of this fever, and such are the changes that take place in the symptoms even within a short time, that bleeding, though at first the most powerful and most effective of all remedies, may become dangerous, if performed at a subsequent period... The first stage of this fever is a stage of great excitement, but in general the excitement ceases within eight and forty hours, and often much sooner, and is succeeded by a stage of exhaustion or collapse, which continues till the termination of the disease. Should the bleeding be repeated after the excitement has subsided, the author is convinced, by a full review and consideration of his experience, that it may accelerate a fatal termination.'

That, however, when really necessary to employ the lancet, our author is an intrepid and active practitioner, the cases given in illustration of his opinions, and the following rule which he has laid down, sufficiently prove:—

'Where blood-shot eyes, violent throbbing of the temporal and carotid arteries, anxiety and difficulty of breathing, are present in a person in the prime of life, and of a full plethoric habit, the quantity must be great indeed, which will injure by its excess. From such a patient, fifty or sixty ounces of blood may be taken away with the greatest confidence, and should the symptoms abovementioned not be removed by that quantity, it may be carried even farther.'—P. 115.

His directions respecting the exhibition of purgatives are very judicious: he advises most particularly that they should be thoroughly employed at the beginning, 'as it can then be done with great and decided advantage.'—Afterwards he asserts, that active purgatives are neither effective nor safe, although through the whole disease mild aperients may and ought to be administered.

Our author's experience of the fatal nature of the 'black vomit,' coincides with that of most tropical practitioners. He has seen a patient live more than thirty hours after its appearance, but never knew a case which did not ultimately prove fatal where this symptom took place.

If there is any fault in Dr. M'Cabe's work, it is his proneness to theory, and resting often his practise in appearance upon his theory, when most evidently this last is merely introduced as a sort of supplement to the former.—He thus talks of the principle of vitality, and that it should not be reduced too low, etc. We regret this manner of expressing himself, because his facts are really valuable, and most of his observations on what is termed the state of collapse, are so perfectly concordant with what happens in the more violent fevers of Great Britain, that we particularly recommend this part of his work to the perusal of our readers.

'In treating this stage of fever,' he observes, 'the principal attention should be directed to the stomach, and the great object of the physician should be to regulate its action. . . Where the exhaustion is great, the stomach ought not to be allowed to remain beyond an hour, without either medicine or nourishment.' In an instance which came to the knowledge of our author, 'three bottles of brandy were given to a patient in about twenty hours, and the same proportion continued for several days.' This patient was not, however, under his care; nor does he advise such an excess under common circumstances. In this case, success justified the remedy; and indeed the state of the individual was such as actually to have called for considerable quantities of stimulants. 'The state of exhaustion was so great, that dissolution was momentarily apprehended; and after swallowing about a table spoonful of brandy, he always experienced a renovation of vital powers, which again declined, as the effects of the brandy gradually ceased, and was only renewed and supported by repeated doses of this powerful stimulant.' Another instance of a similar kind occurred in an officer, who was completely despaired of by the surgeon, and who drank a bottle of brandy and of madeira in one night, 'and to the surprize of the surgeon, was not only alive in the morning, but absolutely so much better, that there appeared hopes of his recovery.' He was ultimately restored to health. Similar instances have occurred in our own practice in this disease.

The latter part of this volume treats of Dysentery, Cholera Morbus and Hepatitis, and presents a tolerably fair compendium of the usual symptoms and treatment in these diseases, but does not appear to contain any thing novel. The work, upon the whole, is creditable to Dr. M'Cabe's talents.

PART II.

ORIGINAL COMMUNICATIONS.

I.—*On the Natural and Medical Topography of the Western Part of Jamaica.* By D. Mason, Member of the Royal College of Surgeons, London.

Our knowledge is still imperfect on medical topography, and when we reflect on its great importance and powerful influence on the animal economy in the production of disease, or the medium for the preservation of health, we cannot help regretting that professional and scientific men have not devoted more time and attention to investigate the subject by experiment and observation. It is too often discussed by mere hypothetical speculation, or hasty observations; hence, medical opinions on the local salubrity or unhealthiness of different situations are so various and contradictory.

A long period of patient and attentive observation, and, perhaps, the aid of nicer instruments than any we yet possess, is requisite to detect minute changes in the constitution of the atmosphere, and the slow and gradual accumulation of powerful agents, which mark the approach, and produce the phenomena of hurricanes and storms, of plague and pestilence, and all the variety of epidemic diseases.

In discussing the medical topography of a country in a comprehensive manner, we have first to examine its external surface; the mountains, plains, and forests; its soil, cultivation, and state of agriculture. Next, its hydrography; the rivers, lakes, morasses, and its connexion with the ocean. Thirdly, its atmospherical topography; comprehending tables of mean temperature, atmospherical moisture, general state of the winds and clouds, tables of the mean quantity of rain, monthly and annual, and the number of rainy and fair days. Having determined all these points, which have more or less influence on the human constitution, and which may be denominated the physical causes of disease, we come to inquire into the state of the population, and the moral causes that impair health. These are found in the habits and mode of living of the people, their occupations and state of labour, and their mental and domestic comforts. The results, and the useful application of all these great natural and artificial causes of disease, are shewn in the calculations and determinations which follow; the prevailing diseases in the different seasons of the year, and the mortality; the proportion of deaths to the population; endemic diseases, and the rise, progress, and mortality of epidemics. The district of country which I am about to describe, comprehends, in the civil division of the island, the parishes of Westmoreland and Hanover: the first is situated on the south side, and the latter on the north side, including together, the whole of the western extremity. From the western point of the island, a range of hills of no great elevation extend to the eastward,

for several miles along the sea-shore. They are composed entirely of unstratified limestone rock, covered with dense wood, and here and there patches in cultivation: no rivulets or springs are found in this range. The nature of the rock allows the water to penetrate through the innumerable fissures in its mass, which in many places is worn into caverns by the continual action of the water, which descends in subterranean passages towards the sea. On the north side of these hills, a narrow valley separates them from another range of greater elevation. This valley terminates to the westward in a large morass, which spreads itself along the sea-shore, immediately on the north side of the west end of the island. The eastern extremity opens in the large plain of Westmoreland, which runs to the eastward many miles, and expanding also to the north, forms a rich and magnificent amphitheatre, bounded on the south by the sea, and to the east and north by lofty hills. The greater part of this plain is in cultivation, chiefly in sugar-canes and pasture. It is much wooded, the logwood (hæmatoxylon) abounding; and towards the sea an uncultivated morass, covered with mangrove trees—the rhizophora—and creeping plants extend along the shore. Towards the mountains, the plain runs into waving hills, composed of stratified rocks, of alluvial formation. The loftier mountains are composed entirely of secondary limestone, without apparent stratification. On many of the ridges petrified shells are found in abundance. The base of these mountains is surrounded by a friable marly soil, formed by the wearing down and deintegration of the fragments of the rock, and intermixed with vegetable matter. These mountains terminate in rocky peaks, worn into cavities and fissures by the continual action of rain. They are clothed with forest trees from the base to the summit, and the vegetation is so luxuriant, that the underwood and twining plants form an impenetrable thicket. The plain is intersected by many small rivers, which wind their course slowly towards the sea, showing the gentle inclination of the land. Several ponds and small lakes are likewise interspersed, some of which are supplied merely by the rain, and the descent of the water from the higher grounds, which is retained in hollows by the impermeable nature of the base. Others, of greater depth, are doubtless maintained by subterranean springs from the mountains. The water in some of the springs, and also in some wells of no great depth, is impregnated with sulphate of magnesia and iron, in small quantity, acquired, probably, in its passage through beds of magnesian limestone.

The lofty chain of mountains which penetrates the island from east to west, terminates at the morass before mentioned, near the west end. In tracing the aspect of the country on the north side of the central hills, we perceive a series of waving hills, of a different formation from the central ridge, probably alluvial, and in excellent cultivation. This deposit rests on the limestone of the loftier mountains, as would appear by the similarity of the rocks towards the sea-shore, to the mountain ridge of the base, of which they are probably a continuation. This connexion is also shewn by detached hills or clusters of limestone rock, raising their heads above the

alluvial formation. The central ridge is formed by a series of conical hills, rising abruptly from the easy sloping hills at the base, and continuing their steep and rugged ascent to the summit. The conical peaks are united by sloping ridges, which separate the valleys and table-land which pervade the whole range. These valleys are covered with fertile soil, and in many places the industry of man has brought them into rich and useful cultivation; while the lofty and rugged peaks remain in the hands of nature, but in no less luxuriant vegetation of native and congenial plants.

The northern coast, from Negril Bay to the vicinity of Green Island, is nearly a continued morass; but from the last-mentioned place to Lucea, the coast is lofty and bold, formed of compact limestone rock. To the eastward of Lucea, towards Montego Bay, the hills approach nearer the shore, leaving a narrow low coast between them and the sea. Few ponds, and no morass-land, appear on the north side of the mountains; and from the structure and inclination of the country, the streams become torrents after rain, but speedily subside into insignificant rivulets.

A European spectator is somewhat surprised when he first views, on the lofty summits of these mountains, the most majestic trees and underwood, in innumerable and excessive abundance and luxuriant vegetation, while scarcely a particle of soil is perceptible to maintain such exuberance. But the limestone rock itself affords support and nutriment to congenial plants, aided by small portions of vegetable matter, which is gradually accumulated and concealed in the holes and crevices of the rocks. In those mountains which have been for ever in the hands of nature, vegetable soil accumulates slowly. It is generated more rapidly in the lower hills, which are in cultivation with the grasses and other plants of easy destruction.

It would seem probable that the natural geographical features of all countries are stamped upon them before they emerge from the ocean. The rocks are the bones of our earth, and by them its configuration is formed. At the period of their elevation from the waters, they are naked and bare; if here and there a fissure is partially filled with the broken fragments of the rock, it is insufficient to obliterate or alter the indelible feature which has been impressed on such substantial materials; even the accumulation of alluvial soil has not yet been able to destroy the original figure of the rocks; and in Jamaica, the formation has not attained a mature growth, especially on the summits of uncultivated mountains, where its progress is unusually slow.

It has been already observed, that the mountains which divide the parishes of Hanover and Westmoreland, and nearly surround the latter, are almost wholly uncultivated. The plain of this last parish raises the sugar-cane in great perfection; and this is its staple production. The cultivated lands on sugar estates, are either in growing canes, land preparing for that purpose, or in pasture and provisions. The soil best adapted for this last article, is chiefly about the base of hills, or in valleys interspersed through them. It

is composed chiefly of vegetable soil, washed down by the rains, and intermixed with pulverised limestone. The intermixture of clay, which abounds in the low lands, is not found so favourable for the growth of vegetable roots, which furnish the principal food of the negroes.

Besides the agriculture of the sugar estates, a few properties are entirely in pasture. The culture of Guinea-grass is the staple on which they depend. This valuable grass grows to a great height, sometimes nine or ten feet high, and is excellent nutritious feeding for cattle. This is the condition of the chief part of the land that is cultivated, but a great portion even of the plain remains waste, and is likely to continue under the dominion of nature for many generations to come. There is enough in cultivation for subsistence; and the articles of commerce, in the present state of things, will more probably require a diminished rather than an augmented production.

After this general and concise view of the features of this district of country, and the state of vegetation and culture, I proceed to make a few remarks on the climate, and to exhibit the atmospherical phenomena by tables, the result of a series of meteorological observations of several years' continuance. Those which are now presented, set forth the mean results of temperature, rain, and weather, during four successive years, with as much detail as conveniently could be offered for publication in a periodical journal.

The daily statements from which the calculations were made, doubtless, would have been satisfactory, both in confirmation of the mean deductions, and also as affording a more continued chain of connexion between the atmospherical phenomena. The present imperfect view, however, probably may be useful in drawing a comparative estimate of the climate of Jamaica with that of other countries; and, perhaps, may induce scientific men of more adequate abilities, and greater information, to furnish a more extensive and complete account of the natural and medical topography of the other quarters of the island.

It may be proper to observe, that the station at which the instruments were kept, and their indications noted, was never changed, being about five miles from the sea, on a gentle acclivity, not exceeding two hundred feet above its level, overlooking the plain of Westmoreland, above described, and in the immediate vicinity of the mountains to the north. The thermometers were kept in a cool room, possessing a free current of air, and consequently affording a just estimate of its temperature, removed from the direct rays of the sun.

The coldest time of the day is about the dawn of the morning; but when much dew has fallen during the night, the rapid exhalation which takes place from the earth about sunrise sinks the thermometer a little, even after the sun is up. The greatest heat is usually about two hours after the sun has passed the zenith. At this period of the day it requires some attention, especially during the rainy season, to note the extreme point. The formation of

clouds, and the sudden fall of rain, which most commonly happens about the middle of the day, instantly produces a diminution of temperature; and by such changes in the atmosphere, the thermometer may be found lower at two o'clock, P. M., than at eleven o'clock, A. M.

The rain-gauge was placed in an open and elevated situation; and although the falls of rain are often partial, and vary considerably, even at short distances, the mean quantity probably approaches nearly to an equality, in districts similarly situated.

The short and very imperfect account of the moisture was estimated by Leslie's hygrometer, which after a time was broken, and could not be speedily replaced. The indications of moisture were always greatest about sunrise, and least towards the meridian. At the former period, the moisture is more abundant in the strata of air contiguous to the surface of the earth. This accumulation is soon elevated and more generally diffused by the rays of the sun, as they ascend above the horizon; and towards noon the lower stratum of air, perhaps, contains less water than the upper region.

These tables shew no considerable variation in the mean temperature, either monthly or annual; nor is the difference between the mean of the extremes of morning and noon very great.

In the quantity of rain, great difference will be perceived, both in the particular seasons of the year, and also between one year and another; but so far as the hygrometrical observations extend, the mean annual moisture is little different, when great dissimilarity is found in the corresponding annual rain. In the construction of the tables, the first column denotes the mean temperature, calculated from the sum of all the mornings in the month; and by a like calculation, the second column exhibits the mean at noon: these two extremes give the mean monthly, and the result of the whole, the mean annual temperature. The fourth column specifies the quantity of rain in inches and decimals; the fifth shews the number of days on which rain fell; the sixth column the number of cloudy days, in which are included the rainy days. It should be observed, that the numbers here denote, not always a continued cloudy day, but also those in which heavy clouds have appeared, during a limited period. In fact, in the climate of Jamaica, clouds often suddenly form, and as suddenly disappear. The mornings are, with few exceptions, uncommonly clear and fine. During the rainy season, the clouds begin to form about the middle of the day, but frequently disperse in the course of the afternoon, and the sun sets with a cloudless sky, or with only a few clouds visible about the verge of the horizon. The columns designated wind, are intended to shew the direction of the wind, and the number of days it blew from these points in each month; the deficient days, when compared with the whole number in each month, were calm or variable. The ordinary winds, like the clouds in this climate, are chiefly to be characterised during the middle of the day. The mornings are calm. In the forenoon the sea-breeze, which is the trade wind, begins to blow on the south side of the island, from S.E.; but as

the sun advances, the air becomes so rarefied to the eastward, that the breeze gradually veers to the westward until two o'clock, P. M., when it usually blows from the S.W. The direction of the trade wind is from E. to S.E., but at the east point of the island it is divided into two streams; on the south side it blows as above mentioned, from S.E., but on the north side its direction is from N.E., and in that quarter the sea-breeze is more uniform than on the opposite coast. In the evening, about eight o'clock, an equilibrium commonly takes place between the sea and land wind, producing a calm. This last wind prevails in the course of the night, and a cool refreshing breeze descends from the mountains. This is the usual course of the undisturbed sea and land winds; but being continually exposed to the operation of atmospherical changes, this uniformity is necessarily often altered and deranged. The columns of the hygrometer shew first, the highest range that was noticed at any particular time during the month, of course, indicating the least moisture. Next is the greatest moisture that was observed, or the lowest degree of the hygrometer. The last column is the mean result of the whole daily highest and lowest in the month.

Table I. for the Year 1816.

MONTHS.	Thermometer.			Rain Gauge	Weather.					Leslie's Hygrometer.		
	Mean in the Morning.	Mean at Noon.	Mean monthly result of the Mean, Morning and Noon.	Rain in Inches and 10ths.	Number of Days in which Rain fell.	Number of Cloudy Days.	Direction of Wind.			Highest.	Lowest.	Mean of the Daily Highest & Lowest.
							S. and S.W. and W.	N. and N.E.	E. and S.E.			
January	72°3	82°2	77°2	4	3	4	16	10				
February	72°5	79°7	76°1	4°5	6	7	11	8	7			
March	71°7	81°9	76°8	5°5	7	10	7	16				
April	73°4	84°8	79°1	4°7	4	9	17		4			
May	75°6	86°6	81°1	8°8	20	20	19		2			
June	76°4	84°8	80°6	8°2	14	19	16		5			
July	76°6	86°8	81°7	5°1	15	16	10					
August	76°4	87°1	81°7	7°2	14	16	18	1	1			
September	76°7	86°1	81°4	11°2	13	18	10	6	2			
October	75°4	86°1	80°7	4°4	13	18	9		5			
November	74°9	84°1	79°5	1°3	3	9	12	13	2			
December	74°7	83°1	78°9	1°2	4	7	7	20	1			
Annual Mean	74°7	84°4	79°5	62°5	116	153	152	74	29			

Table II. for the Year 1817.

MONTHS.	Thermometer.			Rain Gauge	Weather.					Leslie's Hygrometer.		
	Mean in the Morning.	Mean at Noon.	Mean monthly result of the Mean, Morning and Noon.	Rain in Inches and 10ths.	Number of Days in which Rain fell.	Number of Cloudy Days.	Direction of Wind. S. and S.W. and W.	Direction of Wind. N. and N.E.	Direction of Wind. E. and S.E.	Highest.	Lowest.	Mean of the Daily Highest and Lowest.
January	76°	83· 1	79· 5	1· 8	6	7	8	11	2			
February	72· 9	83· 7	78· 3	· 5	2	10	10	9		104°	32°	50° 8
March	72· 4	84· 5	78· 4	1· 2	4	6	17	7		97	20	46° 5
April	73· 9	84· 6	79· 2	9· 2	16	21	11	2		71	6	32
May	75· 3	86· 4	80· 8	2· 4	8	19	9	3		71	19	36
June	76· 8	86· 8	81· 8	5· 3	9	15	16		7	70	6	36
July	77· 3	87· 5	82· 4	4· 3	9	17	11	6	2	55	15	33
August	76· 7	87· 8	82· 2	11· 5	14	21	13		7	58	15	36
September	77· 4	88· 8	83· 1	6· 3	10	23	8	4		55	8	29
October	77· 1	88· 5	82· 8	3· 8	9	18	6	2	1	56	11	32
November	75·	83· 4	79· 2	5·	10	19		5	1	53	11	29· 5
December	74·	82· 3	78· 1	3· 2	7	10	2	18	1	67	14	32
Annual Mean...	75· 4	85· 6	80· 5	54· 5	104	186	111	67	21			

Table III. for the Year 1818.

MONTHS.	Thermometer.			Rain Gauge	Weather.					Leslie's Hygrometer.		
	Mean in the Morning.	Mean at Noon.	Mean monthly result of the Mean, Morning and Noon.	Rain in Inches and 10ths.	Number of Days in which Rain fell.	Number of Cloudy Days.	Direction of Wind. S. and S.W. and W.	Direction of Wind. N. and N.E.	Direction of Wind. E. and S.E.	Highest.	Lowest.	Mean of the Daily Highest and Lowest.
January	73°	83°	78°	3· 4	6	10	4	15		59°	15°	37° 5
February	73· 9	83· 9	78· 9	1·	6	12	13	4	4	71	12	39· 5
March	72· 2	82· 3	77· 2	4· 1	8	13	8	18	2	78	12	41° 5
April	73· 6	85· 3	79° 4	2· 4	3	13	8	5		102	11	40· 5
May	75· 3	85· 9	80· 6	8· 3	12	14	17	4		54	12	33
June	76· 5	86· 5	81· 5	4· 2	17	22	5	8		45	14	29
July	76· 6	87	81· 8	7· 8	18	20	5		2	58	15	36· 5
August	77·	88· 6	82· 8	5· 2	15	23	10	8		60	14	34· 5
September	77· 4	86· 8	82· 1	10· 8	10	19	11	4	5	60	10	30
October	76· 8	86	81· 4	9· 8	13	16	13	9		57	8	28· 5
November	76· 1	82· 8	79· 4	4· 8	19	23	1	22	3	60	14	34
December	74·	82· 1	78	3·	4	9	1	26		57	19	36
Annual Mean...	75· 2	85°	80°	64· 8	131	194	96	123	16			

Table IV. for the Year 1819.

MONTHS.	Thermometer.			Rain Gauge	Weather.				
	Mean in the Morning.	Mean at Noon.	Mean monthly result of the Mean, Morning and Evening.	Rain in Inches and 10ths.	Number of Days in which Rain fell.	Number of Cloudy Days.	Direction of Wind.		
							From S. to W.	From N. to N.E.	From E. to S.E.
January.....	73° 5	82° 4	77° 9	4·8	13	17	10	11	
February.....	71·8	82·7	77·2	·5	2	10	7	14	
March.....	73·5	82·5	78·	1·4	5	16	15		8
April.....	73·9	85·4	79·6	3·8	8	15	16	1	
May.....	75·3	85·7	80·5	7·6	9	13	10	11	7
June.....	76·4	86·8	81·6	3·6	7	13	19		3
July.....	77·2	88·5	82·8	3·8	8	17		1	4
August.....	76·5	87·7	82·1	8·	16	23	15	3	
September.....	77·2	88·4	82·8	6·2	11	17	16	1	1
October.....	76·4	86·8	81·6	3·5	12	15	3	5	7
November.....	75·8	85·3	80·5	1·9	10	18		7	14
December.....	73·4	83	78·2			8	8	15	
Annual Mean...	75°	85·4	80·2	45·1	101	182	119	69	44

I proceed now to make some observations on the state of the population, which consists of European or native whites, people of mixed colour, and negroes. The last, and particularly those in the condition of slavery, are by far the most numerous class of the population, and to that class I shall confine my attention at present. The Creole race, or those born in the country, are now becoming predominant; in a few years the Africans will be entirely extinct; hence the African manners and habits, and even diseases, are gradually disappearing; and the succeeding generation, by endeavouring to imitate, will speedily acquire the ways and manners of the whites. The attention that has been given to the rearing and management of children; to their clothing, food, and cleanliness, has produced a superior race to those imported from Africa. They are better looking, more healthy and active, more intelligent, and of more engaging manners, than their barbarous forefathers. It is also probable, that many of the African diseases, particularly those of an infectious or hereditary nature, may be extinguished ultimately, by this salutary constitutional change.

In the district of the island to which my topographical observations have been confined, the negroes in slavery derive their subsistence from the cultivation of land allotted to them by their owners; and the laws direct twenty-six weekly days, exclusive of Sundays, to be allowed them for that purpose. As each negro, or perhaps family, has his separate portion of ground, which he holds by an undisturbed and lasting tenure, he may raise more vegetable

food in ordinary seasons than he can consume, and an industrious negro usually carries a considerable superfluity to market; but many negroes are more inclined to waste that time in idleness and vice, which should be employed in raising their provisions. The consequences of these indolent and vicious propensities are, hunger, theft, absconding from labour, and other crimes, and consequent punishments, which have a powerful influence on the constitution and the formation of disease. Some of these delinquents are habitually and incorrigibly depraved, but others may be capable of reformation; and this can only be accomplished by a system of clemency, and careful attention to their supply of food, which their neglected grounds are insufficient to furnish, and by other comforts which may render their homes more agreeable than the inclemencies and precarious pleasures of a vagrant life.

The progress of humane and liberal ideas has gradually introduced, within the last twenty years, a milder treatment in the management of negroes, which has contributed greatly to diminish crimes and vicious habits. Corporal punishment has become less frequent, labour more easy, and the most careful attention to general comfort and accommodation is now prevalent. By the continuance and further improvement of this salutary system, we may contemplate the total extinction of many diseases which had their origin and growth from depraved and vicious habits, often produced by neglect and a more rigid discipline.

Besides the vegetable food, which the industrious negro raises so abundantly, he is allowed by his master, weekly, a quantity of salted meat, commonly herrings. It has been observed, and, I believe, correctly, that an ample supply of common salt and salted animal food is requisite for the healthy digestion of much vegetable diet. It appears to stimulate the stomach, and either prevents the formation, or causes the speedy expulsion of acid and æriform matter. In tropical climates, too, the digestive power of the stomach is doubtless weaker than in colder regions, and salted meat is an article of food much relished, and probably contributes to promote the healthy secretions of that organ. In early convalescence from fever, when the stomach just begins to resume its healthy action after the derangement from morbid secretions and the effects of active and powerful medicines, the smallest portion of salted meat is singularly grateful. But this is not the only article of animal food in which the negro is enabled to indulge. With the corn which he cultivates in his ground, he raises poultry and hogs. The first are most commonly sold, and the pork is usually salted and smoked; we may, therefore, consider the diet of the negro almost entirely to consist of vegetable and salted animal food.

Simple water is their ordinary drink. They brew no fermented liquor, and the beer imported into the country is too expensive. Rum is often allowed them while at work, and they also obtain it by purchase, and in this they are fond of indulging to excess; but this observation may be confined, almost exclusively, to the men; the females are remarkably temperate, and seldom use spirits. I

would not venture so far as to assert that this desire so general for ardent spirits, has its foundation in a common and injurious practice of giving strong punch to children, in the mistaken opinion, that it will prevent the formation, or cause the destruction, of worms, because such habits and desires will be acquired in manhood, in spite of a temperate youthful regimen. Yet I cannot help concluding, that an artificial taste and desire may be early created for a liquid, which otherwise would long excite disgust and aversion. Comfort and cheerfulness are so essential to health, that we cannot view with indifference the trivial circumstances that often contribute, by their number or their peculiar impression, to promote or destroy enjoyment; and such attention is peculiarly necessary among persons in bondage. The nature of slavery induces a certain careless indifference about health, and this sort of feeling is a natural and ruling principle in the negro character. To be sick is to be exempt from labour; and, as neither want nor any unusual privation follows, it carries with it rather an inviting than an appalling countenance; hence, we observe these heedless people, wantonly and knowingly, exposing themselves to the most obvious causes of disease and of accidental injury. The prevalent promiscuous intercourse of the sexes, and their unsteady attachments, impel the youthful negroes to frequent and distant visits to numerous female favourites, who are temporary objects of their attention; and these amorous journeys are generally made in the dead of the night, and before the dawn of the morning. Sickness often follows these midnight excursions; and although it would be difficult to suppress the practice, it might be greatly corrected, by holding forth ample encouragement and obvious advantages to conjugal connexion, on the properties to which the negroes are attached. But I cannot help remarking, that the amorous desires of negroes would scarcely be restricted, under any circumstances, to one female; and it is doubtful, whether matrimony, agreeable to the Christian dispensation, would be sufficient to restrain the libertinism of natural temperament, maintained by congenial climate.

The negro disposition is not melancholy or despondent, but gay, cheerful, and thoughtless: the two first are the result of natural temperament, the last may be the effect of his civil condition. The great relaxation which has taken place of late years in the state of discipline, and the rapid rise of a new generation, with better tempers and happier feelings, has contributed to develop and enliven the natural humour and liveliness inherent in their character.

In tracing the influence of the labour and occupations of the negroes in Jamaica, as regards their health, perhaps some salutary improvements might be adopted. But we can scarcely assign the origin of any disease to the present moderate system of labour. Constant employment is unquestionably beneficial to health, although hard labour may be pernicious; and so long as the negro is not required to perform more than his physical strength can easily accomplish, the steady continuance of such a task cannot be supposed to do him injury.

Their work is chiefly agricultural, and the most laborious part is the preparation of the land for the immediate planting of the sugar-cane. In situations where the plough can be used, it supersedes manual labour, both by economy and productive advantage. But on hills and steep rising lands, this implement cannot be advantageously applied, and the business, necessarily, is performed with the hoe. The process of manufacturing sugar, in the western part of the island, is carried on during the dry season of the year; and it is thought necessary, while that business goes on, to continue part of the operations during the night as well as the day. It would seem desirable that this practice should be abandoned, and the business conducted in the day only, — at least, not during the dead of the night. How far such a change is practicable, I am not prepared to prove, nor to survey its disadvantages; but the mornings being always fine, healthy, and exhilarating, an early commencement of the labour would not be injurious, and the suspension of it a few hours, in the middle of the night, devoted to rest, might be recovered by renovated activity. Yet it is not very evident that this system is productive of sickness, for the negroes are usually healthy during that season. It may be said in its support, that the labour, although constant, is not hard, — that it is performed at a healthy time of the year, and the abundance of sugar which the people have at command preserves them in good condition; but these are circumstances that only, in some degree, counteract the effects of an injurious practice. Besides the sugar properties, a few pens or grass farms, and coffee plantations are cultivated; but these are not numerous in this district of the island. On these properties the labour is easier than on sugar estates; and it is observed, that on them the population increases. From this circumstance we should infer, that some part of the labour on sugar estates is unfavourable to breeding; for it will be shewn, that the decrease of population depends less on the excess of deaths, when compared to the mortality in Europe, than on the deficiency of births, below the average fecundity of that part of the world.

The classification of labourers, agreeable to their physical strength, is an arrangement worthy of attention; and in every employment and situation where this method could be practicable, its application would be advantageous to the master and beneficial to the negro, both for the support and continuance of health, as well as to promote the increase of the species.

The local situation of negro villages, and the comfortable arrangement of their houses, are objects of great importance. The houses at present are built in groups, each property having its own village. These dwellings are commonly enveloped with fruit-trees, and a small garden is attached to each, which is usually well manured and cultivated, affording a ready and convenient supply where the provision grounds are remotely situated. The houses themselves are well thatched, and dry,—a matter too essential to be neglected— but in other respects they are incommodious, dark, and dirty. The taste, industry, or indolence of the inhabitant regulates these cir-

cumstances; and perhaps no incident more distinguishes the progress of civilisation than the cleanliness and economy of popular habitations. It is pleasing to observe the desire manifested by the well-disposed among the creole race, to improve the condition of their houses, to remove the confusion, smoke, and dirt of their progenitors, and to imitate their superiors in the light and air of their apartments, and in the arrangement of the furniture. It is the interest of proprietors to encourage this spirit, and give it an artificial impulse. When new houses are erected, they should be finished with neatness and convenience, with a distinct fire-place or detached kitchen, to remove the smoke which is so miserably oppressive to the lungs of white people, and which even use cannot render healthy. Another circumstance of salutary consequence in the negro villages, is the state of roads or lanes, and passages among the houses. During the rainy season these are often exceedingly bad, while in most places it would not be difficult to repair them in a permanent manner with substantial materials.

After this concise topographical view of the country and the negro population, I can only give a general and rapid sketch of the diseases which prevailed, chiefly among that part of the population, during the four years in which the state of the weather is exhibited by the preceding tables. It would lead me far beyond the limits which this paper necessarily prescribes, to enter upon therapeutic or practical details. I can offer little more than a mere statement of those diseases that are more immediately under the influence of the weather; that are produced or aggravated by atmospherical vicissitudes, or subside and disappear during salutary changes.

In the beginning of 1816, the hooping-cough, which had been very general for some months previous, began to subside, and soon entirely disappeared. On this disease I may take the opportunity of observing, that during the warm months it is uncommonly mild; but in the months of November, December, and January, when a considerable reduction of temperature takes place, especially in the mornings, the disease is much aggravated, and often to a dangerous and fatal degree, if the coldness is accompanied and increased by continued damp north winds. These winds sometimes distinctly possess an epidemic peculiarity, during which, most acute diseases assume a character of unusual aggravation.

The country continued healthy until the beginning of May this year, when diarrhœa and dysenteric complaints appeared among the negroes. Unavoidable exposure to rain probably caused that determination to the bowels among these people. The practice in these disorders, and which was attended with distinguished success, was saline purgatives, with calomel, bitters, and small doses of ipecacuanha, and opium. In July, this disease was entirely overcome, and the season became healthy. The autumnal diseases are usually affections of the bowels among negroes, and bilious remitting fevers among the white inhabitants. During this autumn, these complaints were neither frequent nor severe. In those seasons when dry weather prevails excessively during the early part of the year, retarding

the progress of vegetation, and thereby preventing the abundant supply which is wanted and expected in autumn, dysenteric complaints are numerous, and often fatal. The use of unripe vegetables is the principal exciting cause of these diseases, acting at the same time upon the digestive organs, weakened by deficiency of nutritious food. Early attention affords the best chance of recovery.

About the beginning of November, the north winds generally commence, and bring with them rheumatic and intermittent fevers. It was observed already, when noticing hooping-cough, that these winds had often an epidemical character; at such times the intermittents of Europeans and other white people assume a low typhus form, with cold perspirations and occasional delirium, shewing exhaustion of the powers of life, and deficiency in the generation of heat. It is worthy of remark, that the fevers most fatal to those persons who have long resided in a tropical climate, exist about the winter solstice, and during the prevalence of the north winds; while the fever most destructive to Europeans who have lately arrived in the climate, prevail during the summer solstice and autumn. The increased temperature during that season, and the occasional exposure to the rains, which are frequent and often sudden, may be stated as exciting causes, operating on a constitution which had not undergone that salutary and protecting change which the continued influence of the climate in time produces. In the European constitution, the muscular fibre is tense and strong, and the coats of the circulating tubes do not readily yield to the expanded fluids they contain, nor is the solid and fluid expansion in the same ratio; hence congestions, effusions, and irregularities, in the whole circulating system. Until May 1817, the diseases of the preceding winter had been mild, and the season healthy. The heavy rains in April were followed by, and perhaps produced many, severe cases of pleurisy among the negroes, which was the characteristic disease of the season. It is singular that white persons of every description are rarely affected with this dangerous disease. Perhaps the structure of the lungs is somewhat different in the natives of a northern climate, accustomed to inhale cold air, which renders them less sensible to the mild and inconsiderable changes of atmospherical temperature in tropical regions, and less subject to derangement from such alterations. This original formation, probably, is not wholly removed by climate for many generations. The general practice in pleurisy is not different to that pursued in Europe, but blood-letting requires to be used more moderately; and the same observation may be extended to every acute disease with which either white or black people are affected in warm climates. In November and December this year, intermittent fevers became frequent, and were combined with typhus among the white inhabitants. The paroxysms were terminated with cold perspirations, great debility, and delirium. These fevers continued during the early part of 1818. Among the negroes, some cases of pleurisy and catarrhal fever appeared, and a few instances of an uncommon disease, cynanche laryngea, which were so insidiously mild in the earlier symptoms, that death was

produced in two cases under my care before danger was apprehended The chief complaint was soreness, and some constriction about the throat, with slight difficulty of swallowing. No pyrexia, nor any of the usual symptoms of inflammation, appeared. An unusual quantity of frothy saliva or mucus, collected in the mouth and about the throat, was the only obvious circumstance in which it differed from the simplest case of cynanche. I am tempted to give a place here to a short sketch of this case, with the appearances on dissection.

The patient was a negro man, about 24 years of age, of a healthy constitution. He complained of sore throat, with difficulty of swallowing; the absence of pyrexia, and of inflammation in the back of the throat, caused the disease to receive little attention, and a simple purgative with a gargle only was prescribed. The patient continued to walk about for a day and a half after he first complained; the symptoms seemed not aggravated; a sense of constriction about the larynx, and difficulty of swallowing were felt, but not in any urgent degree. A frothy saliva was accumulated about the mouth in an unusual quantity. In the evening of the second day he walked to his house, a short distance, where he was found accidently in a convulsive struggle, and expired in less than an hour. On opening the body, the following appearances presented:—The back of the throat and pharynx were free from inflammation, it became visible on the glottis, and extended down the mucous membrane of the trachea to the bifurcation. It was traced in the right branch, until it entered the lungs. This globe appeared black, and turgid with blood. A great quantity of mucus, tinged with yellowish, purulent-looking matter, was accumulated in the throat, and covered the mucous membrane of the trachea. On examining the stomach, the region about the cardia was much inflamed; the other parts appeared natural, and covered with similar-looking mucous matter to that which was found about the throat.

The other fatal case, which terminated unexpectedly, happened two days previous to the one above narrated, and was characterised by similar symptoms, so far as they were attended to, and the patient was ill about the same space of time, but he was not seen by any medical person until a few hours before death, which was equally sudden and unexpected as the preceding. Dissection shewed morbid conditions nearly similar, even in the upper part of the stomach. These two cases exhibit the disease in a peculiarly deceptive form. Dr. Sydenham notices an equal rapid course of the cynanche, and the frothing of the mouth, as denoting danger. In the cases under consideration, the voice was more hollow than natural, but quite distinct, and the respiration was not difficult. The symptoms mentioned by Dr. Cullen, in his first lines, were not observed, except the straitening about the larynx. I conjecture that the sudden death in the above cases was caused by the accumulation of morbid mucus in the trachea and bronchial branches, exciting spasmodic action in the muscular coat, by which congestion and suffocation were produced. I cannot believe that previous inflamma-

tion existed in the lungs, although the dark turgescence in the right lobe indicated that condition. I would rather suppose that congestion took place by the sudden spasmodic action that produced death, at a time when the blood was in vigorous circulation. The singular coincidence of an inflamed tint about the upper part of the stomach, in both cases, and the appearance of the same sort of mucous matter there, would suggest that the descent of this morbid secretion had produced the inflammation. A striking resemblance may be perceived between this disorder and some cases of an uncommon affection of the throat, related in the Edin. Med. and Surg. Journal, vol. vi. p. 431; and I have no doubt that the proximate cause was the same. Emetics in these cases appeared to be successful, to which blood-letting and blisters may be superadded.

The remainder of the year 1818 presented no epidemical unhealthiness, and the ordinary complaints of the season were mild.

I cannot help noticing here a severe and unusual storm, both as to the particular time of the year at which it happened, as well as some other circumstances accompanying it. It commenced on the night of the 10th, or early on the 11th of November, with the wind from the N.E. It was preceded by dark gloomy weather, with light rain, which first appeared on the morning of the 7th. The mean temperature from the beginning of the month was a little higher than for some years previous. The direction of the wind was also different from some preceding years, in blowing briskly from the north. More rain fell with the wind from the northward, in the month of October, than usual.—It is proper to remark, that the storm under consideration took place much later in the year than any recorded in the history of Jamaica.—The wind which blew from the N.E. on the evening of the 10th, increased to a hurricane in the course of the night, accompanied with rain and thunder, and vivid lightning; it continued unabated in the same direction until the afternoon of the 11th, when it gradually moved from N.E. to S.E., although the force of the wind was somewhat diminished. After this change, it continued to blow violently during the night of the 11th, and on the morning of the 12th, when its stream had moved to N.W. It was felt severely in those places more directly exposed to that point. The rain was constant, but not very heavy. On the 12th, the clouds began to float with apparent rapidity, and occasionally fell in showers. The country, as far as the eye could discern, now assumed a singular appearance of desolation; and if a spectator had before witnessed the effects of a general conflagration, he would have wondered at views so similar produced by such opposite causes. The whole vegetable creation was blasted, and had assumed a brown colour. The rocky summits of the mountains had become visible by the destruction of the leaves and smaller branches of the trees, and the creeping plants and underwood with which they are continually covered. It was observed in the early part of the storm, that the rain had a saline taste, indicating the presence of some soluble salt in the water of the atmosphere; unfortunately, notwithstanding the singularity of the circumstance, no one within my knowledge analysed the water, to ascertain the nature of the impreg-

nation; nevertheless, it was easy to conjecture, that this foreign ingredient in the rain was the cause of such general destruction among tender vegetables. Although the leaves and branches of plants were thus destroyed, the roots suffered little or no injury, for in the space of a month vegetation had resumed its healthy hue. It may be noticed, as the effect of the first-mentioned circumstance, that in the following spring the fruits were remarkably late and scanty. This storm was not followed by any form of disease that could be attributed to an insalubrious condition of the atmosphere.

The weather continued uncommonly dry until the end of May 1819. On the 28th of that month, an immense quantity of rain fell, 3.7 inches, far more than had fallen in the space of twenty-four hours for many years. It was accompanied with strong wind from N. and N.E., a rare direction for stormy weather at this season of the year.

In the beginning of June, a disordered state of the bowels appeared among the negroes, which continued to increase in frequency during the month. About this time a scarcity of provisions became apparent; it was the result of the storm in November preceding. At that time the plantain trees were totally destroyed, but roots, such as yams, cocoa, cassava, &c. maintained their ground, although partially injured by the wind and rain. It was not until February and March that the dry weather injuriously retarded the progress of these vegetables, when the natural influence of spring would have accelerated their growth. Its continuance also destroyed the corn, which had been planted under the usual hopes of the season, and left no expectation of deriving subsistence for some months from the cultivation and produce of the ground. But the effects of the weather were foreseen, and famine prevented, by the timely order and seasonable arrival of a foreign supply. Nevertheless, in times of scarcity it is difficult to provide for numerous wants, and guard against imposition; hence, in such seasons, complaints in the bowels prevail among negroes from causes and conditions already noticed. These disorders increased during the month of July, but the mortality was inconsiderable, because the causes being obvious, the practice was prompt and effectual, excepting in the cases of some old persons and invalids, whose weakly constitutions gave way under the debilitating action of the disease. In some others, the disorder of the bowels terminated in dropsical effusions, from the general inactivity of the absorbent system. This last derangement of the constitution was cured by bitters and iron in small doses, diuretics, and small doses of calomel. At this time, too, some cases of dysentery occurred among white persons, and in most of them it was attended with a considerable discharge of blood. It was difficult to discover the exciting cause of these complaints among this class of the population, who were not subjected to any change of diet, and who seldom use unripe vegetables. It is probable the condition of the atmosphere had considerable influence, through the medium of the skin, changing or suppressing the perspiration. As the negro provisions began to ripen, and become more abundant, intestinal complaints disappeared, and the year terminated with general healthiness.

In the foregoing slight view of the acute diseases, chiefly depending on the state of the weather and the seasons of the year, it will be seen that chronic diseases are altogether omitted. They form a numerous, complicated, and difficult class of negro diseases, which could not be cursorily introduced. Some of these are of African origin, and adhere to the African constitution, which time and different habits may ultimately extinguish; others are generated by their food, mode of living, and accidental circumstances, and exposures incident to mankind, which neither prudence nor science can expect ever entirely to prevent. But the labour of negroes being uniform, mostly agricultural, performed in the day, and in the open air, they are exempt from various diseases produced by close and long-continued application to particular trades and professions in Europe. The diseases of many artizans, caused by the materials on which they operate; those generated in large and crowded manufactories, by close confinement and rigour of labour; the aggravated forms of disease produced by dense population in large towns, by poverty, uncleanliness, and impure air, are either unknown, or of rare occurrence.

It must be some consolation to negro owners, at least, in this island, and a little palliation of the real hardships and ideal degradation of slavery, that its labours are divested of much of the misery, sickness, pain, and waste of life which follows, and is inseparably attached to, the operations of free labour in many of its branches in other countries.

I shall conclude these imperfect observations, by exhibiting a tabular view of the negro population, of its increase and mortality in a small district, during the four years which have been more immediately under consideration.

1816.

Males.	Females.	Total.	Females from 15 to 45.	Births.	Deaths.	Births to Population.	Births to Breeding Women.	Deaths to Population.	Decrease.
668	764	1432	355	33	49	1 in 43.4	1 in 10.7	1 in 29.2	1 in 89.5
				1817.					
679	782	1461	359	36	48	1 in 40.6	1 in 9.9	1 in 30.4	1 in 121.7
				1818.					
741	842	1583	406	23	44	1 in 68.8	1 in 17.6	1 in 36	1 in 75.3
				1819.					
730	826	1556	376	27	56	1 in 57.6	1 in 13.9	1 in 27.8	1 in 53.6

Mean of the Four Years.

Births to Population.	Births to Breeding Women.	Deaths to Population.	Decrease.
1 in 52.6	1 in 13.2	1 in 30.8	1 in 85.2

The above table is, perhaps, too limited for the ratio to be extended over a large population; and no accurate conclusion can be drawn of the progress or decline of the general population, from a statement of circumstances on a scale so confined.

It will be seen by the table, that the ratio of births and deaths varies considerably in the few years noticed, and influences the proportions in the succeeding columns. This variation is governed by other circumstances, besides epidemic and other diseases. The negro population is not yet proportioned or assorted as in other countries. The effect of the slave importations are still in existence, although constantly diminishing. There is a disproportion of old and elderly people, which affects the general mortality, and as they often die, not of disease, but by the mere decay of nature, they perhaps increase the obituary at a time when the season is most healthy. The proportion of births to females of the breeding age, it will be observed, is very small. Among other causes which may be assigned for this disproportion, the morals of the females is one of great influence. The unrestrained libertinism and prostitution of young females effectually check conception; hence, it frequently happens, that the negro women do not breed until late in life, when their passions are more under control, and their discretion has rendered them more steady in their attachments; and of the younger women, those chiefly of indifferent appearance beget children, because their temptations are fewer, nature having denied them those attractions which invite the attention and multiplied solicitations of the other sex.

The first columns in the table shew the population, male and female; the fourth, the number of females which may be considered under the breeding age; the 5th and 6th, births and deaths; seventh and eighth, proportion of births to the population, and to females of the breeding age; ninth, ratio of deaths to the population; tenth, annual decrease.

II.—*On the Flowers of Colchicum Autumnale.* By J. Frost, Member of the Royal Institution of Great Britain, &c. &c.

Whenever great difference of opinion exists with regard to the effects or properties of any medicinal preparation, or vegetable or mineral substance employed in pharmacy, it is highly important to ascertain, as far as possible, the reason why such difference has arisen, and to consider the circumstances under which such medicine may have been administered. The root, or more properly the bulb, of colchicum,* has occasioned as much controversy as an article in the list of the materia medica. One practitioner has declared, he has found it produce most violent cathartic or emetic effects; another says it is a powerful diuretic; a third, that it is an excellent diaphoretic; and another affirms that he has given it in large doses, and even then it does not produce any violent effects; and, lastly, another pronounces it a very dangerous medicine, and that it ought to be erased from the pharmacopœia list.

May we not say, that the cause of such difference of opinion may be referred to the season at which the bulb is collected? The herbalist has it procured at any season of the year, without the least regard to the proper one; and indeed he does not know that vegetables undergo material changes as to the nature of the juices at different seasons. He is not aware that they are in a more active state at one time than at another. His object is merely to obtain a sufficient quantity for his customers. How, then, can it be expected that the preparations of the bulb of colchicum should act uniformly, or produce the desired effect? It is probable, the great variation of its action may have been referred to any but the right cause.

We have very frequent evidence how little medical botany is made an object of study or consideration at present, notwithstanding its great importance as a branch of the science of medicine; the consequence of which is, it often happens that the practitioner administers many vegetable medicines without being in the least acquainted with the nature of them, but depending on the mere *ipse dixit* of some medicinal herb-vender. But to return to the object of this communication, I would observe, that the flowers of colchicum autumnale will afford the profession a certain, uniform, and safe medicine, in those cases in which the use of colchicum is indicated, and that they do not produce those unpleasant effects which occasionally follow the use of the bulb. Another great advantage is, that the strength and properties of the preparations made from them are always uniform; for the collector cannot err in the time of selecting them, and their virtues cannot be readily impaired by the mode of conducting the processes for their preparation. My friend Dr. Pearson informed me, that he has found an infusion

* Colchicum, derived probably from a species of it growing in Messinia, in the Isle of Colchis.

of the flowers prove useful in cases of chronic asthma. It would appear from a paper in a former Number of your Journal, that preparations of the flowers have been beneficial in several cases.

The following formulæ are those I adopted about three years since, for the preparation of the flowers:—

Acetum Florum Colchici.

℞ Flor. Colch. Autum. rec. ℔j.
Aceti 0j. Macera per dies xxj. in vase vitreo, frequenter agitato.

Vinum Florum Colchici.

℞ Flor. Colch. Autum. rec. ℔j.
Vini Albi Hispanici f. ℥xij.
Spir. Tenuioris f. ℥iv. Macera per dies xxj.

Tinctura Florum Colchici.

℞ Flor. Colch. Aut. rec. ℥vj.
Spir. Tenuioris 0j. (Sp. gr. 925.) Macera per dies xxj.

PART III.

COLLECTION OF MEDICAL FACTS AND OBSERVATIONS.

Section I.—British.*

Corpora Lutea—in the Ovaria of a Child, aged only Five Years.

It was long imagined that the presence of a *corpus luteum* in one of the ovaria was a demonstrative proof of *impregnation* having previously taken place in the subject to which it belonged. Of late years, however, it has been shewn, in the most satisfactory manner, that this opinion is erroneous, and these *marks* or *bodies*, as they are called, have since been attributed to sexual intercourse, or at least to sexual excitement or desire.

Mr. Dunlop,† however, mentions a recent instance which shews that this opinion also is unfounded, and that *corpora lutea* may be formed in cases where neither intercourse, nor passion, nor excitement of any kind, could have had place. Dr. Mackintosh, lecturer on midwifery in Edinburgh, he says, has in his museum a prepara-

* The 'Facts,' &c. quoted in this Section, are drawn exclusively from British sources, and more especially from the *Original Communications* contained in the recent Numbers of the other medical journals of Great Britain an abstract of the more valuable parts of which will thus, monthly, find a place in the Repository, in a condensed form, and illustrated by occasional observations of our own.—Editors.

† Beck's Med. Jurisp. p. 104.

tion taken from the body of a child, which he, in company with Dr. J. Scott, dissected at Piershill Barracks, near Edinburgh.

This child died, it appears, of tubercular disease in the lungs, when not above *five* years of age. On examination, the *hymen* was found entire, and in the ovaria were numerous *corpora lutea*, as distinct as in the adult impregnated female.

Euphorbia Lathyris—The Expressed Oil, a mild and active Purgative.

The Euphorbia Lathyris, or *caper spurge*, is a native of the south of Europe, and was first introduced into our gardens, where it is now not uncommon, about two centuries ago. It is naturalised somewhere in Bedfordshire, and in most old herb gardens—it flowers in May and June.

From the *seeds* of this plant our oil is obtained by expression, which has lately been proposed as a substitute for the Croton oil, by Dr. Calderini of Milan, who states, that in purgative power it is little inferior to the latter; and that it is preferable in this respect, that its exhibition is not attended by any of those unpleasant symptoms which the acrid and irritating qualities of the Croton oil are so apt to occasion.

When filtered, this oil is, in appearance, very similar to castor oil—it is inodorous, limpid, and neither acrid nor disagreeable to the taste. By long keeping, however, or by exposure to heat, it becomes turbid, dark-coloured, acrid, and afterwards rancid. It burns with a clear flame without smoke, is insoluble in alcohol, and forms a soap with alkalis.

For an adult, the dose is from four to eight drops, which may be given in an emulsion, or in any other convenient vehicle—its action upon the bowels is certain, strong, and prompt; but at the same time mild, for it neither occasions vomiting, tenesmus, or pain—unless, indeed, it be in a rancid state, when it becomes drastic, and produces griping.

The application of this plant to medical uses is not new; from Mathiolus, who wrote in 1562, we learn that, in his time it was commonly known in the shops by the name of cataputia, and it is particularly noticed by Gerarde in 1636.

Dioscorides and Galen also are supposed to have mentioned it, as have various other writers, all of whom, however, agree in speaking of it as a very violent purgative, contrary to what we would be led to believe from the statement of Dr. Calderini. This apparent discrepancy arises, in all probability, from this circumstance, that the *entire seeds* were formerly used, and not the *oil* simply, as now recommended.

We may add, that the details given by Dr. Calderini are stated to have been lately confirmed in France, which will, we trust, be a sufficient inducement to the profession in England to give this remedy a speedy trial. The plant is figured in Smith and Sowerby's English Botany, tab. 2255—in Gerarde's Herball, page 503, fig. 18; and in Hill's British Herball, pl. 22.—*Med. Chir. Review, July*, 1825, *p.* 273.

Hydrocephalus with Bifid Brain—Remarkable Case of, in an Adult.

Dr. Spurzheim, in his *Physiognomical System*, (published in London in 1815), mentions the case of a man whom he had seen in this city, then nineteen years of age, and affected with hydrocephalus to a great degree,* but who at the same time was able to read and write tolerably well, and manifested all the moral sentiments and intellectual faculties. This man died in London a few months since, and Dr. Spurzheim, in a letter to the Editor of the Phrenological Journal, (*dated London, April* 15, 1825,) gives the following account of the appearances observed on examination after death.

'The remarkable points in James Cardinal's case (whose figure is given in the Physiognomical System, pl. 5. fig. 2.) are as follow:—

'He died at the age of thirty years in Guy's Hospital, a few days before my arrival. Mr. Morgan and Mr. Key, surgeons of that hospital, had opened the head, and found about *nine* pints of water between the dura mater and the brain, (which was placed at the bottom of the skull,) and *one* pint in the lateral ventricles. Informed of my being in London, they allowed me to examine with them this extraordinary head. An opening under the posterior part of the falx established a communication between the great cavities of the hemispheres and the space between the brain and dura mater; the corpus callosum appeared wanting, but it was only split all along in the *raphé* or middle line; the matter composing it evidently existed on both sides—the lateral ventricles were particularly distended in the posterior lobes—several convolutions of the right side were quite unfolded, while those of the left presented the usual appearance. The convolutions in the middle line of the head, above the corpus callosum, which commonly lie opposed with the falciform process of the dura mater between them, were raised by the liquid, and formed part of the general surface. The appearance of the anterior and middle lobes scarcely differed from that of the healthy brain; the olfactory nerves were large, those of sight small, and the inferior pair of the corpora quadrigemina very small—the cerebellum was flattened, and its cineritious substance of a very dark hue; the whole of the cerebrum was soft, and weighed 2 lb. 14½ oz.

'Thus,' Dr. Spurzheim adds, 'this case united all particular varieties, each of which has been seen by very few medical men.

'1st. A large hydrocephalus, preserving the manifestations of the mental powers.

'2d. Water between the brain and dura mater.

'3d. Water in the interior (*the ventricles*), in communication with that in the space between the brain and skull (*dura mater*), by means of an opening.

'4th. The corpus callosum split in the middle line.—And

* The dimensions of the head at this time, as given by Dr. Spurzheim, were —greatest circumference 33 inches, from ear to ear over the top 24½ inches, from the root of the nose to the neck 23½ inches.—*Phys. System, p.* 182.

'5th. A partial unfolding of the convolutions.'—*Phren. Journ. V. II. No. 7. p.* 408.

Obs.—It is difficult to say whether the preceding account was drawn up by Dr. Spurzheim from what he had *seen* himself, or from what he had *heard* from Messrs. Morgan and Key. The statement in the commencement, that the man *had* died before his arrival in town, and that the head *had* been opened before he saw it, would imply the latter, while the language subsequently employed would lead us to suppose that he had actually *seen* what he describes. This defect lessens considerably the value of the case, which, moreover, is not entirely free from obscurity in some respects, and is manifestly imperfect in others. Thus, we are told that the brain lay at the *bottom of the skull*, yet this brain *weighed* 2 *lbs.* 14½ *oz.*,* and was *distended* by about *a pint* of fluid in its ventricles—which ventricles are thus spoken of as *shut* cavities, although the corpus callosum was *split* all along the raphé, and the fluid throughout was in free communication.

With respect to omissions we may remark, that no information is given as to the state of the patient, bodily or mental, before death—nor as to the shape and dimensions of the head at the time of examination—nor as to the state of the integuments, the bones, and the internal membranes of the cranium.

We trust these observations may have the effect of inducing the gentlemen concerned in the examination of this remarkable case, to furnish us with a more detailed and accurate description of it—preparatory to which they will do well to peruse the interesting account which Dr. And. Duncan has given us of another case of "Hydrocephalus with *bifid* brain," (examined by the late Dr. Gordon of Edinburgh,) which may be found in the transactions of the Med. Chir. Society of that city, published last year.

Mercurial Fumigation—successfully employed in India in various Diseases.

The last number of the Lond. Med. Journal (July) contains a communication from the pen of a Dr. A. Gibson, in which the attention of the profession is called to the employment of *mercurial fumigations*, in certain anomalous forms of chronic disease, generally considered as the sequelæ of syphilis, or denominated rheumatic or mercurial.

The mode of treatment here alluded to has, Dr. Gibson informs us, been long employed in India by the native practitioners; and in their hands has often proved successful, after all the esteemed resources of our art had been exhausted by the European surgeons. It was this latter circumstance which induced Dr. G. to give the practice a trial, and the favourable results which attended his first operations led to its further employment by himself and by

* "The *weight* of the brain (the entire brain) in an adult male is in general about 3 lbs. avoir."—*Monro, Elem. of Anat. p.* 341. Cardinal's brain, therefore, independently of the fluid in the ventricles, must have been of the natural *size*, and occupied the usual space.

others, and finally to its recommendation, as we are told, to one division of the army, by one of the most experienced medical officers in the Company's service.

In his first trials, some of which were made under the superintendence of a native practitioner, the native fumigating composition was employed — but subsequently, and, it is said, with equal success, the common *blue-pill* mass (pil. hydrarg.) was substituted.

The native composition, (in that part of India, *which part is not named*,) and the manner of using it, are as follow, viz.

Quicksilver, ʒiij.=1 iola.
Litharge, (*moordaising*) ʒj. ℈ij. (ʒiss.)= ½ iola.
Red lead, (*sendoor*) ʒiij.
Sulphate of copper, ʒss.

These ingredients, and a quantity of the leaves of a jungle plant called *shetur*, are well triturated together, and formed into a mass, which is divided into fourteen portions, each the size of a small nutmeg. One of these being laid upon a bit of tile, this is placed on some live (*burning*) cow-dung, which is contained in an earthen dish set upon the ground between the legs of the patient; who in a sitting posture is enveloped in a blanket—in about half an hour the mercury is all volatilised, and the operation is over. It is usual to repeat the process morning and evening. When the *blue-pill* mass was substituted, the quantity used was half a drachm each time.

Of his own success, Dr. Gibson has furnished us with twelve cases. The whole of these we shall extract, as the best method of making our readers to form a satisfactory opinion of the plan of treatment in question. In doing so, however, we shall deviate a little from the arrangement of Dr. G., who has jumbled his cases together without much regard to the nature of the symptoms; and shall entirely omit his *remarks* and *observations*, as possessing no interest in themselves, and as being conveyed in a language which, we regret to say, is in general verbose, inflated, and often obscure.

Cases successfully treated by Mercurial Fumigations.

I. *Rheumatic Affections.*

1. Sackpal, sepoy — admitted into hospital with rheumatism, June 24 — Pain greatest in the right elbow joint, which was much swollen and stiff. All the usual means recommended in such cases failing, *mercurial fumigations* were tried the beginning of August, and administered *fourteen* times, that is, morning and evening for seven days. Dismissed on the 15th for duty, having been detained for some days merely on account of the state of his mouth.

2. Darnac—admitted with rheumatism, June 28—Pains general, but greatest in the ancle joints, which were swollen and rigid, the

swelling and stiffness extending over the foot to the toe. The usual remedies failing, *fumigations* were tried the beginning of August, and administered fourteen times. Dismissed, we presume, *August* 11; but one authority says *July* 11, which must be an error.

3. Moiddeen, sepoy — admitted with rheumatism, May 9. Painful swelling, and stiffness of the joints of the lower extremities—for which the usual active and palliative means having been vainly acted, *fumigations* were tried the beginning of August, and employed fourteen times — was severely salivated, and dismissed *cured*.

II. *Supposed Syphilitic Affections.*

4. D. Sing, sepoy—admitted into hospital with syphilis, Feb. 17. A phagedenic chancre of a most obstinate and threatening nature was the principal primary symptom—the usual mercurial course was followed by general pains, and all the untoward symptoms denominated *anomalous*—unsuccessful trials were made of the *oxy-mur. hydrarg.*, the *pilul. hydrarg.*, *sarsaparilla*, *ipecacuanha*, and *opium;* and blisters, liniments, cupping, frictions, and bandaging, were long and ineffectually employed. He was bed-rid, and his general health greatly impaired from suffering and want of rest; when the *fumigations* were resorted to—after fourteen applications, he was up and active, (*August* 21) complaining only of a sore mouth, and a little stiffness of the ankle-joints, connected, perhaps, with the damp weather.

October 27, perfectly well.

5. G. Sing, sepoy—admitted with venereal, Feb. 28. The early history of this patient is very similar to the preceding, but the secondary character was more formidable, as swellings from time to time appeared on different parts of the body—the principles of the treatment were the same, and, in the beginning of August, when the *fumigations* were had recourse to, the state of the patient was as follows:—General health greatly impaired, bowels irregular, appetite bad, habit emaciated, occasional nocturnal attacks of fever, with intense thirst — constant lassitude and listlessness, considerable enlargement of one *os calcis*, swelling of the digital extremity of one of the metacarpal tones, and a lump on the scapula—these enlargements acutely sensible to the touch. After a few *fumigations*, all external marks of disease began to vanish, and after *fourteen* applications (in seven days) he had no complaints.

August 21, active and supple.

October 27, stout and well.

6. Rodrigues—admitted August 1, with nocturnal pains, and a scabby eruption on the legs and arms—had been lately under mercury for a virulent chancre—after seven days' *fumigation*, the pains subsided, the eruption disappeared, and he was dismissed.

Sept. 30.—This patient (a poor man) left the hospital in damp rainy weather, and, while under the influence of mercury, was again attacked with pains, has again been *fumigated*, and is now free from complaint.

7. A commissariat servant — was treated about two months ago with mercury for chancres, and was supposed cured. For the last week, has been troubled with a thickening and dryness of the cuticle, on the points and under the nails of his fingers, from which it peels off without discharge—there is a dry eruption also between the fingers and toes, and on the palms and soles, which detaches itself in like manner in the form of thickened cuticle, leaving on some spots a little rawness — unhealthy excoriation also on the inside of the prepuce. *Cured*, by *fourteen fumigations*, which made his mouth very sore, and produced considerable salivation—during the latter fumigations the head was excluded from their direct operation, in consequence of the state of the mouth.

8. An European.—A general vesicular eruption over the body—a swelling in the groin of long standing—a glandular swelling on the right side of the neck — phymosis and discharge — general health much affected—appetite bad—sleepless, and spirits greatly depressed—has used mercury at various times in the course of the last two years for suspected venereal disease—has used ointments and washes of various kinds for the eruption, which first appeared about two or three months ago—has latterly been taking corrosive sublimate, and using mercurial frictions, with some good effect on the eruption, but with evident injury to the constitution.

Fumigated fourteen times, salivated, and cured.

9. Parab, sepoy—*acute case.*

Sept. 3.—Has concealed a venereal infection for fifteen days—penis greatly swollen, tense, and very painful, with gangrenous inflammation of the prepuce, which at one place is ulcerated through, and discharging a foul bloody pus. A poultice was applied for two days, but the progress of disease was so threatening to the penis, that the *fumigations* were resorted to on the 5th—on the 6th, the mouth was tender, and a line of separation between the diseased and sound parts of the prepuce forming—on the 7th, the prepuce dropped off, leaving a clean sore as if circumcised, and exposing a deep foul ulcer in the body of the glans. Mouth very sore, salivation profuse, sore healed without trouble, and early in October the man returned to his duty.

III. *Anomalous Affections.*

10. A female, aged 17.—August.—Pains and swelling of the lower extremities, the former most severe during the night — general pains and stiffness of the joints—great difficulty in rising when once seated—emaciation — colour sickly, and appetite bad—has been ill above a year. *Fumigated* fourteen times, mouth only became tender, salivation very trifling—cured.

11. A poor patient.—August.—Considerable inflammation, with swelling and slight suppuration above the *ossa nasi* — two small ulcerated openings between the cheek and right *ala nasi*, discharging matter and maggots — purulent discharge from the nostrils — œdema of the lower eye-lids, closing up both eyes, and shooting pains of the cranium. *Fumigated* fourteen times, mouth very sore, and severely salivated. Dismissed cured, Oct. 1.

12. Blugwatta, shop-cooly. — Sept. — For about the last ten months has been in delicate health, and suffering from general pains — is now thin and emaciated, and the general health is much impaired — complaints originated in jaundice, for which he took mercury, and has used other medicines of various kinds at different times. *Fumigated* three times daily, for fourteen times—mouth tender on the second day, when the pains began to give way—cured.

Obs.—The cases seem to have all been treated in 1823, and certainly furnish grounds sufficient to justify, and perhaps may induce, the European practitioner to try once more the effect of *mercurial fumigations*, in cases where the employment of that mineral may be deemed advisable.

Mutilation in Utero.—Singular Case of.

A married woman, aged twenty, was delivered of a living child, (*Dec.* 29, 1823,) after an easy and natural labour of a few hours. The child, however, only lived for about twenty minutes after birth, and on examination was found to want the *left foot*, which appeared to have been removed (*as if amputated*) a little above the ankle. In the vagina, the foot was found, and from the size, when compared with the other, seemed to have been separated from the body about two months—it was in a state of perfect preservation, not in the least discoloured or changed by putrefaction. The divided surfaces, on this part and on the leg, were both nearly healed, and in both the bones protruded.

The mother stated that she had only gone seven months, (with this the appearance of the infant agreed,) and that nothing had occurred during her pregnancy to alarm or distress her.—*Lon. Med. Journ. July, p.* 38.

Obs.—It is difficult to form any satisfactory conjecture as to the cause of this singular occurrence, or as to the manner in which it took place—with respect to the facts themselves no reasonable doubts can well be entertained, for they are authenticated by the testimony of the surgeon who attended the patient (*Mr. Watkinson, King Street, Soho*), and in some measure by the editors of the journal to which we are indebted for the preceding details, who state that they had examined the preparation of the parts, of which at the same time, they have given a sketch.

PUERPERAL FEVER—successfully treated.

'IT has fallen to my lot to witness (in different localities), within the last ten years, several cases of this disease, some occurring epidemically, others sporadically; in all a similar plan of treatment was adopted, and with the happiest results. *When the symptoms were urgent*, the copious abstraction of blood at the onset, active cathartics, and the internal and external use of rectified oil of turpentine, were resorted to, and succeeded *in more than nine cases out of ten. In milder cases*, venesection was sometimes dispensed with, and active purgation, with the external application of the ol. terebinth. (to the abdomen) *were alone adequate to the cure.*'—*Kinneir, in Lon. Med. Journ. July, p.* 33.

Obs.—We do not mean to question the veracity of Dr. Kinneir when we intimate, that something more than mere assertion is necessary to authenticate the preceding statement—for, according to the present state of our knowledge with respect to puerperal fever, it really does appear incredible, that of *many* such cases *all the milder*, and *nine in ten of the more severe*, should have been saved, and saved too by means which often fail in the hands of others. We have employed the oil of turpentine in that form of puerperal fever which is most frequently met with in lying-in hospitals; and although we consider that no remedy is superior to it, or even nearly approaches it, in this disease, yet the practitioner cannot expect that it will cure every case. We can truly say that we have given turpentine in a greater number, as well as a greater variety of diseases, than perhaps almost any other physician, (perhaps not less than two thousand cases), but we candidly confess that not nearly all the cases of puerperal fever in which we have given it have recovered. We should add, however, that, owing to the prejudices of those whom we have met, other means had been previously resorted to, until the stage of disease was too far advanced to admit of much hope from any remedy. We shall bring this subject again before our readers, and we have urgent reasons to do so, at some not very remote period: in the mean while we wait for the purpose of obtaining farther experience, occasions for which are frequently coming before us.

SPASMS IN THE URETHRA, &c.—arising from Strictures in the Rectum—Case.

IN the month of September last, the captain of a merchantman, aged forty-five, applied to Mr. W. White, of Bath, complaining of having been for upwards of two years afflicted with violent spasms in the urethra, and great difficulty in making water. For these complaints he had not been able to obtain the smallest relief, although he had consulted several medical men, amongst whom were some of the first surgeons of the metropolis. By one of these gentlemen a *sound* had been passed into the bladder, and a decided opinion pronounced that there was *no stone* in that viscus—by another the urethra was examined with a bougie, and a *stricture*, supposed to be of a spasmodic nature, said to have been detected—

at length one more sagacious than the rest (a surgeon of Bristol, *whose name is not given*,) was induced to examine the state of the rectum, and finding *there* a stricture, recommended the patient to consult Mr. White, who has, it is well known, paid particular attention to this disease.

On introducing a bougie, says Mr. W., I found the rectum extremely irritable and much contracted. There were two strictures, the first about four inches from the extremity, the other about seven or eight—through these with difficulty a bougie of the seventh size was made to pass. The patient stated that his bowels had been in a constipated state for several years—that he seldom had any evacuation oftener than once in two or three days, and not even then without taking some active aperient—that the motions were rarely *figured*, and when so, were small and flat—that after every alvine evacuation, the spasms in the urethra came on, and with still more severity, every time he made or endeavoured to make water—that he had a continual inclination (almost every ten minutes) to do this, but only discharged a few drops at a time, and that this was sometimes followed by a little blood. His situation, therefore, was truly distressing, and yet, notwithstanding all this, strange as it may appear, *his general health*, we are told, and *appetite were very good.*

On the 27th September Mr. White commenced his plan of treatment, by passing a bougie of the seventh size, which produced much irritation—and continued to introduce one of these instruments almost daily (gradually increasing the size) until the 24th December, when the patient was able to pass one of the largest size himself, and with very little irritation—he then left Bath in a very comfortable state.—*Lon. Med. Journ. July, p.* 21.

Obs.—During the whole of the time this patient was under the care of Mr. White, no medicine appears to have been used but a little castor oil occasionally—the gradual subsidence, therefore, of every distressing symptom, and the restoration of the bowels and urinary organs to a natural and healthy state, can only be attributed to the operation of the bougie.

In the original communication, Mr. W. details at some length the daily changes which took place, but he has entirely omitted to mention the true diameter of the bougies employed (for *sizes* mean nothing), or the anatomical nature of the disease with which the rectum was affected—his communication indeed appears to have been sedulously purged of every thing technical, and to have been intended for the general though addressed to the professional reader.

A postscript (dated March 25, 1825) gives us to understand that the patient had gone to sea, but not quite well it would appear, 'in consequence of not having been so attentive to himself as he ought.'

Section II. — Foreign.

The New Italian Doctrine, or the Doctrine of Contro-Stimulus.

M. L. M. Bailly having attended the practice of Tommasini, and conferred much with him on this subject, has given, in the *Revue Médicale* for May, a short memoir upon it. As this theory is not much known in England, (we speak from considerable observation,) we have determined to present to our readers a translation of this exposition. The general principles upon which this doctrine of contro-stimulus is founded, are divided into several heads:—

1st, — Life is the result of a continual equilibrium between two opposite forces; the one may be called A, or stimulus — the other B, or contro-stimulus. These two mutually destroy or neutralise each other.

2dly, — Both are active; and it is this activity which, equally proper to stimulants and contro-stimulants, prevents the admission of the doctrine by those who think that the contro-stimulation of the Italians is the same with passiveness or negation of action. We cannot regard as a contro-stimulant a substance which, as a purgative, increases the mucous secretions, the peristaltic action of the intestines, the capillary circulation, &c.

3dly, — Every stimulant, and every contro-stimulant, may excite the same vital phenomena, without enabling us, by appearances only, to distinguish what is the exciter of these phenomena, or whether it is produced by stimulation or contro-stimulation: for every physiological action may be exalted or altered by either, without any difference in the manifestation of the action. Thus, delirium may be excited by contro-stimulants, as hunger, hæmorrhage, or any other cause of exhaustion, as it may be by plethora or inflammation. Opium will cure in the former case, — it will be fatal in the latter. It is the same with mucous, cutaneous, and serous evacuations, and with convulsions, — in short, with all the manifest symptoms of diseases. They may all be the result of two opposite causes; and hence experience has proved to the physicians of all countries, that there are diarrhœas, convulsions, and even fevers, in which sometimes stimulants, sometimes debilitants, are successful. The form of a disease is, then, of less importance than its foundation (*le fond*), and it is that foundation which, depending on the stimulant or contro-stimulant cause that produced it, constitutes what the Italians call the *diathesis* of stimulus, or contro-stimulus.

4thly, — Stimulant and contro-stimulant remedies may be strengthening or debilitating, according to the state of the system which receives them. A stimulant remedy, administered to a patient attacked by a disease from stimulus, will much more frequently diminish than increase the strength. A contro-stimulant, administered under the same circumstances, will have tonic effects. Generally, the apparent effects of these two classes of remedies are infinitely variable; their only important action is the neutrali-

sation of the opposite diathesis to that which produced the disease. Two patients, attacked with the same disease, and treated by the same remedies, may each be cured, and affected in a very peculiar manner by these remedies. For instance, if tartrate of antimony be given to two individuals attacked by pneumonia, both shall be cured in the same time; but one shall suffer from vomitings, colic, and diarrhœa, while the other shall remain exempt.

5thly, — Every stimulant and contro-stimulant medicine produces usually two effects — one local, often unimportant — the other general or universal, which alone is necessary. Thus, tartrate of antimony produces vomitings, colics, diarrhœas, perspiration, &c.; these are its local effects, or, as the Italians express it, with respect to this last phenomenon, generally local. Again, it acts upon the *ensemble* of the vital forces, upon the stimulant forces of the economy; it appears to paralyse the nervous power — it diminishes the violence of inflammatory congestions — and, in short, it diminishes the conditions which maintain life. These are general effects, and independent of its local action, for these salutary effects may be produced in certain inflammatory affections, without vomiting, colic, diarrhœa, or perspiration.

It is not, then, by revulsion nor derivation that these remedies act, since often they are administered upon the very organs that are affected. Thus, gastritis may be treated with gamboge, aloës, cream of tartar, jalap, &c., — comatose fever with opium, &c.

6thly, — In every local inflammation, the general state of the economy is compromised. There is an exaltation of excitability; and it is on excitability that tartrate of antimony, the neutral salt, and, in short, all contro-stimulants act, which cure, not by acting upon the vital properties of the affected part, but upon the excitability which supports life in the part, as well as in the whole economy, or, if we choose so to express it, which is a general result of organisation; for it is not important to decide upon its origin. Local effects, irritations, local congestions produced by the remedies, the functions which they stimulate, are but secondary phenomena, which require to be considered only in particular cases.

7thly, — In the physiological state, the stimulant and contro-stimulant forces are in equilibrio; the constant exercise of the functions is the result. When one predominates, there is disease. If this occur from the excess of the stimulant force, contro-stimulant remedies may be administered in quantities which would not be borne in the physiological state; and this dose should be so much the greater, as the stimulant forces have been raised higher. If, on the other hand, there should be an excess of the contro-stimulant forces, the patient may be supported with doses of stimulants, which would be fatal if the patient were in health. For instance, a man who, in health, would be grievously affected by two grains of emetic tartar, and, what has sometimes happened, would be poisoned by four grains of this salt or of muriate of barytes, will bear, in an inflammation of the chest or abdomen, eight, ten, fifteen, twenty, or more grains, without inconvenience.

In the same way, a diabetic patient will support, without difficulty, twenty, thirty, eighty grains, and more, of opium; while, in health, a few grains would have poisoned him. The facility with which the system accommodates itself to these enormous doses of medicines, according to the state of health or of disease, is what the Italians name ' tolerance of medicines,' (*tolérance pour les médicamens.*)

There is a tolerance for stimulants in affections arising from contro-stimulus, as in diabetes, delirium, tremours, &c. There is a tolerance for contro-stimulants when there is inflammation.

As the morbid diathesis diminishes, the system becomes incapable of supporting the same dose of the remedy, till at length it returns to the physiological state, in which the smallest dose gives rise to troublesome consequences. Thus, a patient who, while labouring under peripneumony or dysentery, bore twenty or thirty grains of gamboge or tartrate of antimony, cannot bear more than a grain, or even half a grain, when recovery is at hand.

8thly, — Provided the remedy is introduced into the system, it signifies little in what manner it is effected, since the excitability is a general property, upon which we act, from all parts of the economy. We have, therefore, only to consider the general, and not local, action of remedies. It is by the first only that a cure is effected. When we treat dysentery by gamboge, it induces recovery, not because it contro-stimulates the intestines, but rather because it acts upon the *ensemble* of the dynamic forces of the system.

9thly, — There is in the economy a power of reaction, the effect of which is, to oppose the accumulation of stimulus or contro-stimulus; and this power of reaction is imposed upon the action of contro-stimulants. For instance, if one of these, such as the tartrate of antimony, be given in too large a dose, the economy tends to reproduce the symptoms which this stimulus has neutralised, as it tends to reproduce heat when we are exposed to cold. An intestinal congestion may, therefore, be the result of its administration. If the patient die, the vascular congestion is looked upon as the consequence of stimulation, or of inflammation by an excess of tone, while it is precisely similar to that which cold, and all powerful debilitating sedatives, produce, — the deleterious effect of which upon the economy can by no means be opposed by bleeding or other contro-stimulants. It is, therefore, necessary to distinguish congestions, secretions, and nervous symptoms, as produced by the stimulating powers, from the same phenomena, when arising from contro-stimulus. — *Revue Médicale, Mai* 1825.

Experiments on the Treatment of the Itch.

An extensive series of experiments has lately been made by Dr. Maury, physician to the hospital St. Louis, on the comparative advantages of the different methods of treatment proposed for this disease. We shall merely notice those formulæ which were found unequivocally to be the most efficacious.

1st.—Sulphur pomatum of M. Helmerick: sublimed sulphur, two

parts; purified potass, one part; lard, eight parts. Two frictions are made in the day, using two ounces of the pomatum for each. Mean duration of the treatment, $11\frac{7}{10}$ days. The price of this is moderate; it soils the linen, from the excess of fat over the alkali; has some smell, but does not incommode the skin; and effects a speedy cure. It differs little from the '*pommade sulphuro-alcaline*' employed at the hospital of St. Louis.

2d.—Camphorated liniment of M. Vardy: composed of two ounces of olive or almond oil, and two drachms of camphor. Mean duration of the treatment, $13\frac{3}{10}$ days. This medicine is too expensive for general use in an hospital: it stains the linen; the smell is not unpleasant; it effects the cure without irritating the skin, and the itching is much relieved by the first application. It is excellent in private practice.

The compound liniment of M. Fournier differs from the foregoing one, in the addition of two drachms of liquid ammonia, and the combination is favourably spoken of; the medium length of time required for the cure being reduced to $11\frac{4}{10}$ days.

3d.—Pomatum, proposed by M. Melier: subcarbonate of soda two ounces; water one ounce; olive oil, four ounces; flowers of sulphur, four ounces. Dissolve the subcarbonate in the water, and add the oil, so as to make a soap; then add the sulphur gradually, carefully mixing it. Of this, two ounces are to be used for each friction, and these to be employed twice a-day. Mean time required for the cure, $13\frac{7}{10}$ days. The oil and alkali are here united so as to form a soap, hence it stains not the linen, and cures the eruption without irritating the skin.

4th.—Sulphureous baths, in each of which four ounces of the sulphuret of potass were added, required $17\frac{8}{10}$ days.

5th.—Sulphureous fumigations required $21\frac{4}{10}$ days.—See *Journal Général de Médecine.*

Case of Poisoning by Tincture of Opium.

Dr. Jenkins was requested to attend on Mrs. ——, on the morning of the second of September, she having taken a large quantity of laudanum.

'On my arrival,' he states, 'I found the situation of the patient as follows: countenance cadaverous; mouth and eyes half closed; extremities nearly cold, and very little warmth on the surface generally; pulse scarcely to be felt: presenting, in a word, all the appearances of approaching death. From her friends I ascertained she had taken laudanum, to the amount of between two and three ounces.'

Emetics of sulphate of copper and of tartar emetic had been given without effect, when Dr. J. resolved to exhibit the spirit of turpentine, both by the mouth and anus. The following mixture was, accordingly, immediately thrown up:—

℞ Ol. Terebinth. rect. ℥j.
Vitel. Ovi unius. Misce, deinde et adde
Aquæ Pluv. tepidæ ℥viij. Fiat enema.

And three teaspoonsful of the following were given every quarter of an hour:—

℞ Ol. Terebinth. rect. ℥ij.
— Ricini ℥j. M.

The enema was retained for a short time, and was repeated within half an hour.

'12, M.—An evident improvement had taken place. Her lips and countenance had in some measure lost their ghastly hue; a degree of warmth had returned to the extremities and surface in general; pulsations at the wrist distinctly to be felt; no catharsis had, however, yet taken place. Ordered a soap injection, and to continue the terebinthinate mixture.

'6, P. M.—To my astonishment, found the patient sitting up, and out of bed, conversing with her friends. Her system, however, was visibly much exhausted, and her ideas were rather wandering. Shortly after my last visit, an active purging had taken place, and dark offensive matter had been discharged; after which the amendment had developed itself.' This patient soon recovered.—*New-York Medical and Physical Journal*, No. III.

The *fourth* number of the above Journal contains the particulars of two cases of poisoning by opium, wherein the affusion of cold water, as it was first recommended to the profession by us, (see Old Series, No. CIII.) was employed with complete success. Next to this remedy, the exhibition of the oil of turpentine, in our opinion, deserves a decided preference over other measures usually resorted to, in order to rouse the system, and stimulate the vital and nervous functions, after they have been overwhelmed by the ingestion of a large quantity of any narcotic drug.

New Theory of Generation. By Professor Rolando.

It appears from numerous experiments made by this physiologist, that before fecundation there exists in the ovary a tissure of capillary vessels, *i. e.* a vascular and spongy disk, which is the rudiments of the whole vascular system. 2dly, That the act of fecundation gives rise to a substance, which, when organised, forms the nervous system. 3dly, That upon the action of this system depends the first transformation, by means of which a small vessel is changed into a left auricle and ventricle—a visible act of a new organisation, of a new life, and, in one word, of that which constitutes a new animal. 4thly, That the right auricle and ventricle are formed in the same way. 5thly, That by the action of these, some very small vessels are changed into considerable arterial and venous trunks. 6thly, That the sacculus vitellarius, the yolk-bag of Haller, ought to be considered as the rudiments of the alimentary canal and its appendices. 7thly, That a simple vesicle gives rise to the common integuments, as well as to the membranes of the amnios. 8thly, That from the facts related in this memoir, we can not only more easily comprehend the formation of organised being, but we can also explain the rationale of different monstrosities, which, according to M. Rolando, depend sometimes

upon a fault of the pre-existing vessels, sometimes on an irregular distribution of the nervous system, and, at others, on the disturbed action of both nervous and vascular systems.—*Revue Méd., Mai.*

Of the Morbid Appearances of the Digestive Canal of Children affected by Hydrocephalus.

Dr. Blackhausen, of Bremen, has written to Professor Hufeland, that, in sixteen cases of hydrocephalus dissected by him, within the preceding eighteen months, he had found the stomach very much softened, so much so, as that the finger could be pushed through its coats without difficulty. The mucous tunic seemed as if dissolved, particularly inferiorly, and appeared in a reticulated form. The same appearances were observed throughout the rest of the canal. In almost all of the cases, the internal surface of the intestines was studded with diseased follicular glands, which were more numerous and more enlarged in the small than in the large intestines. These glands presented a vesicular appearance, and furnished a purulent matter, which flowed through a small opening, more or less distinctly seen at their centres. The circumference of these glands was frequently swollen and callous. The other abdominal organs were generally healthy.—(*Bib. der prak. Heilk.* 1824.)

In order to appreciate fully the nature of this derangement of the mucous coat of the digestive tube, or its relation with that of the encephalon, the treatment employed ought to have been accurately detailed.—Editors.

PART IV.

INTELLIGENCE RELATING TO MEDICINE AND THE MEDICAL SCIENCES,

FOREIGN AND DOMESTIC.

*Of the Propriety of employing Graduated Measures for the Exhibition of divided Doses of Medicine.**

Attention to minutiæ cannot be censured in a science requiring that degree of precision which the practice of medicine undoubtedly stands in need of. It must surely be admitted that, if medicines be efficacious, it is important that accuracy should be observed in the regulation of the quantity to be used as a dose; yet it is a fact, that the great bulk of practitioners, while prescribing, are uncertain that the doses used will be such as they intended. A tea, dessert, or table-spoonful, are indefinite quantities, and, in consequence, it is not uncommon for a patient to take double, or only half as much as was directed. Now, this evil can be easily remedied: let a glass

* Extracted from a letter to one of the editors, from a well-known and very respectable surgeon.

be graduated by a definite standard, and brought into general use. All practitioners mean by a teaspoonful (cochlearium minumum vel theæ), a fluid drachm; by a dessertspoonful (coch. mediocre), two fluid drachms; by a tablespoonful (coch. magnum, amplum vel largum), four fluid drachms. The prescriber will not have to make any alteration in his prescriptions or mode of prescribing; he will only have to direct the use of a medicine-glass. Indeed, such medicine-glasses have already been made, and can be procured at Darman's glass-warehouse, Rathbone Place; and it only requires the sanction of the faculty to bring them into general use. The same objection was formerly applicable to the old mode of prescribing drops, and has been effectually removed by the use of minim glasses.

Clinical Remarks on the Diseases most prevalent during the preceding Month.

THE weather has been intolerably hot during the greater part of July. The newspapers quote some observations, but we rather question their accuracy, as high as 95° of Fahr. in the shade. Our own thermometer, which is tolerably correct — and there are few that are correct — was never higher than 86°. Little or no rain has fallen throughout the month.

We have lately been trying Backer's pills in dropsy, and with considerable success. In one instance of long standing they reduced the swelling entirely, but the boy when we last saw him seemed still ill. In the other cases we have not trusted to them alone, but have previously directed blood-letting, or employed elaterium. There has appeared much difference in the operation of these pills; in one or two instances they have acted powerfully on the bowels, but in general they have only produced nausea; and under this the swellings have gradually subsided, without any augmentation of urine, at least beyond the natural quantity, and without any perceptible increase in any other of the excretions or secretions. We have suspected much difference in the preparation of the drug. Some neuralgic affections have been cured by the carbonate of iron or bark, accompanied with purgatives. In these cases there was always deranged digestion, and the pain diminished as the tongue became more natural.

Febrile affections have been common, and in some cases severe, but more generally exceedingly slight. In some cases there has been little more than languor, thirst, and want of appetite, enduring from one week to four or five, and then gradual recovery — the patient never keeping his bed, and seldom his house. The febrile eruptive diseases, including small-pox, have been also prevalent; but they have presented nothing particular in their characters.

The hot weather has been very productive of affections of the head, and paralysis. Bleeding and purging, and light tonics, have generally been successful. We have had one or two cases of inflammation of the membranes of the brain, in children, arising from exposure to the sun, which terminated in fatal effusion in a few hours, notwithstanding very active means. Chronic diarrhœa,

and inflammation of the mucous surface of the digestive organs, have been very prevalent amongst children; and the inflammation of the membranes of the brain, which often supervenes upon these diseases, has been particularly remarkable during the bygone month. This complication has, however, not had so frequently a fatal termination as we have sometimes seen, owing, perhaps, to the circumstance of its being always watched for in the bowel complaints of children, and to the treatment being more active than that usually adopted. But we shall resume this subject again.

We have employed the colchicum wine and tincture very much lately, but have never yet seen harm arise, beyond a little vomiting and purging, which have generally given relief. Certainly it is not always a safe remedy in gout; there it requires more discrimination. In chronic rheumatism, by far our most efficient remedy has been acupuncturation. How it acts we shall not attempt to explain, but we have scarcely once found it fail in procuring relief. — EDITORS.

Report of Medical Plants which may be gathered during August, embracing those which are in Flower, &c.

As we consider it to be of the utmost importance that practitioners collect and prepare their own vegetable medicines, and useful to them to be reminded of the proper season of doing so, we shall, in future, furnish them regularly with a monthly list of those that may be gathered during the month following the day of our publication. The advantages of this, to country practitioners more particularly, are most evident. The chief reasons for our giving this report are— 1st, The very bad condition of the officinal parts of plants, as obtained from the majority of herbalists and wholesale dealers, owing to inattention to the directions laid down respecting the time and circumstances under which they ought to be collected: 2d, The knowledge of the great superiority of all the vegetable medicines that are gathered and prepared by practitioners themselves, and of the greater dependence which may consequently be placed upon their properties and effects, compared with those vegetable preparations,— extracts, and tinctures, more particularly, which are manufactured by the different operators on a large scale, who generally resort to processes and apparatuses, which effectually injure, or altogether destroy, the less permanent and more active properties of the plant.

On these grounds, therefore, we strongly advise practitioners to collect, or cause to be collected, by careful hands, those parts of plants usually employed in medicine; and we also recommend them to make the various officinal preparations from them. We shall from time to time furnish our readers with every information in our power, which may tend to facilitate this object; and we shall occasionally place proofs before them of the superior excellence of the preparations they may thus provide themselves with, at comparatively little expense, and at infinitely less than that which they are at, according to the more usual way of obtaining them. The very

able and much respected general practitioner, to whom we are indebted for considerable information on this subject, and who, although in a very extensive practice, collects his own plants, has placed at our disposal some of the preparations which he has himself made from them; and the superiority of them all, the extracts more particularly, over those with which we have compared them, is most evident.

In the present state of pharmacy, we can truly state, that the practitioner who has not his own vegetable medicines collected and prepared under his own eye, gives substances of whose properties he is nearly ignorant, and whose effects he cannot calculate upon every time that he prescribes them to his patient.

The list which we now offer is necessarily imperfect, owing to the advanced period of the month at which we determined upon commencing it: however, it will improve as we proceed with it. We shall only add, that our report will not be confined to the list of the London Pharmacopœia, but we shall mention such others as are or have been generally used in medicine. The names of Linnæus are those which we shall adopt. We may also notice, that the time of flowering generally shews the period at which the flowers themselves, the leaves, and herbaceous parts of the plant, may be gathered. For other particulars, see the works on materia medica.

I.—Medical Plants Flowering in August.

[When the officinal parts are mentioned, it denotes that these may be gathered during the month.]

Anethum Fœniculum.
Anthemis Nobilis. Flowers.
Artemisia Santonica.
——— *Maritima.* Flowering tops.
——— *Absinthium.* Flowering tops.
Chironia Centaurium. Flowering tops.
Centauria Benedicta, or *Cardicus Benedictus.* Leaves and herbaceous part.
Colchicum Autumnale. Flowers.
Convolvulus Scammonea.
*Cucumis Colocynthis.**
Dianthus Caryophyllus. Leaves petals.
Eryngium Maritimum.
Hyssopus Officinalis. Leaves and herbaceous part.
Inula Helenium.
Lactuca Virosa. Expressed juice.
Lavandula Spica. Flowers.
Leontodon Taraxacum. Leaves.
Lythrum Salicaria. Herbaceous part.
Melissa Officinalis. Leaves.
Mentha Vividis. Leaves.
——— *Piperita.* Herb.
Origanum Vulgare. Leaves.
——— *Majorana.* Herbaceous part.
Rumex Aquaticus.
Ruta Graveolens. Leaves and herbaceous parts.
Smilax Sarsaparilla.
Solidago Virgaurea. Flowers and leaves.
Tanacetum Vulgare. Flowers and leaves.
Veratrum Nigrum.†

* Is now beginning to flower, which it has not done before in this country for many years.

† As active a medicine as the *V. Album.*

II.—Officinal Parts of Plants which may be gathered in August.

Seeds of the *Carum Carui.*
Fruit of the *Morus Nigra.*
Seed of the *Coriandrum Sativum.*
Root of the *Daphne Mezereon.*
Strobiles of the *Humulus Lupulus.*
Seeds of the *Hyosciamus Niger.*
Seeds of the *Pimpinella Anisum.*
Seed of *Angelica Archangelica.*

New Apothecaries' Act, passed July 6, 1825.

We formerly hinted, and somewhat broadly, that our friends of the Worshipful Society of Apothecaries of the city of London would, perhaps, go up to parliament for a new act.* We afterwards signified that some of our statements, connected with this view of their (then lame) condition, gave rise to proceedings, (on the part of an individual, at least,) bordering on the *violent*, and closely identified with the *absurd*. Let our readers judge, from what follows, whether we knew or did not know what we were about.†

A new act *has been* passed — the preamble to which declares expressly, that 'doubts have arisen as to some of the provisions of the said (former) act.' The first defect pointed out is, the want of a legal form for the purpose of searching apothecaries' shops: the second is, the questionable nature of the power of the master, wardens, and court of assistants, to elect or appoint members of the said court to be members of the court of examiners.‡

Doubts are further stated to have been entertained as to the power of the master and wardens to administer the oath prescribed by the, now obsolete, act to the members of the court of examiners — which doubts are dissipated in the following *precise terms*: — 'From and after the passing of this act, it shall and may be lawful to and for the master and wardens of the said society, for the time being, or for the master and one of the wardens of the said society, for the time being, or for the master-wardens and court of assistants of the said society, or the major part of them, and they are hereby respectively authorised, required, and empowered to administer to all persons who shall from time to time be, by the master-wardens and court of assistants of the said society, or the major part of them, chosen and appointed to be members of the said court of examiners, &c. &c., the oath or affirmation dictated by the said recited act, &c.'

The fourth clause of the new act contains the following most *important and interesting* information, which cannot fail to gratify a large body of the profession. Of its private history we cannot, of

* Repository, June 1824, p. 529, and more especially for September same year, p. 253, Note.

† Ibid. for March 1825, p. 263.

‡ The new act conveys the power in question, but excepts the master and wardens, for the time being, from belonging to the court of examiners; and declares, that any member of the said court, being elected to fill any of these offices, shall vacate his seat, and be eligible during the time he may continue master, senior or junior warden.

course, reveal all we know; but there is some cause for congratulation, on our own parts, as to the full extent to which it is carried.

—— ' Be it enacted, that every person who heretofore has held, or who now holds, or hereafter shall hold, a commission as surgeon or *assistant-surgeon*, or apothecary, in his Majesty's army, or as surgeon or *assistant-surgeon* in the service of the Hon. the East India Company,* shall be entitled to practise as an apothecary in any part of England or Wales, without undergoing any such examination, or receiving any such certificate, as by the said recited act, &c. &c. is directed, and without being liable to any penalty or disability whatsoever imposed by the said recited act, &c.' — ' And no such person shall be obliged, in order to recover, in a court of law, any charges claimed by him as an apothecary, to prove that he was in practice as an apothecary ON the said first day of August 1815'†——

The next clause [V.], in our humble apprehension, is constructed for the benefit of the *lawyers*. We cannot comprehend it any more than the famous text in ' the said recited act,' upon which this is a curiosity of a comment, and upon which we have already given a plain man's opinion.‡ It consists of a single sentence, extended to no less than seventy-two lines of very condensed printing. We say that *we* ' common sort of people' cannot perceive its drift, unless we are warranted to conclude, that it does lay the unfortunate *apothecary-litigant* under the necessity of proving that he was an apothecary on Tuesday the first day of August, in the year of our Lord one thousand eight hundred and fifteen; but how or in what manner, or by what sort of proof, this is to be established, said act still leaves to plaintiff and defendant, or to their counsel and attornies, to make out as they can, or may think fit.

Clause VI. authorises the worshipful company to examine surgeons' apprentices; and in one following it is enacted, (after *confession* that the authenticity of the certificates hitherto granted was expensive and difficult of proof,) that the company's seal shall be sufficient for this purpose.

Clause VIII. provides a remedy for those unfortunate candidates who may have been *plucked* on their first and even second trial. Heretofore, it seems, there was no power to try them a *third* time. Be it known, therefore, to each and every such unhappy wight, that he may now *lawfully* compear before the court of examiners

* The medical officers of the navy are most unaccountably omitted! Is this an oversight, arising out of the alterations made in the bill during its progress through the house, or is it *designed?* If the latter, we shall, of course, hear about it. By the way, it is worthy of notice, that a certain class of practitioners (about whose *professional* qualifications, we presume, there can be little doubt) are placed entirely without the pale of Apothecaries' Hall — we mean those alluded to on a former occasion. — See REPOSITORY for August 1824, p. 171, Note. Such of them as have not served an apprenticeship cannot legally practise as apothecaries.

† See Case of Malmsey *v.* Abbott, REPOSITORY, June 1824, p. 529.

‡ REPOSITORY, ibid.

twice in every year, until (by hook or by crook) he worries them out of a qualification — which qualification, even if obtained at the eleventh hour, shall be ' deemed and *taken to be* as valid' as that of the poor fellows who have borne the burden and heat of the day.

To the best of our recollection, in all cases of process instituted by the worshipful company, under the *recited act*, the penalty sued for has been the maximum of £20. This was not from avarice, and is now explained, by the act before us, in a simple manner: — it appears that no means were specified in the *recited act*, whereby the minor penalty of £5 could be recovered. This is now made as easy a matter as the other.

Clause X. limits actions to six months after the actionable deed shall have been committed; and exacts twenty-one days' previous notice to the parties implicated. Every action shall be brought in the county where the matter in dispute shall arise; ' and the defendant or defendants in every such action or suit shall or may, at his, her, or their election, plead specially, on the general issue, and give this act and the said recited act of the 56th year of the reign of his late Majesty, and the special matter, in evidence, in any trial to be had thereupon, and that the same was done in pursuance and by the authority of this act and the said recited act,' &c. &c. &c.

Finally (Clause XI.), this act is to continue in force till the 1st August 1826.

Prior to or on the said first day of August 1826, we expect to detail to our readers at least as many litigations as we have felt it our duty to do under the dominion of the ' recited act.' We do not say that there will be a third act to amend an act, passed, &c. in explanation of an act, &c. &c.; but should such an event take place, it will be no more than we expect.

Biographical Notice of the late Mr. WILLIAM SWAYNE.

MR. WILLIAM SWAYNE, apothecary, and acting house-surgeon to the Infirmary in Bristol, died in that city on the 25th of June, 1825.

Few men have ever combined a greater number of those endowments, intellectual and moral, which qualify an individual for holding the highest rank in the medical profession, and for extending the limits of practical medical knowledge, than the subject of this brief notice. He was the seventh son of the Rev. George Swayne, vicar of Packlechurch, and rector of Dyrham, in the county of Gloucester, well known as the author of the " Gramina Pascua." He was born in 1790, and received his school-education, first at the grammar-school at Ilminster, and afterwards, under the Rev. T. Eden, at Whitehall, near Bristol, under whose tuition he remained until his 17th year. His medical education was commenced by an apprenticement under Mr. Griffiths, apothecary in the same city; and during two years of the term, he attended the Bristol Infirmary, as surgeon's pupil to Mr. Huting. He went afterwards

to London, and pursued his studies at the Borough hospitals, and after two years became a member of the College of Surgeons, to which he was admitted in January, 1813. In the year 1816, he obtained, by an unanimous election, the appointment of apothecary to the Bristol Infirmary.

From the time of Mr. Swayne's appointment to this office, he continued to discharge the laborious duties attached to it with the greatest assiduity. The sedateness of his temper, and his indefatigable perseverance, enabled him to go through the round of daily duties, and attend to a multiplicity of minor concerns, without losing sight for a moment of objects which require a greater display of talent, though, perhaps, not a more difficult effort of mind. Although he was in the habit of visiting daily, and of inquiring into the state of every patient in a large hospital, as well as of managing all the inferior matters, both in the medical and surgical department, he found time to pursue, with great diligence and success, the study of morbid anatomy, and even to examine personally the body of almost every individual who died in the house. In this most important branch of medical knowledge, he acquired, by his own research, a great store of original information. But morbid anatomy was not pursued by him, as it has too often been done, as if it were merely a matter of curious discrimination. He never lost sight of its real and proper connexion with medical practice, or with the attempt to remove or prevent the evils which it displays. In attending the sick, he was equally observant of the more minute symptoms of disease. A cool and deliberate judgment enabled him often to form opinions even in obscure cases, on which himself, as well as others, relied; and in the consequent practice he was prompt and energetic. Some persons have thought him too bold in the use of the lancet, and of evacuant remedies; but the writer of this account has had frequent opportunities of knowing that he acted always with care and circumspection; with the energy inspired by competent knowledge and experience, and not with the precipitancy and daring which result from hardihood and temerity. The result of his practice was, especially in acute cases, remarkably successful.

In the autumn of 1824, Mr Swayne was attacked by symptoms of pneumonia, which was the prelude to phthisis pulmonalis. He tried the effect of a voyage to Barbadoes—which appeared to retard, though it did not arrest, the progress of his malady — but returned, after giving up the hope of recovery, in which he had been from the first by no means sanguine; and about three weeks after his arrival, expired at the house of his brother, Mr. J. C. Swayne. He underwent much bodily suffering in his last days, but died with composure and perfect resignation; for he had the faith and hope of a Christian, and was wholly free from that baneful scepticism, too often imputed to the medical profession, which darkens and embitters the mind, and deprives those who are under its influence of the only support in the last hour.

Dr. L. Rogers, of New York, has recommended, in the fourth Number of the New-York Medical and Physical Journal, the tying of the large arteries supplying the principal joints, in order to prevent inflammation supervening in these joints after wounds or injuries of them; and he has adduced three cases, in which this operation was performed successfully, in order to shew the propriety of the practice.

The operation of amputation at the hip-joint has recently been performed by Dr. Mott, of New York. The case was necrosis of the thigh from a fracture. The patient recovered. — *New-York Medical and Physical Journal, No. IV.*

High Operation for the Stone.

We understand that this operation has very recently been performed by A. Copland Hutchison, Esq., at Sheerness, with complete success. The stone extracted from the bladder was uncommonly large.

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

[No publications will be announced under this head, except those which are actually received by the Editors, from the Author or Publisher.]

1. The Theory and Practice of Warming and Ventilating Public Buildings, Dwelling-Houses, and Conservatories. Including a General View of the Changes produced in Atmospheric Air, by Respiration, Combustion, and Putrefaction, with the Means of obviating its Deleterious Agency; and a Description of all the known Varieties of Stoves, Grates, and Furnaces; with an Examination of their comparative Advantages for Economy, Fuel, and preventing Smoke. By an Engineer. Illustrated by numerous Plates, &c. &c. 8vo. Pp. 340. Underwoods. London, 1825.

*** This work will prove interesting to men of science generally, and to the medical practitioner more particularly.

2. A Course of Dissections, for the Use of Students. By Herbert Mayo, Surgeon, and Lecturer on Anatomy. 8vo. Pp. 284. Burgess & Hill.

*** This is an excellent manual for the dissecting-room.

3. Practical Remarks upon Indigestion; particularly as connected with Bilious and Nervous Affections of the Head and other Parts; including Observations upon the Disorders and Diseases of the Stomach, and Superior Parts of the Alimentary Canal. Illustrated by Cases. By John Howship, Assistant-Surgeon to St. George's Infirmary; Member of the Royal College of Surgeons, and Medico-Chirurgical Society of London, &c. &c. &c. 8vo. Pp. 210. Longmans. 1825.

4. Military Medical Reports; containing Pathological and Practical Observations illustrating the Diseases of Warm Climates. By James M'Cabe, M.D., Author of 'Observations on the Cheltenham Waters,' &c. 8vo. Pp. 257. Whittaker. 1825.

5. A Letter to the Right Hon. W. Huskisson, M.P., on the Quarantine Bill. By A. B. Granville, M.D., F.R.S., &c. 1825.

NOTICE OF LECTURES.

Dr. Copland will begin his Lectures on Pathology and the Practice of Medicine, at the commencement of October.

Dr. Gordon Smith will give, during the ensuing season, a Course of Lectures on Medical Jurisprudence.

THE METEOROLOGICAL JOURNAL,

From the 19*th of* JUNE *to the* 20*th of* JULY, 1825.

By Messrs. HARRIS and Co.

Mathematical Instrument Makers*, 50 *High Holborn.

June.	Moon.	Rain Guage.	Therm.			Barom.				De Luc's Hygrom.		Winds.		Atmo. Variation.		
			9 A. M.	Max.	Min.	9 A. M.		10 P. M.		9 A. M.	10 P. M.	9 A. M.	10 P. M	9 A. M.	2 P. M.	10 P. M.
20			60	67	44	29	58	29	62	66	70	N	NE	Clo.	Rain	Clo.
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24			64	71	56	29	82	29	75	57	60	SW	SW	Fine	——	Clo.
25			66	75	53	29	63	29	54	56	68	S	WSW	——	Rain	Fine
26		,20	66	71	49	29	60	29	62	62	67	W	WSW	——	Fine	——
27			62	68	52	29	63	29	65	62	68	W	WSW	——	——	——
28			58	64	52	29	60	29	50	72	78	SSW	WSW	Sho.	Rain	Sho.
29		,28	58	67	59	29	53	29	52	72	76	NW	W	Fine	——	——
30	●		62	68	55	29	52	29	52	70	76	WNW	WSW	——	——	——
1			60	67	50	29	64	29	87	67	72	NW	NNE	——	Clo.	Clo.
2			58	68	52	30	05	30	10	62	72	ENE	NW	——	Fine	Fine
3			63	70	60	30	12	30	05	62	58	W	NW	——	——	——
4			66	72	60	30	08	30	13	67	62	NW	N	——	——	——
5			65	68	55	30	17	30	17	64	60	N	N	——	——	——
6			60	65	55	30	05	30	00	60	66	NE	E	Clo.	Sho.	——
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9			55	66	55	29	95	29	92	83	70	NNE	NE	——	Fine	Fine
10			62	68	57	29	90	29	90	62	70	N	WSW	——	——	——
11			65	74	57	29	90	29	90	65	65	WSW	WSW	Fine	——	——
12			69	77	67	29	91	29	93	62	55	W	W	——	——	——
13			71	79	61	30	00	30	04	57	63	W	WSW	——	——	Clo.
14			69	79	63	30	07	29	99	73	60	SW	SSW	——	——	Fine
15	☽		83	86	67	29	91	29	94	52	63	S	WSW	——	——	——
16			77	85	64	30	06	30	12	60	58	N	ESE	——	——	——
17			76	82	65	30	17	30	12	57	55	ESE	ESE	——	——	——
18			76	87	67	30	09	30	07	65	62	ESE	E	——	——	——
19			76	88	64	30	10	30	11	66	51	E	SE	——	——	——

The quantity of rain fallen in June was 99-100ths of an inch.

NOTICES TO CORRESPONDENTS.

THE Readers of the MEDICAL REPOSITORY may perceive that it is our intention to extend our month limits to at least six whole sheets, or 96 pages, and to print the greater part of the work in a closer an more uniform type than formerly, which will be equal to a still farther extension of the limits of the wor They will also observe that the present Number contains 104 pages.

Several Communications are received, and are under consideration. Original observations and importa facts are solicited, on the part of the Editors, from the old correspondents and readers of the work.

Literary Notices, &c. cannot be inserted in the body of the work, unless with a very few exception which will rest with the Editors.

Correspondents, and authors of works, or of papers in other Journals, who may wish to have their pr ductions noticed, may send them under cover (post paid) to the Editors, 1 Bulstrode Street, Cavendis Square, or to the Publishers, Fleet Street.

*** Notwithstanding the great extension of our limits this month, we have been obliged to defer the inse tion of a number of articles until our next Number.

Errata in last Month's Repository.

P. 69, line 33, *for* "conical," *read* "cervical."

P. 92, line 11, *for* "lime," *read* "brine."

*** Communications, and Works for Review, are requested to be addressed (post-paid) to th EDITORS, to the care of Messrs. T. and G. UNDERWOOD, 32 Fleet Street.

THE LONDON MEDICAL

REPOSITORY AND REVIEW.

No. 141. SEPTEMBER 1, 1825. VOL. XXIV.

No. III.——NEW SERIES.——VOL. I.

PART I.

REVIEW.

I.

OF THE PATHOLOGY OF TETANUS.

An Essay on Tetanus, founded on Cases and Experiments. By JOSEPH SWAN, M.R.C.S., and Surgeon to the Lincoln County Hospital. London, 1825. 8vo. Pp. 98.

Six Cases of Tetanus; accompanied by Observations on the leading Symptoms of that Disease, with a view of ascertaining its Primary Seat and most appropriate Mode of Treatment. By R. CARMICHAEL, Esq., M.R.I.A., Surgeon to the Richmond Hospital, &c.—[Transactions of the College of Physicians in Ireland, Vol. IV.]

Recherches Anatomico-Pathologiques sur la Médecine Pratique, &c. Par C. F. TACHERON, D.M., &c. &c. TETANOS. Tom. III. Paris, 1823.

MR. SWAN'S treatise is divided into three heads; the first of which consists of the history of several experiments performed with a view of proving the effect of local irritation on the constitution; the second chapter treats of '*idiopathic tetanus;*' and the last is on '*traumatic tetanus.*'

From his experiments, some of which we shall lay before our readers, Mr. Swan comes to the conclusion, that the ganglial system of nerves is that which is most particularly affected in cases indicating much constitutional irritation. The diseased relation, generally called sympathy, subsisting between an injured part and the stomach and bowels, is known to every practitioner; but the question is, Is the ganglial system of nerves the only seat which comes within the sphere of this relation? or are the organs which are supplied more particularly with nerves from the ganglionic system, those which sympathise *first* with the seat on which local injury has been inflicted? Before attempting to answer

these questions, we shall give some of Mr. S.'s cases and experiments, in order that the reader may have an opportunity of judging for himself.

'Susanah Graham, a stout-looking girl, aged seven years, was burnt by her clothes catching fire on the 20th of August, 1823, at noon. The thighs, and arms and back, were the parts affected; but some of them appeared to be burnt deep. The skin of the abdomen was not burnt. She did not appear to suffer much pain. Mild ointment was applied to the affected parts.

'21st.—At ten, A.M., she complained of pain in her belly. She had vomited several times. She wandered a little, and was cold, and her face was death-like. She said she remembered me. The pulse could not be felt in either arm. Purging medicines were given her, but they did not remain in the stomach.

'In the evening the pulse was perceptible, but she appeared weaker, and was quite insensible; the pupils of the eyes were much dilated, and did not contract on the approach of light, but she could see, for she attempted to blow out the candle. Six leeches were applied to the temples. She died at one, A.M., on the 22d.

'*Examination.*—The lungs were very purple, and loaded with blood. There were spots of ecchymosis behind the posterior mediastinum on the left side; there was a great vascularity on the outside of the aorta; there was some fluid in the pericardium.

'There was an increased redness on some parts of the omentum, but the peritoneum appeared healthy. The liver was generally pale, and especially on its concave surface. There were some spots of redness on the villous coat of the stomach, but I could not decide that they amounted to disease. About six inches of the jejunum were highly inflamed.

'All the ganglia of the grand sympathetic nerves in the chest were vascular. On the right side, the semilunar ganglion and all the rest of the ganglia in the abdomen were very vascular. On the left side, the semilunar ganglion and the first in the abdomen, formed by the continuation of the grand sympathetic nerve, were very vascular, but the others were not. The nerves of the axillary plexus were very vascular. The sciatic nerves within the pelvis, and the anterior crural nerves, were vascular, but not near so much so as the axillary plexus.'

Mr. S. gives here, also, the history of a case of fracture of the neck of the thigh-bone, followed by great constitutional irritation, and, in about five weeks, by death. In this case 'there was violent inflammation of the semilunar ganglia,' and the intestines were very vascular.

The author thereafter details a series of experiments performed upon dogs, the result of which goes to prove that the ganglia of the sympathetic nerves shew marks of irritation, if not of inflammation, after every local injury of any extent.

These experiments consisted in inserting oxide of arsenic and gamboge under the skin of the animals, and in producing compound fractures of their limbs. We here relate one of these experiments: —

'*Exp.* 1*st.* — One portion of oxide of arsenic, weighing thirty-nine grains and three quarters, and another portion, weighing twenty-six grains, were moistened with water, and inserted into a wound in the back, between the shoulders, of a very large dog, on the 18th of April, 1823, at half-past seven, A.M. Soon after, I laid my hand over the wound, so as to press the arsenic to the back, and he immediately had twitchings in different parts of the body. He ate with a good appetite. Involuntary contractions of the muscles of the face continued throughout the day, so that the teeth would frequently be brought close together with a snap. He has neither vomited nor purged.

'19th. — He is much the same as yesterday. Twenty-five grains of powdered oxide of arsenic were given him on a piece of meat at a quarter before eight, A.M. At half-past nine he had not vomited. At one he had vomited several times, and I believe nearly the whole of the arsenic was rejected, as the symptoms continued just the same as before he took it.

'20th. — He is much the same. He has not vomited again. He has no appetite. The same twitchings of the face continue.

'23d. — He is very weak. An abscess broke on the right side, and as it was presumed no advantage would result from prolonging his existence, he was hanged.

'*Examination.* — All the ganglia of the grand sympathetic nerves were inflamed. The par vagam and nerves about the face had a greater redness than usual, and a slighter degree of it existed in the axillary plexus. The sciatic nerves were natural. All the thoracic viscera were healthy, but there was an increased vascularity on the outside of the aorta. There appeared more than usual redness on the peritoneum of the stomach, but not on that of the other viscera. The villous coat of the stomach was ulcerated in several places, and that of the small intestines presented an appearance of red spots. There were red spots and bloody mucus on the inner coat of the rectum. Neither the brain, nor the medulla spinalis, nor their membranes, had any increased vascularity. The ganglia of the spinal nerves were more vascular than natural, but those formed by the fifth pair had not any increased vascularity.

'The largest piece of arsenic weighed full thirty-eight grains, and the smallest twenty-four grains. There was much inflammation of the skin to some distance round the place where the arsenic was inserted. The abscess had formed near the shoulder.'

The morbid appearances after death being nearly similar in all the other experiments which were performed, it is therefore unnecessary to lay the history of any more of them before our readers. We shall now proceed to the chapter (second) 'on idiopathic tetanus,' so as to give the reader the

substance of the facts from which the author draws his conclusion, respecting the immediate seat of disease in tetanus, before we make any remarks upon that conclusion. He commences this chapter with the particulars of a case of tetanus sent to him by a friend. The subject of this case died in two days from the commencement of the attack. The treatment consisted of bleeding, leeching, and purging with calomel and jalap. We shall give the account of the examination of the body, which took place eleven hours after death, in the author's own words. It is necessary previously to observe, that the spasm in this case was much more violent in the right than in the left side of the body.

'*Examination.*—On opening the abdomen, a considerable volvulus was found in two portions of the small intestines. The intestinal canal was laid open through its whole extent. The stomach exhibited nothing remarkable, and contained only a little fluid, and a few portions of the submuriate of mercury. The villous coat of the small intestines throughout had marks of having been in a state of great irritation; many very vascular patches were observed on it, and it was loaded with green and yellow slime and mucus; at the superior extremity of each volvulus several lumbrici were lodged, and others were found in different parts of the canal. The colon was irregularly distended with air, and presented rather a curious appearance; its mucous coat was healthy, and contained a few ascarides; the rectum contained fæces which had not an unhealthy character. All the absorbent glands were enlarged, but those in the abdomen were very vascular; and the mesentery throughout had the same appearance of undue action and irritation. The bladder was thicker than usual, but was not otherwise unhealthy, and contained urine.

'The lungs were florid and loaded with blood, but not unhealthy. A patch, about the size of a shilling, and having the appearance of effused lymph, was found on the pericardium, covering the apex of the heart.

'The ganglia of the grand sympathetic nerves were examined with very minute attention. In all of them there existed decided marks of *irritation*. The vessels usually pale and colourless were injected with red blood, and the same was observed in some of the intermediate portions of nerve. The vascularity could be distinctly traced before their removal from the body, and immersion in cold water for some time did not diminish it. The left semilunar ganglion exhibited a few vessels, *but the right* was injected in a beautifully minute manner, quite as much so, when seen through a magnifying glass, as the conjunctiva in a state of high inflammation. The same distinction, though not in the same degree, was observed between the two sides in all the portions of the grand sympathetic nerves which were examined.

'On opening the head, every part of the pia mater was found to be minutely injected with blood. The substance of the brain had

a healthy appearance. Some fluid was found in the ventricles and at the base; on the removal of the brain, a quantity was found equal to about two ounces. On hanging the head over the edge of the table, the same fluid kept dribbling from the spinal canal.

'The spinal canal was laid open through its whole extent. The sheath of the dura mater seemed to be distended with fluid; but on being divided, was found to contain only air. The pia mater presented exactly the same appearance as that of the brain. The medulla itself was perfectly healthy.

'After death, the limbs of the *right side* remained quite stiff, but those of the left were in a considerable degree relaxed.'

It will be seen in this case, that the greater affection existed in that side of the body in which the semilunar ganglion was more diseased.

Mr. S., in this chapter, relates three experiments, one of which we shall transcribe: —

'November 22d. — At a quarter before three, P.M., I gave a bitch, of moderate size, a grain of alcoholic extract of nux vomica. 23d. — At a quarter before ten, A.M., I gave her another grain. At eleven, I could not perceive any decided effects from it. At half-past two, I gave her a grain and a half. At six, she had stiffness of her limbs and difficulty of breathing. 24th. — At eight, A.M., I gave her a grain and a half. At two, P.M., she had two grains. 25th. — At half-past nine, A.M., she had two grains, and at two, P.M., three grains. 26th.—At a quarter past eight, A.M., she had three grains. At a quarter before ten, she had one of the most violent paroxysms of tetanus I ever saw. At half-past four, P.M., she had three grains. 27th. — At ten, A.M., she had three grains. She did not appear so much affected as yesterday. At half-past eight, P.M., she had four grains. December 2d. — She appears quite well. Two grains were given at half-past eight, A.M. At half-past nine she had spasms. 3d.—Two grains were given at half-past eight, A.M., and at a quarter before three, P.M., three more grains. At six she had a violent paroxysm. 4th. — She appeared quite recovered. At a quarter past eight, A.M., I gave her three grains, which seemed to affect her very little. At six she had two grains. At this time she was very dull. 5th. — At half-past eight, A.M., I gave her three grains. She appeared better than she was on the preceding evening. At two, P.M., the whole body was in a state of slight spasmodic action. The eyes looked red. Two grains more were given, and at a quarter past nine, three grains more. 6th. — I gave her four grains at half-past eight, A.M. She died at noon.

'*Examination.* — There was an increased vascularity of the semilunar ganglia, but especially of that of the right side. In many of the other ganglia of the grand sympathetic nerves there was a slight increased vascularity. The vessels of the pia mater of the brain were numerous, and there was some fluid between the dura mater and the tunica arachnoidea. There was a little fluid in

the ventricles. The brain was healthy. There was a slight increased vascularity of the pia mater of the medulla spinalis, and there was a quantity of fluid within the sheath of the dura mater. The medulla itself was healthy. The stomach was contracted, and its villous coat rather red, but not diseased. The villous coat of the small intestines was very red in patches. There was a slight redness in the mucous coat of the large intestines. The appearance of the thoracic viscera was healthy, except some spots of ecchymosis in the lungs.'

In the last chapter of his essay, Mr. S. relates two fatal cases of traumatic tetanus. One proceeded from a burn, and the other followed a puncture by a spike, which penetrated 'the joint between the metacarpal bone and first phalanx of the little finger.' Upon the examination of the bodies, the ganglia of the sympathetic nerves were found vascular. There was fluid in the brain and in the sheath of the medulla spinalis; the vessels of the enveloping membranes were loaded with blood, and many of the nerves of the body were vascular.

Mr. S. concludes, from appearances after death, 'that the ganglia are the important parts of the nervous system to which the first irritation tends, and from which it proceeds to the rest of the nervous system;' and he adduces, as proof of this, the case where the ganglia of the right side, corresponding with that of the body, most affected, were found in a state of great irritation. This correspondence of affection may be accounted for upon another principle, by admitting the spinal nerves to constitute the seat of disease. For if the spinal nerves of the right side were those which were originally most affected, the irritation would necessarily be communicated more particularly to the ganglia of the same side. In cases of constitutional irritation, the stomach and bowels, it is true, become decidedly affected; but do they suffer more in proportion than other parts? When the centre of nerves becomes irritated, either from local injury, or from general disease, such as fever, the effect of that irritation is felt by every part of the system; but we have no decided proof that the ganglial system, and those parts which that system more particularly supplies with nerves, suffer more than their share of the general disturbance.

From the experiments and cases which Mr. S. relates, it will be seen that the ganglial system of nerves presented similar appearances after death in the cases of constitutional irritation *without* spasm, as it did in those attended with spasm. The symptoms which resulted from arsenic and gamboge being inserted under the skin of a dog, were very different from those which followed the exhibition of the

extract of nux vomica; yet the appearances of the *ganglia* were very similar in both. But it will be seen that in the experiments tried with the nux vomica, the membranes of the brain and of the spinal marrow were decidedly in a state of disease, which was not the case where the other poisons had been used. Will not common purgatives produce similar appearances in the ganglia, to those which are found in cases which have died of tetanus, or of other diseases attended with much constitutional irritation? Mr. S. acknowledges that mercury will do so; he therefore considers this medicine an improper one in tetanus. But we find mercury to be a very valuable remedy in many diseases attended with much constitutional disturbance, even when that disturbance arises from affections of parts which receive the chief of their nerves from the ganglionic system. We may here instance inflammation of any of the abdominal viscera.

Dr. Copland, in the Number of the REPOSITORY for May 1822, laid down a very ingenious system of physiology and pathology, founded upon the functions of the ganglial system of nerves; and in his additions to Richerand's Physiology, he has illustrated several interesting physiological and pathological points by the view which he took of the functions of that system. But the phenomena of disease cannot be accounted for by taking into consideration one system alone.*

* The able writer of this article has mistaken our views. We do not consider the ganglial or sympathetic system of nerves to be the *exclusive* seat of disease; but view it as the seat of *primary* derangement, and the part to which we are led ultimately to refer deranged function in our analysis of disease. Viewing this system, therefore, as the seat of primary derangement, and as participating, in their future stages, in the disorders of the other systems and organs, which it is instrumental in producing in them, we have considered that it should be made the basis of rational pathology, — because it holds the primary relation with the cause of disease; because it is the means of establishing the disordered relations in which other systems and organs of the body participate; and because it is generally upon it that our remedial means produce their primary and most effectual operation, and through the medium of it act upon the rest of the body.

We never intended to convey the idea that this system of nerves — which may be termed organic or vital, from the nature of its functions and connexions — is the exclusive seat of disease, and we think that no such opinion can be correctly inferred from what we have said on the subject; because we expressly state, that the vital and organic functions depend upon this system of nerves, and are influenced by it, therefore it most necessarily follows, that, when itself is deranged, all those functions thus depending upon, and modified by it, must be also deranged.

To be still more explicit, as an occasion offers itself of being so, we have inferred from the nature of the structure of this system, of its relations with other systems and organs, and from the nature of its functions as manifested by such relations, &c., that it is on the ganglial or great sympathetic system,

As far as it regards the phenomena of automatic life, and the diseases connected with the organs which manifest it, particularly those related with the arterial system, that view of

that the causes of the greater number of diseases make their immediate impression, and establish their more intimate relations; and that as soon as such an impression is made on this system, the disordered function resulting therefrom is communicated to the vascular system, the other parts of the nervous system, the digestive and other organs of nutrition, &c., with which parts this particular system holds an intimate connexion, as shewn by anatomical investigation; and that the thus communicated or resulting disorder is in proportion to the intimacy of this connexion, and the nature and circumstances of the causes, and of the primary impression made by them.

Thus, disorder being primarily induced and seated in this system of nerves, it cannot be denied that the functions and organs depending upon this system must very soon become also deranged, in proportion to the intimacy of such dependence, and become equally the seat of disease. Hence the vascular system, and all the functions of organic life, as well as those of external relation, participate in the derangement; and although the first impression of the causes of disease is obviously not made upon them, and although the disorder resulting from these causes does not simultaneously supervene both in this particular system and in these other systems and organs, yet it is soon communicated to them all, and thus disorder soon exists to a greater or less degree, according to the kind of disease, in all of them — the disorder of the one acting upon and perpetuating that of the other.

In farther illustration of this subject, we shall take an instance or two. The causes of fever—particularly those consisting of terrestrial and of animal exhalations — undoubtedly act upon the mucous surface of the bronchi and air-cells, when inhaled along with the inspired air, and, perhaps, upon some parts of the other mucous surfaces. Here the first impression is evidently made upon the nervous organisation, upon which the functions of these parts depend; and this impression, from the greater intimacy of relation, is communicated to the centre upon which this nervous organisation is itself more immediately dependent. What is the result of this impression? We may answer, diminished or otherwise altered function of this system of nerves throughout its extension, according to the nature of the cause, followed by proportionate derangement of the digestive and organic functions, which also depend upon this system — by languor, oppression about the præcordia, and sighing—by deranged state of the circulation, of the animal heat, and of the circulating fluid, owing to disordered function of the eliminating and secreting organs — and by many other resulting phenomena of a diseased kind. Here we have, to a greater or less extent, general disorder established even early in the disease, and who can point out the system or organ which is not, in its progress, more or less deranged? and who, at its earliest commencement, and after the due exercise of pathological analysis, can assert that the causes of disease can find access simultaneously to all these parts, or that there is a morbid impression made by any of these causes, at the same moment, upon them all?

Surely it cannot be urged, as a fault, against any system of pathology, that it proceeds too far in tracing back the chain of disordered action; for the more closely we pursue our analysis, and the more intimately we trace the individual links of the chain which connects the causes by which we are acted upon from without, with the ultimate effects which it is our profession to mark and counteract, the more completely are we performing the

the functions of the ganglionic system of nerves will amply account for many phenomena of disease, which cannot be satisfactorily explained according to any other principle. The author of the present volume is either ignorant of this extensive view which Dr. C. has taken of the ganglial system of nerves, or it did not suit him to take notice of it.

As the ganglial nerves are distributed with the blood-vessels throughout the body, it is reasonable to expect their functions to become disordered, and the ganglia themselves to manifest signs after death of having been in a state of irritation; but, as far as we know any thing of the physiology of the different nerves, we have no proof of the sympathetic nerves being those which confer the power of motion on the muscles. In most, if not in all, cases of tetanic affections, the membranes of the brain or those of the medulla spinalis are found in a state of disease. We have seen several cases, both in children and in adults; in some of which a considerable quantity of fluid was found in the spinal sheath; and the membranes of the medulla were highly injected with blood in the others. We have also noticed in some cases, and more particularly in one case, of idiopathic tetanus, the vessels supplying the dorsal muscles to be gorged with blood. When experiments prove that it is the cerebro-spinal nerves which confer the power of contraction on the muscles, and when these nerves, or their centre, or their enveloping membranes, are always found in a state of irritation, or disease, in fatal cases of tetanus; and, particularly, as the ganglia of the sympathetic nerves present the same appearances in cases of constitutional disturbance, whether attended with muscular spasm or not; as well as in consequence of the mere exhibition of mercury, as the author acknowledges, — we have no right to infer, from the facts which we have as yet before us, that tetanus depends upon irritation, or inflammation, of the ganglial system of nerves. That they present these appearances of disease in cases of tetanus, the author has clearly proved; but as other parts also, connected with the centre

duties of our science, and the more firmly are we placing the practical discharge of our offices on a safe basis. The pathologist, also, who tutors his mind to this kind of analysis, will be abler to follow out the manifold relations of disordered function, to take in at one mental grasp their mutual dependencies, and to pursue synthetically the various deranged actions which will result from an ascertained cause, and from the contingent operation of the fortuitous influences which may modify them. The mind, also, who thus forms itself to such philosophical views of disease, will be least liable to allow its numerous manifestations at the moment of inquiry to escape his observation, and will be abler to apportion to each its precise value, in the estimate of disease which he will be led to form.

of the nerves of motion, exhibit marks of disease, we should be more inclined to attribute the phenomena of tetanus to affections of the latter than to those of the former parts.

We admire Mr. S.'s researches into the nature and seat of this disease, but we cannot help deprecating the means which he has made use of on the present occasion in order to obtain his ends. There is something very cruel in the idea of fracturing the limbs of living animals, and of subjecting them to the action of slow and painful poison. Experiments performed with the view of proving any important points of pathology may be palliated, when we have no other means of arriving at a knowledge of these points; but, unfortunately, we find a sufficient number of fatal instances of tetanus in our own species to prove every thing which the author at present has attempted to prove, without subjecting other animals to the pain and torture of experiments.

Mr. S. considers that he has established an interesting point relative to the practice which should be employed in this dreadful disease, inasmuch as opium and other antispasmodics cannot be expected to have much influence on the malady when inflammation is going on in important parts. He consequently recommends blood-letting, both general and local, and the patient to be well purged; and when this is done, 'it appears reasonable' — he adds — 'to suppose that quieting and relaxing medicines may be of use, as the pulvis ipecacuanhæ compositus given in frequent doses.' He is of opinion that mercury is not likely to prove of much service in this disease, as he found, from experiments on animals, that it produced inflammation of the ganglia.*

Mr. Carmichael, in his article at the head of this review, relates the history of six cases of tetanus, one of which terminated favourably, but all the others fatally. Two of the fatal cases were examined after death, but no diseased appearances were found, except numerous contractions of the small intestine in one of them. The spinal marrow was laid bare, but it appeared healthy in both cases, as also did its membranes. It does not appear that the brain was examined in either case, nor does the author say a word about

* We do not consider that Mr. Swan has satisfactorily made out that actual inflammation of the sympathetic ganglia is present in the cases he has recorded. He ought to have attended more than he has done to their natural appearances. These ganglia are naturally very vascular; and what he considers to have been "increased vascularity," may have been their healthy condition merely, or a state of vascularity but little beyond it.— EDITORS.

the state of the ganglia of the sympathetic nerves. Indeed, these cases, as the author himself acknowledges, throw no additional light on the nature of the disease.

Mr. C. infers, from the pain of which the patient complains at the pit of the stomach, that the disease is intimately connected with the sympathetic nerves; but that, as the mental faculties are not deranged during the paroxysms, there is no reason to suppose the brain to be much involved in the disease. We are ready to grant: —

Firstly, That the mental faculties are in no, or but in a very inconsiderable, degree affected; but this is no proof that the brain is not in a state of disease. We have seen abscesses formed in the substance of the brain, without any mental derangement being manifest. The membranes are frequently inflamed and thickened, yet the mind appears perfect. If it be admitted that some parts of the nervous centre are destined for motion, and others for sensation and thought, the phenomena of disease must be according to the portions of it affected, as well as according to the nature of the immediate cause of the disease. One degree or kind of affection of the centre of motion may produce paralysis, and another may produce spasm, of the muscles. Our knowledge of the diseases of the nervous system is yet so imperfect, that we can draw no satisfactory conclusions from appearances after death. We frequently find precisely the same morbid appearances in those who die of confirmed mania, as in those who die of tetanus, of epilepsy, meningitis both acute and chronic, as well as in others where no symptoms of cerebral disease existed before death. It would appear, therefore, that the absence of any derangement of the mental faculties is no proof against the brain and spinal marrow being affected in tetanus.

Secondly, In maintaining that spasmodic affections of the muscles depend upon disease of the nerves which confer on them the power of motion, we by no means deny that the sympathetic system of nerves is the first whose functions become deranged, in many instances; for irritation in the intestinal canal, produced by worms and several other causes, will bring on tetanic symptoms: but these symptoms do not manifest themselves until the irritation, or disease, extends to another tissue. The first cause may act on the ganglial system, and disorder its functions; but in this stage, will there be any symptoms of tetanus? The functions of these nerves are deranged in innumerable instances where no spasm of the muscles succeeds; whereas spasm succeeds more frequently a slight wound of the toe or finger, where

there is no reason to infer the ganglial system to be primarily affected.

These remarks receive an additional proof from the researches of M. Tacheron, who, in the third volume of his 'Recherches Anatomico-Pathologiques sur la Médecine Pratique,' relates eight cases of tetanus, four of which terminated fatally. In two of the fatal cases, worms were found in the intestines, upon dissection; but in *all*, the brain or its membranes clearly manifested diseased appearances. The vessels of the meninges were gorged with blood; fluid was found between the membranes, as well as in the cerebral cavities; and in one of the cases the substance of the brain was remarkably soft.

M. Tacheron appears to be of opinion, and very justly, that irritation of the mucous membrane of the intestines is often the cause of disease of distant parts, and that, therefore, it may bring on tetanic symptoms in some cases. It cannot be denied that the first relation of the disease is in many instances with this membrane, or with the nerves which supply it; but from the appearances, on dissection, in M. T.'s cases, it is evident that the irritation had been transferred to more distant parts connected with the centre of the voluntary nerves. In tracing the chain of causation, we can conceive no difference which can be manifested in the symptoms, whether the voluntary nerves become *primarily* affected, or through the medium of another system of nerves, provided that they come within the sphere of influence of the cause of disease. Nor does it appear, moreover, that the exciting cause has much to do in keeping up the disease when once established, whether the affection may have been brought on from irritation in the bowels, or from a puncture of any part.

One of the fatal cases quoted by M. Tacheron succeeded the repeated application of powdered cantharides to a blistered surface. In this case, the membranes of the brain were highly diseased; so were also the stomach and intestines. It does not appear that the contents of the spinal canal were examined in any of these cases.

Although it is very probable that the arteries receive the chief power of their action from the sympathetic system of nerves, yet it would appear that the spinal nerves also, when the muscles are much excited, possess the property of influencing the action of the vessels which supply them. Dr. Copland found the spinal marrow, with its membranes, of a hare hunted down, in a state of apparent inflammation. The vessels were gorged with blood. This shews the influ-

ence of the action of the muscles over the vessels of the centre of the nerves which supply them, and the relation is undoubtedly as intimate in one direction as in the other.

As the authors before us have thrown no light upon the *treatment* of the disease, we shall not, at present, proceed to consider this most important part of the subject. We shall, however, have an early occasion of bringing it more fully and, we trust, more satisfactorily before our readers than our limits would have permitted us to have done on this.

II.

*THE ART OF DETECTING DISEASES.**

[Third Article.]

An Essay on the Symptoms and History of Diseases, considered chiefly in their Relation to Diagnosis. By MARSHALL HALL, M.D., F.R.S.E. 1822.

Symptomatology; or the Art of Detecting Diseases. By ALEXANDER P. BUCHAN, M.D., F.L.S. 1824.

Novus Thesaurus Semiotices Pathologicæ, quem collegit atque edidit MAUR. HASPER, Med. Chir. atq. Philos. Doctor. 1825.

Manuel de Clinique, ou des Méthodes d'Exploration en Médecine, et des Signes Diagnostiques des Maladies. Par L. MARTINET. 1825.

Séméiologie Générale, ou Traité des Signes et de leur Valeur dans les Maladies. Par F. J. DOUBLE. 5 tom. 1811—1825.

ADHERING to an arrangement which, whatever may be objected to it, has the recommendation of being simple and convenient, and, as we believe, practically useful, we have considered the diagnostic signs to be collected from the Face and Attitude, and from an observation of the Thorax and Abdomen. In the same plain and natural order of inquiry, we shall proceed to notice symptoms connected with the Alimentary Canal, the Urinary Organs, the Uterine System, the Extremities and General Surface, and the Intellectual and Sensorial Functions; divisions of great importance, and involving many particulars of much interest.

THE ALIMENTARY CANAL. — If we were required to name any *single* circumstance in the state of a patient which might be relied upon as a general test of the severity or stage of a malady, of its aggravation or decrease, we should be disposed to say it was to be found in the state of the tongue. We do not mean to disavow the want of reliance we have so repeatedly expressed on any one symptom, taken by itself; but we are every day more and more convinced of the supe-

* Continued from page 117.

rior certainty of the indications afforded by the tongue to those afforded by the pulse. Not to dwell on the well-known character of this organ in scarlatina and in diabetes, its aspect generally affords important information in the phlegmasiæ; and is invariably instructive, though greatly diversified, in the many forms of indigestion; whilst in fevers of every type we could almost go so far as to say, that the appearances of the tongue are infallible. To this we may add, that in the countless local affections, functional or organic, proceeding from the great root of disorder in the first passages, and scattered widely over every part of the system, we have still a source of intelligence in the condition of the tongue; as well as in all cases where the reverse of this appears to take place, and affections, in the first instance local, draw the whole constitution into a participation of evil. In order, however, that the practitioner may derive correct information from the state of the tongue, he must compare it with the symptoms and duration of the malady he is to treat, and is to inquire into any recent changes which may have been observed by others. The gradual cleaning of the tongue, for example, in continued fever or in typhus, is a very encouraging circumstance; but its sudden restoration to redness is an unfavourable and often a fatal symptom. Dr. Buchan remarks, that if it is 'red and tremulous, it betokens the approach of diarrhœa:' we have found this state precede profuse discharges of blood from the bowels in the latter stages of fever. Hippocrates considered the same state the precursor of delirium. In inflammation of the lungs or throat, redness of the tongue has long been observed to indicate danger. Several conditions of the tongue are yet so little understood as to be no more than undefined indications of *something wrong:* it is not very uncommon to find the tongue clean and moist, with the exception of two parallel streaks of mucus; this appearance, about which we have heard various opinions, is not noticed in any of the works before us. A furred tongue is so common a symptom in the earliest stages of indigestion, observable particularly on rising in the morning, that it is erroneously considered natural to some people, and is disregarded; whereas it is, perhaps, always a warning of future suffering, which might be averted by some changes of diet and regimen, or escaped by means of some judiciously administered medicine. Such a state of tongue may undoubtedly be observed two or three years before any serious secondary dyspeptic affection supervenes; but, during all this time, the patient will be found to have been regardless not of it alone, but of other precursory symptoms, as irregular bowels, flatus, occasional debility,

frequent but slight ophthalmic attacks, uneven spirits, &c., which a professional adviser would have known to arise from a failing digestion. Dr. Hall has endeavoured to describe the morbid appearances of the tongue in all the stages of this affection — an affection which seems to be more or less partaken of by all persons after they have attained middle age: but they are too various to be comprehended in any description, whilst every description will be found to contain something which the reader has not observed, and to omit some appearances which he has occasionally remarked. We have not been able to verify the observation of Dr. Buchan, which, indeed, he seems not to offer unreservedly, that 'a thin dark-coloured pellicle, extending along the centre of the tongue, indicates the presence of hydrothorax;' but it deserves attention, as coming from a physician of his experience and habits of observation. He adds: —

'I have observed this symptom to vanish when the fluid was temporarily removed by the operation of active remedies, and reappear when effusion again recurred.'—P. 58.

Some of the French physicians, who take greater pains than we do to verify every observation scattered over the works of Hippocrates, have found inflammation of the lungs of one side of the chest indicated by whiteness and roughness of the corresponding half of the tongue: but this seems too much like a fanciful refinement, and irresistibly reminds us of their own unceremonious proverb, 'grand observateur, grand menteur.' The tongue becoming brown and dry in ardent fevers has been looked upon as an indication of putridity: it seems, however, to be an appearance readily put on in peritonitis, and, perhaps, in other inflammations, and not to warrant such a deduction. In phthisis pulmonalis the tongue is frequently, we should say generally, clean; but if we find it at first covered with mucus, we shall find also, to our great discouragement, that, though our medicines may remove this coating, they do not bring the stomach to a healthy state. Remarkable cleanness of the tongue is often a sign of great debility; and this cleanness may be accompanied with a smooth, shining redness — an appearance frequently observed in children; or with paleness and some tumidity, as noticed by Dr. Hall in chlorosis. But, of all diseases, it appears to us, that none is so strongly characterised throughout its progress, by the morbid and various aspects of the patient's tongue, as fever. It is in the commencement of the attack, amongst many anomalous and obscure symptoms, of which the patient can give no clear or connected account, that we find correct information in the thin white coating and tremulousness of the scarce-protruded

tongue. In a few days more, we observe this coating becoming gradually thicker; and, as the disease advances, growing darker in its shade, approaching from the centre to the borders, and by degrees pervading the whole of the tongue. Again, among the earliest symptoms of amendment and the faintest dawnings of hope, we hail a slight moisture struggling through the incrustation,—the commencement of a progress of restoration to its natural appearance in the edges of the tongue, from which, back to the centre, we anxiously watch the retreat of the sordes: we see our hopes destroyed by a secondary encroachment, and a new movement in advance of this dark and ill-boding hue; or we trace with unspeakable satisfaction the slow but gradual departure of this blackness, until it altogether disappears — founding thereon hopes of recovery which are seldom, if ever, deceptious. We presume these observations accord with general experience; and although the appearances are more marked in this severe disorder of the frame, we are inclined to think there are many other disorders in which attentive observation of the state of the tongue would furnish information little less valuable and exact.

Aphthæ are seldom met with in this climate, except when there are signs of general debility and intestinal irritation, as in infants; or where they are the result of such long-continued disease, as can require no elucidation from so incidental an appearance.

Impairment of the power of swallowing, even when no pain is complained of except when attempts are made to take food, is a very serious symptom.

'By observing the *kind of effort* made by the patient,' says Dr. Hall, 'we may often ascertain pretty nearly what is the situation of the cause of obstruction. If the fauces be defective, the substance attempted to be swallowed is often forced through the nostrils; if the cardia be obstructed, the patient frequently regurgitates a large quantity of food apparently swallowed.'

When the patient can swallow fluids with less pain and difficulty than solids, we have to fear some permanent and increasing cause of obstruction in the œsophagus, likely to prove fatal: when solids are swallowed with less difficulty than fluids, the œsophagus is probably partially paralysed, or its utmost action, as well as that of the pharynx, in some way impeded. We say this, however, rather on the authority of others: we have not generally found the patients inclined to make nice distinctions between solids and fluids, when both have been productive of painful efforts, vomiting, and pitiable distress.

It is very natural and very proper to put some queries con-

cerning the prevalence of thirst, or the state of the patient's appetite for food, when we inspect his tongue. Late physiologists have peremptorily fixed the seat of thirst in the fauces; but perhaps without sufficient reason: it sometimes, at least, appears to be occasioned by the presence of acrid matters in the stomach, and the patients are instinctively led beyond the mere moistening of the fauces, to conveying a considerable quantity of fluid into that viscus, not only with great present refreshment, but often with the effect of allaying the troublesome sensation as completely as they do that of appetite by a certain measure of food. Thirst may be occasioned by mental agitation or violent passion; and many officers with whom we have conversed have mentioned this as remarkable during the excitement of the field of battle, when, like Hotspur, they were '*dry with rage* and extreme toil.' Considered as a symptom, thirst, though frequent, common to all affections attended with fever, and an accompaniment of dropsy, is not often of importance. The absence of thirst, the tongue being dry, in cases of fever, may be looked upon as a sign of diminished sensibility. A new and unaccustomed desire for wine and ardent spirits is often a warning of insanity. An aversion to fluids, though remarkable in most examples of hydrophobia, is not pathognomonic of that dreadful disorder: it has been observed in some bad fevers, as observed by Double, who particularly speaks of one kind which, for that reason, he designates hydrophobic malignant fever, and in which there appears to be an inflammation of the stomach and throat. * The same author quotes from Sarcone a description of spontaneous hydrophobia, † in which the patients appear to have been maniacal, but with several symptoms usually produced by the bite of a rabid animal, and among the rest an aversion to fluids; or rather, as it would seem, ‡ an obstinate refusal to drink: it is to be remembered, however, that patients in hydrophobia are often very willing to drink, and make repeated, but unsuccessful, attempts to do so. Dread of water has also been observed in nervous subjects, and in other examples related by various authors.

The state of the appetite is of more consequence. Its diminution is a common accompaniment of diseases attended with fever, those excepted in which the fever is of a hectic character, for in them we often observe the appetite good to the last. Loss of appetite is frequently the unquestionable

* Semeiologie, Vol. II. p. 200.
† Sarcone, Historia Ragionata de' Mali Osservati in Napoli, nel 1774.
‡ Vide Double, Vol. II. p. 204.

consequence of disease of the stomach, bowels, or other viscera concerned in the digestion and assimilation of food; or of that loss of tone which is induced by old age: but, on the other hand, it is often serviceable to the patient, and a means employed by nature to prevent our self-indulgence being fatal to us, as in fever; and if the stomach is forced to take food against this plain dictate, vomiting, or great inconvenience, or aggravation of the malady, is the result. An inordinate appetite, also, is sometimes merely a natural stimulus to repair deficiencies; as after a fever of some weeks' duration, or after long fasting from any other cause, or after copious evacuations. An insatiable appetite may, however, arise from a depraved secretion in the stomach, from too great muscular irritability of that organ, or from disease. It is not uncommon in many chronic diseases, at once encouraging false hopes in the patient and his friends, and becoming a new source of dyspeptic troubles to those already debilitated. It is a remarkable feature in diabetes, and 'often the precursor of disease, especially of apoplexy.'* Variability of the appetite is a common symptom of worms. Depravation of the appetite, which is seldom seen in men, is a characteristic symptom of chlorosis, and sometimes takes place during pregnancy, and in cases where there is irregularity in the uterine functions. Nor should it be forgotten that it is sometimes an effect of long-continued bodily and mental suffering, as in the cachexia Africana, or dirt-eating disease of the negroes.

'The longing for such materials,' observes Dr. Mason Good, no less feelingly than eloquently, 'is, in this disease, a mere symptom, and rarely shews itself till the frame is completely exhausted by atrophy, dropsy, and hectic fever, brought on by a longing of a far more serious kind — a longing to return home; a pining for the relations, the scenes, the kindnesses, the domestic joys of which the miserable sufferers have been robbed by barbarians less humanised than themselves; and which they have been forced or trepanned to resign for the less desirable banquet of cattle-whips and threats, and iron harness, and hunger.'†

The various symptoms of dyspepsia are, of course, to be inquired into, as pain, flatus, acidity, vomiting, &c. Pain coming on after food is taken, and lasting two or three hours, is frequently a mere result of debility of the stomach; but the same inconvenience may arise where there is an enlargement of the liver, pancreas, or spleen: if the pain comes on two or three hours after eating, and is only relieved by vomiting of the ingesta, we have to dread some serious

* Buchan, p. 59. † Study of Medicine, 2d Edit. Vol. I. p. 129.

disease affecting the pyloric orifice. Pain when the stomach is considered to be empty may arise from depraved secretion, or from those derangements within the organ which lead to the ejection of water or of blood, and in both cases with relief: but when there is organic disease, the pain will be found to occur at uncertain periods, and to be temporarily relieved, sometimes by the discharge of an abundance of acrid and offensive matter, so various, and occasionally so unaccountable, in its appearance, as to baffle comprehension or description. In a very protracted case which we had some time ago an opportunity of observing, the exacerbations of pain recurred every three or four days, and were relieved by the copious discharge of watery fluid, containing a thick admixture of what could only be compared to chopped grass. The appearance of the ejected matter must, therefore, always be examined and compared with the general symptoms. The sympathies of the stomach are so extensive, that vomiting may arise from causes primarily affecting almost every other part of the body; from severe injuries of the brain; and in the course of phthisis pulmonalis; and from the irritation of diseased viscera near it, as the liver and pancreas, or remote from it, as the uterus or bladder. When the stomach is itself the subject of disease, as of gastritis, vomiting is a striking symptom, and the ingesta are immediately returned: but vomiting occurs also in inflammation of other parts of the intestinal canal. It is to be remembered, that vomiting may be a symptom of hernia; and that it is the occasional precursor of several of the exanthemata. Nor should it entirely be forgotten, that cases are related by authors on whom the utmost reliance may be placed, in which vomiting occurred daily for years, almost all the ingesta appearing to be returned, and often with blood, and yet in which, on dissection, there was found no cognisable disease.

No complaint is more general among dyspeptics than that of flatus, particularly in the numerous cases occurring in the labouring classes in the country, who eat voraciously of food difficult of digestion, and drink strong beer without moderation, whenever they can procure it. Flatus is a continual source of uneasiness, and often the unsuspected cause of many painful symptoms referred to the chest or abdomen, in the hysterical; in other cases, it is the cause of much uneasiness, erroneously supposed to depend on determination of blood to the head; the former has been denominated by some authors false gout or false rheumatism.* Distension from

* Double, Vol. III. p. 163.

flatus is a tormenting accompaniment of most chronic diseases of parts within the abdomen, in some of which the intestines undergo enormous distension. It is, however, always a secondary symptom, and, as such, seldom of diagnostic importance.

Practitioners in this country have certainly not been open to the charge of want of attention to the state of the bowels or the appearances of the fæces, for many years past, although M. Double, in that part of his work which was published three years ago, accuses his countrymen of negligence in this respect. This branch of observation has sometimes with us been carried to what may be called a ridiculous excess: fashionable physicians have been said to carry painted specimens of colours in their pocket, to assist the imperfect descriptive powers of their patients; whilst the pocket-book of many a worthy invalid at Cheltenham or at Leamington has contained, as the diurnal register of many successive weeks, little more than an exact note of that one circumstance in the day, which seems alike to fill the minds of the foul and of the fair at a watering-place; as if, with the Scotch physician mentioned in Sir Astley Cooper's Lectures, they thought that, as far as *this* world was concerned, regulation of the bowels was the only thing worth thinking about. We should scarcely allude to this subject here, if we did not really think that medical men are chargeable with having rendered the public unnecessarily indelicate on this topic. We know of no place so utterly destructive of romantic feeling, and in which the meanness and misery of human nature is at once so sadly and ludicrously exhibited, as the pump-room of a fashionable spa. The alternations of drinking and walking, and walking and drinking, the mixture of determination and solicitude, the visible expectation of specific effects, the measured paces, the meditative and purely selfish countenances, indexes of thought absolutely concentrated on the individual viscera, the inappropriate music of a celebrated band, the cold ceremonials, and the abrupt departures, — altogether form a scene in which all that is elevating in our mixed nature is overwhelmed and lost, and all that is 'of the earth, earthy,' is displayed with a grossness of publicity to which nothing but habit could ever have reconciled the gentlemen and ladies of a reserved and decent nation. After all that has been said about the colour of the alvine discharges, it is of less importance than the form and consistence, and it is surely quite unnecessary to tax the patient's mind with noting, and endeavouring to describe in words, what is never correctly described by him

or by nurses or servants, and concerning which we find it impossible to obtain correct information without actual inspection.

'The alvine evacuations,' says Dr. Hall, 'are generally very offensive in all cases attended with rapid *loss of flesh*, but in none more than those in which the powers of life are, at the same time, in a state of decline, — as in the decay of *old age*, in cases of *slow fevers*, &c.'

The same character attends continued and typhus fever, as well as all cases of neglected bowels on which serious nervous disorders have supervened, as epilepsy, chorea, mania. Black and sanguineous discharges are often the effect of hepatic or splenic obstruction; but examination after death has shewn, in several cases of this kind, the mucous membrane lining the intestines, and particularly that of the duodenum, very strongly injected, without marked disease of any other organ; and pitchy stools are seen in hydrocephalus. Discharges of blood with the fæces, which are so common, and even so salutary to some hæmorrhoidal subjects, and in them so frequently associated with derangement of the liver, are a very serious symptom in the latter stage of fever, and in purpura hæmorrhagia: in neither of these cases can there be any difficulty in distinguishing the disease from dysentery. An appearance of hæmorrhoids, or bloody evacuations, is now and then given by hæmorrhage from the vessels at the posterior part of the nares, the blood being swallowed, and passing through the alimentary canal, though in a coagulated state, yet still so as to deceive the patient. Green stools often precede convulsions in children; and their production is generally considered a criterion of safety when the treatment of croup is trusted to calomel. Double says they are also common in hysteria, hypochondriasis, and mania; but we doubt the correctness of the observation. We have often reason to be amused with M. Double's entire dependence on Hippocrates, and his familiar reference to the cases of those who were under the care of that justly venerated practitioner; speaking of 'Cleonactus, who lived beyond the Temple of Hercules,' and of 'Appollonius of Abdera,' and of the 'wife of Æceta,' and of 'the son of Pythion,' and of 'the patient who lived in the garden of Dealces,' as confidently and as easily as if the cases had recently occurred among the men and women living in the Faubourg St. Germain, or the Rue St. Honoré, or the Garden of Plants. To this implicit deference to writings handed down to us, not unimpaired, from high antiquity, we more seriously object, when we think it blinds an author to facts, as we think it

surely sometimes does the author in question, and, among other instances, in the following passage : —

'Grey-coloured or white dejections, in acute diseases, and above all in bilious fevers, *are mortal;* and particularly if there is lesion of the liver, with frenzy or delirium. Appollonius of Abdera had the right hypochondrium tumefied and painful in the beginning of his disorder. Some days afterwards, the dejections were white, and resembled curdled milk. He died frenetic, on the thirty-fourth day of his disease.'—Vol. III. p. 199.

It would seem as if M. Double had formed his opinion exclusively on this case. A deficiency of bile is generally detected in the lighter colour of the fæces, but the variable shades have questionless been too exclusively attributed to variations in this secretion; and several kinds of food, to say nothing of medicines, change the appearances considerably. In some very puzzling cases, the presence of worms in the fæces will explain and relieve many strange symptoms; but we are not aware of any specific fæcal appearance which indicates the presence of these parasitic animals in the intestines. Inodorous dejections are said to be the result of great debility.* During inflammation of the mucous membrane of the intestines, coagulable lymph is generally formed, and evacuated in shreds, compared by Dr. Pemberton to boiled macaroni : these appear when the danger of the disease has passed : but offensive curdled evacuations, with specks of blood, lead to a suspicion of ulceration. A kind of membranous discharge is not at all uncommon in some patients, perhaps arising from chronic inflammation of the mucous lining of the bowels : Dr. Good speaks of this appearance under the head of Diarrhœa Tubularis. Diseases affecting the calibre of the rectum are generally detected by the appearance of the fæces.

'Tenesmus accompanies some of the diseases of parts in the neighbourhood of the rectum, as calculus, scirrhus of the prostate gland, diseases of the uterus, &c., as well as those of the rectum itself. It is unnecessary almost to state how painful a symptom it is in most cases of dysentery, of diseases of the mucous membrane of the colon and rectum, of impacted scybalæ, &c.'†

When the fæcal matter, to use M. Double's expression, is passed with satisfaction, we have not to apprehend disease of the rectum, womb, or bladder; affections of which organs are sometimes known to exist by the circumstance of pain during the extrusion of the fæces. Hysterical patients are subject to a deceptious kind of tenesmus, the cause of

* Double, Vol. III. p. 204. † Hall, sect. 443.

which is not so serious as to be very evident.* Of this we have met with a remarkable example, in which the complaints made by the patient were sometimes of such a kind, that a practitioner to whom the case was new would have believed there was partial occlusion both of the rectum and vagina. When the stools are passed consciously, but in bed, the patient's strength and energy are considerably impaired; but this state is not unfrequently recovered from: it is sometimes a symptom of diseased spine. When the stools are passed unconsciously, the patient, unless he is maniacal or comatose, is generally near death.

THE URINARY ORGANS.—The colour, quantity, and consistency of the urine, also, though by no means conveying so much or such constant information as has been supposed, are yet worthy of some attention: these states of this secretion are so liable to variation from slight causes, of almost hourly occurrence, as to be in almost all cases of second-rate importance, excepting when there is a tendency to the formation of calculus, in which case the peculiar appearances of the deposite become a guide to our practice; and in diabetes, when the saccharine property of the urine determines the serious character of the affection.

'Red particles,' Dr. Buchan observes, 'adhering strongly to the sides of the containing vessel, which patients commonly denominate a red sand, generally indicate disease of the liver.'†

We doubt this explanation of an appearance so common as to be very reasonably referred to accidental disturbances in the stomach and bowels. In the phlegmasiæ, we, for the most part, find the urine very high coloured, and depositing a reddish sediment as the disease declines: in nervous complaints, copious and pale; in dropsy, and in inflammations, within the thorax particularly, scanty and of a deep colour; in dyspepsia cloudy, or mucous, or albuminous, or with an oily surface, but infinitely variable; in hepatitis dark; in icterus yellow; in scirrhus of the liver depositing a pink sediment, the rosacic acid, though this deposit occurs in other instances; in hydrocephalus depositing a white sediment;—observations to all which there are many exceptions.

'Discharges of mucus with the urine attend chronic inflammation of the bladder, disease of the prostate gland, calculus, &c. Pus and blood are sometimes observed as the effects of calculus and ulcers of the bladder or kidney.'‡

Bloody urine is not very common, although patients often speak of it when, on examination, it is found not to exist.

* Double, Vol. III. p. 207. † Symptomatology, p. 54.
‡ Hall, sect. 466.

It takes place, however, in diseases of the kidneys, ureters or bladder, particularly when there is a calculus, and is thei easily induced by exercise.

'If the kidneys are the seat of the hæmorrhage,' says M. Martinet, 'the discharge is accompanied with pain and heat in th loins, and often with coldness of the extremities; it is only in th case of blood being accumulated in the bladder that the hypo gastrium is enlarged and painful, and the patient has a frequen desire to make water. When the hæmorrhage proceeds from th ureters, there is a sense of pain and tension along those canals Hæmorrhage from the bladder is ordinarily preceded by frequen desire to void the urine, by heaviness and pain above the pubis extending to the perinæum, the groin, and the lumbar region. Th patients sometimes complain of a burning sensation about the anus and of tenesmus and constipation; the excretion of urine is painfu and difficult; the blood is either not mixed with urine or very par tially. In hæmorrhage from the urethra, pain is felt in some par of the canal; the blood is red, liquid, and pure, and flows withou effort.'*

Black urine was anciently considered a symptom fre quently portending a fatal result: it has in modern time been regarded as merely unassimilated; and it occurs no and then, from causes little known, and without danger. A white phosphatic sediment is by some practitioners looke upon as indicative of a rachitic diathesis: white deposites ar seen in hydrocephalus, in diseases of the prostate, and i some dropsies. The manner in which the urine is passed i more important. If much pain is complained of, it is ou duty to ascertain the cause: if the pain is seated in th hypogastric region, and comes on after the bladder i emptied, we suspect calculus: if pain is felt in the passag of the urine, the lining of the bladder or urethra is probabl affected. The circumstance of the urine being passed in full stream, or interruptedly, may also afford us information Dr. Hall says —

'I have once or twice met with cases in which the urine wa expelled by involuntary *gushes*, occasioned by a sudden contractio of the bladder; they have appeared to be of a hysteric or nervou nature.'†

A full bladder, without any desire to evacuate the con tents, betokens a loss of sensibility; unconscious discharg a loss of power or paralysis, though it may be the result c irritation in the urinary passages. Involuntary discharge, c incontinence of urine, may arise from all causes capable c preventing its delay in the bladder, and thus occasioning

* Manuel de Clinique, p. 311. † Sect. 458.

to pass from the ureters to the bladder, and from the bladder through the urethra, and out of the body continually, or as fast as it is secreted in the kidneys. The bladder in these cases may, and for the most part does, retain its muscular power; but the power of the sphincter is lost, or weakened, or interfered with, by paralysis, by irritations of the neck of the bladder, by accidental injuries, or by age. The terms suppression and retention have occasionally been employed indiscriminately, but the difference between the states is as great as the meaning of the words is distinct: and it is most important to distinguish one state from the other. Retention, whether ureteric, vesical, or urethral, is never a trifling affection, but is yet often remediable; suppression is always a disease full of danger. A very serious mistake may be made in cases of long-continued suppression, in which the urine may at last begin to flow, whilst the bladder remains distended — a state which leads, in the end, to extensive abdominal inflammation, mortification, and death. This fatal error is to be avoided by an examination of the hypogastric region, where the distension and fluctuation will generally shew the true condition of the bladder: should these diagnostics be obscure, the introduction of the catheter must not be neglected. Cases even more deceptious, but less dangerous, are mentioned by surgical writers, in which the bladder has been enormously distended for weeks, although urine was discharged, at the usual intervals and in the accustomed quantity, all the time. Retention, it is to be kept in mind, may depend on inflammation or paralysis of the bladder, or inflammation of its neck; on pressure; on obstructions in the urethra or the bladder itself; and on injuries of the spine. It is also to be watched in typhus fevers. In female patients, it should not be forgotten, that retention often occurs when there is no reason to attribute it to such serious causes.

Although we are not ignorant that long and learned disquisitions have been written on this secretion, and that even recent writers have endeavoured to make it available to the knowledge of particular states or varieties of disease, and a foundation for certain rules of practice, we find too much contradiction and uncertainty concerning it, and have observed too much of its daily and hourly variations — of its ready, if not constant, modification by numerous kinds of food and an endless diversity of circumstances, and have heard too much from others of the unsatisfactoriness which has followed many years of careful observation of this secretion,—to induce us to prolong our remarks concerning it, or to attempt to lay down any thing more positive: we shall

therefore pass on to the consideration of the Uterine System; observing, however, by the way, that Dr. Nauman's thesis in Hasper's collection will be found to contain ample details of all that relates to uromancy — details which we leave for those who love to devote their hours to researches which are at once laborious and trifling, and not only difficult in progress, but, we fear, useless when completed.

THE UTERINE SYSTEM. — On this subject we find very scanty information given by Dr. Hall. Even M. Double, whose work is in almost every part so full and copious, is brief concerning the morbid changes connected with the uterine system; nor, if we confine our observations, as we profess to do in this notice, to symptoms of diagnostic value, will it be necessary to say much on this division. The functions of the uterus, with a reference to the age of the patient, are what we have principally to attend to in female patients, over and above the other circumstances already alluded to, or yet to be spoken of. Suppression of the menses may arise from debility, or from plethora without debility — cases opposite, and requiring opposite treatment, but only to be distinguished by the general symptoms of each case. Suppression takes place in pregnancy; but the practitioner would be very incautious who should depend upon this sign, even when accompanied with an increased size of the abdomen: we must always inquire into the collateral proofs of a gradually ascending abdominal tumidity, a dark areola round the nipple, and other symptoms, in the absence of that which is the most decisive of all, the motion of the fœtus. In a case of recent occurrence, amongst many doubtful signs, the decided suspension of phthisical symptoms appeared a circumstance worth remarking, but the case yet remains undetermined. Where there has been a cough of some continuance, with frequent pulse and irregular hectic, suppression of the menses adds much strength to our suspicion of phthisis. When the catamenia have never appeared, we have generally to overcome debility; but in many cases we have rather to correct a faulty distribution of blood, and, whilst we try to relieve other organs, to endeavour to excite the uterus to its peculiar secretions. If, after the cessation of the catamenia at the usual period of life, there is an unexpected return, unaccompanied by pain, this also is a mere effect of debility, for the most part, and readily cured: but if much pain attends the discharge, we have most probably to contend against a serious disease. Menorrhagia, like amenorrhœa, occurs in states of the system exactly opposite, and requires the same prudent consideration of all the circumstances that may be present. If long-continued and painful,

occurring about the natural period of cessation, we have to apprehend scirrhus of the uterus, or polypous, or other tumours. Menorrhagia in delicate women is a frequent consequence of mental agitation or continued disquietude: it is also sometimes merely dependent on a neglected state of the bowels; but it frequently proceeds from disease of organs remote from the uterus, and not unfrequently of the spleen. The practitioner will not be unmindful, that there may be a profuse flow of blood from the uterus as well as excessive menstruation, and, where the distinction is important, will not omit the only means of making it—an inspection of what is discharged. In cases of leucorrhœa, the consistence of the discharge, its acridity or blandness, and its colour, are the circumstances which inform us whether it depends on debility, irritation, or disease; and whether it proceeds from the vagina, os uteri, or interior of the uterus. The term leucorrhœa has been so vaguely applied, and serious diseases, of which it is only a symptom, may be so aggravated by a treatment directed solely to the suppression of the discharge, that there can be no question regarding the propriety of an examination, not too long deferred, in doubtful and in chronic cases. During menstruation it is not common for a leucorrhœal discharge to continue, a circumstance which sometimes facilitates its distinction from gonorrhœa. M. Double informs us that leucorrhœa is often *critical* in the endemic catarrhal fever of Paris, and that many of the cases occurring in that city have that origin.*

The Extremities and General Surface.—It is very easy, when we ascertain the state of the pulse, to make ourselves, at the same time, acquainted, without any unnecessary display, or parade of investigation, with the temperature and general state of the surface, the firmness or flaccidity of the muscles, the dryness or moisture of the skin, the degree to which emaciation has proceeded, the colour and form of the fingers and nails, &c. Heat of the general surface accompanies fevers in the active stage, and acute inflammations; but in the stage of collapse the surface is cold and shrunk—changes which may be well observed in the different stages of an intermittent.

'Augmentation of the temperature and redness of the upper extremities,' says Double, 'sometimes precede violent attacks of apoplexy. I have seen many examples of this.'†

Heat of the hands and feet after eating, has, we think, been too positively considered an indication of phthisis by some

* Vol. III. p. 274. † Vol. I. p. 467.

authors.* Though generally a symptom in cases of that disorder, it is not confined to them. The belief entertained by some physicians of accurate information being conveyed of local internal disease by means of local external heat, has already been mentioned. Burning heat of the feet often adds to the miseries of other disorders, without any very evident cause, as in erysipelatous affections *not* affecting the feet, and yet more in dropsies. It sometimes happens — and we can scarcely determine whether the phenomenon is confined to any particular disease, although we happen to have observed it most strongly exhibited in a case of phthisis pulmonalis, in which there was a suspicion also of an hepatic affection — that the patient complains of sudden and intolerable sensations of heat confined, perhaps, to the fore-arm, or limited to the space between the elbow and shoulder, disappearing in one extremity and becoming sensible in another, the skin of the suffering part conveying, at the same time, a burning sensation to the touch. This may, perhaps, be a consequence of the powers of nature, in such chronic cases as it appears in, being inadequate to the perfect establishment of the hot stage of hectic. What M. Double calls *nervous* heat, appears to have some relationship with what we have described; 'a heat which has nothing determinate in its character, either as to its situation, duration, or intensity; which passes rapidly from one part to another, which comes in gusts, or like lightning, and alternates with vague and irregular chills.'† According to this writer, it is often unconnected with fever; is a frequent attendant on affections of the pulmonary mucous membrane, malignant fevers, hysteria, and hypochondriasis; but the parts of this description are too loose to be applicable to the same symptom. In considering the heat of the surface, we are led to the important inquiry which concerns the presence of hectic fever — important, because it goes far to determine the nature of some disorders, and the progress of others. What is called the hectic flush is sufficiently familiar to all observers, and considered by unprofessional persons the distinguishing mark of consumption; but to the physician, extreme habitual paleness is scarcely less ominous. Heat and redness of the cheeks are commonly, and M. Double says invariably, present in inflammations of parts within the chest: heat of one cheek, and coldness of the other, are said to indicate the malignant character of acute disorders.‡ Repeated observation of a symptom by no means rare, has led us to connect flushing of the face with functional, and sometimes with

* Double, Vol. I. p. 470. † Vol. II. p. 346. ‡ Vol. I. p. 303.

organic, derangement of the liver. Coldness of the extremities, when there is heat of surface in the upper part of the body, and all the varieties of irregular sanguineous distribution, often require our attention: coldness of the lower extremities, with extreme paleness, is very remarkable in some cases of dyspepsia, chiefly during the performance of digestion, and, together with this symptom, there is generally some disturbance about the heart, or determination to the vessels of the head. Dryness and roughness sometimes, and sometimes clamminess and coldness, are very remarkable in the advanced stages of typhus. 'In diabetes the surface is often peculiarly dry, harsh, rough, and exfoliating, and deprived of perspiration.'* Profuse perspiration on the arms and chest, or on the legs, particularly coming on during sleep, is indicative of debility. Profuse perspirations, productive of no relief, generally accompany the pains of acute rheumatism and tetanus. The same circumstance is remarked by Dr. Hall to attend inflammation of the mamma, and some affections of the kidney.

Emaciation is always instructive either of the duration or character of the disease: there are few chronic diseases in which it does not take place, but it is indicative when occurring early in the course of the malady, of the organ or organs principally affected, and a negative information may consequently be deduced from its absence. We shall on this subject quote from Dr. Hall.

'Loss of flesh takes place in the *acute dyspepsia*, but is scarcely observed in the *chronic* forms of that disorder, — a circumstance by which they are therefore distinguishable from *insidious organic diseases or protracted inflammations*. Emaciation is little observed in diseases of the *head*, *heart*, and even the *lungs*, compared with those of the *mesenteric glands*, the *stomach and bowels*, the *liver*, the *pancreas*, &c. In *diseased mesentery*, the emaciation and loss of strength are nearly, if not absolutely, *progressive*; in *disease of the liver*, there may be for some time, even for years, a degree of recovery, and weakness and loss of flesh, and even icterus and anasarca occasionally disappear.'†

Dr. Pemberton, to whom Dr. Hall refers, explains the difference observable in these different instances of disease by the circumstance of diseases productive of emaciation being seated in 'glands of supply,' and diseases in which emaciation is not an early or a constant symptom in 'glands of waste.'‡ But we must not forget that emaciation is sometimes one of the first symptoms, and, in all probability, in

* Hall, sect. 216. † Sect. 220, 223, 224.
‡ Diseases of the Abdominal Viscera, c. vi.

such cases, an indispensable condition, of recovery.* This remark, together with some examples in illustration of it, will be found by the reader in the first volume of the valuable Collections from Dr. Parry's Medical Writings. Loss of sensibility is an approach to paralysis, though the cause may sometimes be merely local. Numbness, also, is often the result of pressure, as pain is the result of irritation higher up in the course of the nerve, of which we may find instances dependent on calculus, spinal disease, constipated bowels, and tumours of different kinds. The cramps of the lower extremities, which attend some abdominal diseases, must be similarly understood. Numbness of the arms is seen in diseases of the heart, in angina pectoris, and in hysterical females. Diminished power of the extremities may be produced not only by paralysis, but by painful and long-continued disease of the joints, or it may be only part of the languor and inertia of a patient recovering from fever. When the patient stoops habitually over the thigh-joint, we are taught by surgeons to fear serious disease there; and pain in the knee is a familiar symptom of one of the worst diseases of the same articulation. Rigid extension of the limbs, particularly of the lower limbs, is seen in severe forms of hysteria. Wandering pains in the limbs are often the light and slightly regarded precursors of severe attacks of fever; and we have known the same symptom the only acute one in a fatal case of pneumonia,—a circumstance, perhaps, of very rare occurrence, but still deserving to be mentioned.

Œdema of the feet and ancles is, in women, a common consequence of all affections which have lasted long enough to debilitate, as well of pregnancy, in which, as well as in cases where abdominal tumours of any kind impede the return of blood from the extremities, the effect is merely mechanical: these examples are to be distinguished from anasarca, which may be considered the extreme aggravation of œdema. In mere œdema, the integuments are generally little changed, except as regards their distension, and the surface has a soft and natural aspect; in anasarca, the skin is tense, white, shining, streaked or *moreened* with red: the first is a mere accident, but the second supervenes when chronic maladies have become hopeless. The anasarca following eruptive diseases, or produced by exposure to cold when the body is heated, is of a different nature, and often readily relieved by active practice. Dr. Hall remarks —

'There is a singular morbid affection of the surface, which has not, I think, been noticed by any practical writer: — *the face, and*

* Double, Vol. II. p. 294.

some parts of the surface of the body, become suddenly and remarkably puffed and swollen; this affection appears to be occasioned by the presence of some indigestible substance in the stomach, and generally yields to the operation of an emetic and purge.' *

We have here another observation of M. Double, of a class which we have throughout considered ourselves justified in objecting to — one which, with the appearance of great nicety and exactness, we deem to be erroneous and fanciful: —

'The swelling of the extremities of one side, which takes place in individuals affected with hydrothorax, proves that it is on that side that effusion has taken place in the pulmonary cavity.' †

We have attentively watched numerous melancholy cases of hydrothorax, without remarking the occurrence here described.

Tremours, in their lighter modifications, are very common, and produced and readily aggravated by recent causes of nervous debility. Tremours of single parts of the body, and tremours violently affecting the head, sometimes occur in paroxysms, and are probably of the family of epilepsy. They are, when they appear habitually, sometimes the forerunners, and often the sequelæ, of paralytic attacks: in the latter case they occasionally precede the perfect restoration of the limb; and it is not improbable that tremours are in some instances serviceable to the constitution, the diffused agitation of the limbs, and the sensorial expenditure thus continually occasioned, serving as a relief to the nervous centre, on the same principle that vehement action accompanies and relieves mental excitement, and drunken people, or those under the influence of sudden joyful emotions, find satisfaction in dancing, and passionate people in pacing quickly about the room, and lunatics in long-continued muscular exercises and vociferation. M. Double, indeed, asserts, that 'deep-seated nervous affections, as, for instance, affections of the head, are *cured* by habitual tremours.' Dr. Hall says —

'There is one morbid affection in which tremour is so characteristic as to have been chosen for its denomination — the *delirium tremens;* from the occurrence of this symptom, in a remarkable degree, I was enabled, in one case, to *foretell* that delirium would follow.' ‡

Subsultus tendinum is a sign, also, of more or less impaired nervous power, and may be compared, as an irregular distribution of nervous influence, to the irregular gusts of heat above mentioned. When death is fast approaching, it is not uncommon to see the patient pushing off the bed-clothes

* Sect. 232. † Vol. I. p. 472. ‡ Sect. 238.

from his chest, or drawing them towards him, or unconsciously rejecting what is offered to him; and after these signs recovery seldom, perhaps never, takes place. Floccitation, or picking the bed-clothes, is also not unfrequently a symptom of approaching death; but it occurs in severe diseases which have a tendency to lower the actions of the brain, as in enteritis, and must not be looked upon as of fatal import.

'If, in acute disease, the patient, being delirious, continually lifts his hand to his forehead, we may be assured there is violent cephalalgia, and predict approaching delirium.'*

Pruritus, which should, perhaps, rather be spoken of under the head of morbid sensations, sometimes precedes the yellowness of skin in icterus. Troublesome itching is often an unexplained symptom of a broken constitution, and also now and then adds to the other inconveniences of old age. Pruritus is a singular product of a sufficient dose of the acetate of morphine, of which it is considered to be so constant an effect, as to be important in a medico-legal point of view.† The sensation termed aura, usually proceeding from the extremities, and a blue colour of the fingers and hands, or toes and feet, are among the common precursors of an epileptic paroxysm.

A particular delicacy of the hands is observable in many consumptive patients. Large and disproportioned joints, particularly of the fingers, are often seen in struma, and in children disposed to mesenteric disease. More positive indications have been assigned to the nails: Dr. Hall observes, that in very protracted cases of chlorosis, along with a branny, sallow, unhealthy state of the skin, 'the nails become brittle, break off in lamellæ, — so that the patient is incapable of taking a pin out of her dress, — and sink in irregularly in their middle part.'‡

'From no circumstance,' says Dr. Buchan, 'are we enabled so accurately to determine the predisposition to pulmonary consumption as from the uniform configuration of the nails. If a child inherit this peculiar structure of nails from a parent, who has died of phthisis, escape from a similar fate is hardly possible. It has been observed, that young persons addicted to the habit of biting their nails are prone to pulmonary consumption.'‖

There may be something of correctness in the first part of this passage, but the latter part appears to us to be quite trifling and foolish. Neither can we agree in the observation

* Double, Vol. II. p. 545.

† See an extract from Professor Orfila's observations on this subject, in the REPOSITORY for July, p. 79.

‡ Sect. 231. ‖ Symptomatology, p. 90.

which follows, that 'confident hope of recovery' is a 'diagnostic symptom of phthisis.' A great proportion of consumptive patients see death long before its near approach, some with calmness, but many with vain longings after a life from which even a complication of sufferings has not weaned them. On the other hand, many chronic disorders are no less strongly marked by confidence of recovery in the patient, when the confidence of the practitioner is gone. This has been so particularly the case in some examples of lumbar abscess, that we have attributed it to the presence of hectic.

Among the appearances of the skin, that of purple spots, level with the surface, variable in size, and confined to no part of the body, must not be passed over. This may be a trifling disorder, dependent on some intestinal irregularity; or an active disease, relieved by venesection and purgatives; or the external indication of a diseased state prevailing in all the arterial extremities, and connected with various internal hæmorrhages. In all these cases, the purple spots are not themselves of much importance: when they form part of a serious disease, the general condition of the body will sufficiently indicate it. If we had not on one occasion known the blue colour produced by nitrate of silver hastily pronounced to depend on organic disease of the heart, we should scarcely have thought it necessary to notice the difference between this artificial pigment, and the colour of the general surface arising from causes obstructing the circulation. The colour produced by a long course of nitrate of silver can be compared to nothing more aptly than that which is produced on the nail by a black-lead pencil; the functions of the skin remain unimpaired, and its temperature is unchanged: but the blueness occasioned by a diseased heart is seldom unaccompanied with coldness of the surface, dyspnœa, and dropsical symptoms —

> 'Skin ill-perspiring, and the purple flood
> In languid eddies loitering into phlegm.'*

Varix generally attracts most attention in the lower extremities, and is, for the most part, indicative of pressure in the abdomen, though it may result from a general varicose disposition, observable in a less degree in other parts. Varices are said to be salutary in determination to the head, and in some cases of mania;† an effect probably referrible to change of determination.

(*This subject will be concluded in our next Number.*)

* Armstrong. † Double, Vol. III.

III.

TUBERCULAR CONSUMPTION.

Sur le Traitement des Tubercules du Poumon. Par le Docteur NASSE, Professeur à l'Université de Bonn.

On the Treatment of Tubercular Consumption. By Dr. NASSE, Professor in the University of Bonn.

CONSUMPTION is the great scourge of this country. More prevalent, undoubtedly, in some parts of our island than in others, it is of frequent occurrence in all. Believed by some practitioners to be occasionally curable even in its confirmed and worst form, it is acknowledged to be every where a cause of appalling fatality. Obscure in its origin, rapid in its general progress, confined to no season, excluded from no climate; its symptoms distressing, and, for the most part, intractable; its subjects either the young and promising, or those who have just attained the full powers of mind and body; it is an object of general interest and general dread. The labours of pathologists have illustrated the morbid states in which it consists, but the practice followed in the disease has either stood still, or been varied by occasional attempts at still greater success — attempts made with sanguine hopes of advantage, but resigned, one after another, after a certain number of trials, in despair. On this account, every new idea relating to the disease deserves to be listened to, and every plan that ingenuity, skill, or humanity can suggest for its treatment, merits consideration and prudent trial: we shall, therefore, briefly notice a paper 'on the Treatment of Tubercles of the Lungs,' published by Professor Nasse, of Bonn, in the Journal Complémentaire for May last.

Foreign writers have frequently spoken of the causes of consumption with very little reflection. A recent one, whose name does not at present occur to us, attributes its great prevalence in England to the habitual use of *butter;* ignorant or forgetful that the disease prevails in countries where the luxury of butter is not to be procured. Writers of great eminence have been equally remarkable for sanctioning fancies of this kind; for we can give no more respectful title to Stahl's opinion, that the abundant use of *bark* predisposed the English people to consumption; or to Hoffman's, who, as if the disease was limited by a *salique* law, attributed it to our so frequently partaking of strong wines; or to Van Swieten's, that it arose from the general use of animal food; or to Baldinger's and Quarin's, that it was much promoted by the severity of military punishments. Professor Nasse considers the principal causes of consumption to be, inheri-

tance, contagion, and unwholesome nourishment; and he thinks it probable, but not proved, that the itch and mercury may contribute to produce it. 'We really think the itch, although it is justly a very unpopular disease, may be absolved from many crimes with which the hatred of mankind has in every age accused it, and from this amongst the rest. The merits of mercury are not so easily settled, because those diseases in which it is given in the greatest excess are themselves of a nature to excite a lurking disposition to phthisis. Neither do we agree that the occurrence of phthisis is rare after forty.

An opinion of the contagious nature of phthisis, which is very generally entertained in some parts of the Continent, is becoming more prevalent among us, although we have never met with what could be considered clear proof of such a quality. In a country in which phthisis is so common, the death of husband and wife, in the same disease, does not call for the explanation of contagion; and where the children die of phthisis soon after the death of phthisical parents, we still do not require it: Dr. Nasse, however, mentions instances of men labouring under tubercular phthisis marrying *two* or *three* wives in succession, all the wives dying of phthisis, in consequence of receiving the contagion from these said husbands, who outlived them all, in spite of their tubercles: such instances cannot be supposed to have been very frequent. On the other hand, Portal mentions instances of husbands losing two or three wives of consumption, and yet escaping the contagion themselves. If consumption be really contagious, it appears to be so in a very low degree: we never heard of a physician, a nurse, or a neighbouring patient, catching the disease in the wards of an hospital; but it must always be advisable to dissuade young and delicate persons from sleeping with their relatives when the disease has become confirmed, and more especially when the night perspirations are considerable, and the breath very fœtid.

The following are the observations of this writer on *dyspeptic phthisis*: —

'Autenreith and Wilson Philip have called the attention of physicians to phthisis pulmonalis supervening on an affection of the digestive passages: and an impartial review of the history of the disease leads me to consider it probable that such is the source of the complaint in more frequent instances than is generally supposed. The analogy between, if not the identity of, tubercles and scrofulous tumours which have so intimate a connexion with the act of sanguification* in the abdomen; the very intimate connexion

* The word *hématose*, employed here, and which we have translated *sanguification*, is used by later French writers to express not only the conversion of chyle into blood, but of arterial blood into venous.

existing between the stomach and the lungs, both receiving the same nerve, and both actively participating in the affections of that nerve; the circumstance of gaseous fluids which have passed from the digestive passages into the blood being chiefly liberated from the circulating stream in the lungs, which cannot be effected without some irritation of the latter organs; the fact that even metallic mercury, which we have injected into the veins of animals, in imitation of Gaspard, is chiefly found in the substance of the lungs, surrounded by small albuminous masses; — all confirm such observations as have already been made at the bedside of patients.'

The opinions entertained by Professor Nasse on the subject of the supposed origin of tubercles in an inflammatory action, will be found to agree, for the most part, with that of the best authorities of the present day: the subsequent passage relates to this subject, as well as to the influence of catarrh in creating those morbid productions: —

'As regards the production of tubercles by catarrh, we may oppose to that supposition the historical fact, that, according to all appearance, phthisis pulmonalis did not formerly succeed in such frequent instances to catarrh as it does in the present day, when tubercles are evidently of more common occurrence. Besides, we remark now, that catarrh may, in certain cases, last whole years without giving rise to tubercular phthisis, whilst, in other cases, we see the symptoms of this formidable malady a few weeks only after the catarrhal affection. If we do not admit that tubercles existed previously in these cases, we are driven to suppose a seed of tubercles which cannot be demonstrated, another specific affection of the lungs, a tubercular virus lodged in the blood, or elsewhere, &c.

'Laennec has strongly opposed the idea, so often advanced, of tubercles being the result of inflammation. The proposition is no more entitled to acceptation than an hypothesis, quite as widely spread, which teaches that all diseases accompanied with morbid formations are to be traced to the same cause. In the first period of the existence of tubercles we find no inflammatory symptoms; if they come on, it is in the course of the disease. It has been shewn by Cruveilhier,* that an antiphlogistic plan of treatment has no effect in checking tubercular phthisis, even in the earliest stage: and we know that the situation of tubercles and the usual seat of inflammation of the lungs are not the same; that the latter most frequently attacks the superior lobes and the left lung, whilst the former are found oftenest in the right lung and in the inferior portion, as attested by Bayle, Laennec, Lherminier, Fouquier, and Chomel, as well as by Bourdon, in his parallel between the maladies of the two lateral halves of the body. I may cite, as a further proof of the different circumstances favouring tubercles and inflammation of the lungs, the experiments made at my instigation by

* Médecine Pratique, c. i. p. 170.

Freudenberg,* who, having killed several animals which had been kept eighteen days in an atmosphere constantly charged with coal-dust, found the lungs highly inflamed, but not the smallest trace of tubercles.

'If these circumstances prevent our looking upon inflammation or catarrh as causes producing tubercles, it does not follow that these two states have not very important relations with tubercular disease, inasmuch as, being readily associated with tubercles which have had another origin, they may produce irritation in them, and accelerate a fatal result. When the parts surrounding tubercles are inflamed, there are, almost always, pain, high-coloured urine, and inflammatory irritation of pulse. But tubercles may increase, break, and discharge themselves, without this process: or catarrh and inflammation may occur and disappear, whilst the tubercles remain; the one being a rooted evil, incorporated, in some degree, with the body, whilst the others are merely accidents, chiefly depending on the nature or influence of external agents. This slight sketch of the principal conditions during which, as far as any thing certain can be established on this subject, tubercles of the lungs are developed and pass into the state of irritation, indicate to us in what manner and to what point we are able to afford assistance, either in preventing the establishment or the aggravation of the disease.'

We most sincerely hope that Professor Nasse's views of the hereditary transmission of this malady, as well as of scrofula, gout, &c., and of the consequent progressive degeneracy of the human race, are as exaggerated as they are unduly mournful. It is not easy to understand with what peculiar powers he wishes physicians to be endowed, in the following passage: —

'We would not,' he says, 'call for the help of medical police; and Heaven forbid that we should see it interfering to prevent marriages; but what might not be effected by physicians, if their social position was different, and they were invested with public functions which allowed them to act for the general interest, instead of being confined to the pure and simple exercise of their profession?'

With respect to the diet of phthisical patients, the writer before us and almost all other writers have been able to add nothing to the rules prescribed by the Greek physicians: it should be moderate in quantity, and not stimulating, but nutritious. Although it is obvious to every practitioner of common sense, that a general rule in diet must have all the inconveniences of a quack medicine applied to all diseases, yet the confidence of patients is a good deal shaken, in many parts of this country, by exaggerated reports of the success of a tonic treatment. We were lately allowed, as a great

* Diss. de Tuberculorum in Hepate et Pulmonibus Causis atque Curâ. Bonn, 1824.

favour, to benefit ourselves by the perusal of a manuscript case of a 'lady of distinction,' who had been quite cured, of consumption, as she believed, by the Rev. Dr. Stewart; and, of course, all the consumptive persons within the circle of this lady's acquaintance must be put upon the same plan — a plan which, although it may be admirably adapted to some cases, would only hasten death in others. We would beg to suggest to Dr. Stewart, that if patients are allowed to circulate manuscript particulars of their own cases, they should not omit the most important part — a detail of the symptoms. In the case we were happy enough to peruse, the symptoms were *left out;* but a very particular direction was given to Dr. Stewart's house, and a kind suggestion that he could prescribe by letter quite as well as if he saw the patient.

Dr. Nasse remarks that butchers are rarely attacked with phthisis: their general good health had previously been noticed by Beddoes and others, and is, perhaps, to be attributed partly to their leading a very active life, and partly to their living upon meat not recently killed, although there may be other causes for it. Dr. N. has frequently advised that weakly boys should be apprenticed to butchers, above all things counselling that they should not be made tailors, which, he says, is 'to devote them to phthisis.' We need not seek for the cause, as he has done, in the sudorific impregnation of the garments brought to be repaired. The attitude of a tailor, the temperature of his workshop, the light flocculent matters for ever floating in it, and the want of exercise, must be very unfavourable to young men of weak lungs.

In determining what atmosphere is most favourable to the phthisical, Dr. N. thinks too little attention has been paid to Dr. Wells's opinion of the infrequency of phthisis in countries where intermittent fevers were common; and adds —

'We have a part of the country near the Rhine which is subject to frequent inundations, where cases of intermittent fever occur every year: I had already advised persons supposed to have a weak chest to reside in that country, but a more attentive examination has proved to me that consumption is to be found there.'

Nothing has been more arbitrary than the rules by which consumptive patients seem to have been consigned to different places of residence in this country, on the Continent, and in islands in the Mediterranean and the Atlantic; as to Bristol, where consumption is particularly frequent; to the sea-coast, where it is doubtless more common than in sheltered inland parts of the country; to Malta, to Madeira, to the West Indies, &c. The last observation will apply to the

coasts of France, Portugal, and Spain, in all which there is more consumption than in the interior of those countries. Dr. Wells's opinion has not been supported, in general, by physicians residing in Cambridgeshire, Lincolnshire, and other fenny situations; and we are inclined to think any country, or any place, might be safely recommended to the consumptive patient where the air is *mild, dry,* and *equable:* it is difficult to find places possessed of these requisites; but if the patient does not gain them by change of place, he sacrifices the little comfort which he is capable of enjoying without any kind of equivalent. The result of Dr. Nasse's experience exactly accords with our own in this particular. The medical treatment of consumptive patients is thus spoken of by Dr. N., and we fear with too much justice: —

'I have made many attempts to cure and to dissolve the tubercles, but all attempts have been useless. Some medicines, about which a great deal has been said, and particularly digitalis, have been evidently injurious, producing irritation, and hastening the progress of the disease. In consequence of the publication of some opinions by Jenner, tending to prove that external tubercles and a phthisis, accounted tubercular, had disappeared under the influence of long-continued nausea, I have persevered in giving tartar emetic to patients unquestionably affected with tubercular phthisis, until they had a constant propensity to vomit, but this method was equally unsuccessful. We should avoid aggravating the already deplorable situation of phthisical patients by resolvent and alterative medicines. Long experience has convinced me, that those who abstain from medicines, and attend simply to regimen and diet, suffer less, and live a longer time, than those to whom we prescribe the usual antiphthisical remedies, digitalis, phellandrium, conium, lead, &c., even provided regimen is equally attended to. All these measures stimulate the body, the vascular system, and the lungs, and thus increase the fever and the progress of the tubercles, and even augment the pain and inflammation; the pain becomes greater, and life is rendered shorter.

'The cure of tubercles may doubtless be effected by nature, as has been especially proved by Laennec: but the cure is not effected in these rare cases by resolution, but by the expulsion of the tuberculous matter by the bronchi, and the cicatrisation of the cavity. The physician has no power to forward this process; and when it is promoted by nature, the only assistance he can give is by removing whatever may interfere with her intentions. The more strictly he observes this, and the more carefully he avoids any cause of excitement, the better does the patient find himself, and the more easily does nature accomplish her work. Sudden changes of temperature, deviations from correct regimen, mental excitement, and medicine untimely administered, invariably increase the difficulty of expectorating, quicken the pulse, and add to the nocturnal restlessness. Remedies may then be required to restore calmness to the system,

but the mildest should be selected. When the difficulty of expectoration has been unattended with any inflammation, I have always found it best alleviated by a small quantity of sal ammoniac dissolved in aqua malvæ sylvestris (*eau de quimauve*), sweetened with a little syrup of gum. If decided symptoms of phlogosis should supervene, we should not hesitate to apply leeches or the cupping-glasses, and nitre must be substituted for the sal ammoniac. If there is an erythismal state, considerable cough and agitation, without inflammation, relief will be derived from the hydrocyanic acid; if this medicine should produce diarrhœa, which is not an unfrequent effect of it, we must give opium. In two cases in which this kind of erethism existed, I have seen some alleviation produced by the inhalation of carbonic acid gas. But all these remedies, unless they are administered at the proper time, and in circumstances precisely adapted to their being prescribed, make the patient's condition worse instead of better.'

The next and last extract we shall make from Professor Nasse's paper, we leave, without comment, as matter of reflection with our surgical readers: —

'In other maladies, when medicine abandons us, surgery often comes to our assistance, and more frequently as surgeons become more and more bold and successful in their attempts to penetrate into the different cavities of the body. Are we not to expect any help from it against tubercles of the lungs? In these affections, and others partaking of the same nature, situated in the lungs, when there can be no discharge effected by the bronchi, when the fever and debility are increasing, and the destruction, or, at least, the infarction, of the lungs is proceeding, would it not be possible to reach the disease from without inwards, in the interstices of the ribs? The first attempt of this kind, which was made some years ago by my persuasion, was not successful. The subject of it was phthisical, and was unable to expectorate; the right side of the chest returned a dull sound on percussion; and as he had lost all hope, he consented that an opening should be made into the chest, in that part where the sound was the dullest. The pleura-costalis and the lung were found to adhere in the intercostal space where the incision was made: the lung was solid and resisting: the incision was two lines in extent: nothing flowed out of it at first, but in the course of the following days, a tent having been kept in the wound, there was a considerable discharge of ichorous fluid. Less oppression was now felt by the patient, and his cough was not so violent as before; but the respiratory efforts, notwithstanding all our precautions, repeatedly caused the tent to fall out; the opening soon closed; and the patient, falling into the state in which he had been previously, put himself under the care of another physician. Since that time the diagnosis of softened tubercles has been facilitated by the stethoscope of Laennec, and the attempt might consequently be repeated with a greater chance of success. The operation would appear to be particularly indicated in two cases: —

1st, when the softened tuberculous mass is not readily discharged by the bronchi, and the patient is tormented with fever and an oppressed respiration; 2d, when the passage into the bronchi has closed, and coldness, with oppression, shew that there is danger. Perhaps, also, it would be found advisable when there is a free passage for the tuberculous matter into the bronchi, in order to avoid the danger of suffocation, and even to ensure the occlusion of the cavity. There is, however, a considerable objection to this project, which has not yet been mentioned. The patient could not be hurt by having an external opening made for the discharge of tuberculous matter, which might more conveniently pass out in this way than into the bronchi or the sac of the pleura. But in order that the operation should be performed without danger, we ought previously to ascertain that there is adhesion between the pleura costalis and the lung, or that it is practicable to excite this adhesion before the pleura costalis is perforated. I have examined the bodies of a good many phthisical subjects, to discover whether the tubercular points of the lungs were adherent or not to the corresponding portion of the pleura costalis: in some this was the case, but it was not so in others, and we have not at present any means of ascertaining this circumstance during the life of the patient. Moreover, several experiments made upon dogs have shewn me, that by exposing the external surface of the pleura costalis, and irritating it by mechanical or chemical means, inflammation may be produced, without causing adhesion between it and the lungs. I intend to pursue these inquiries, with a view of determining what assistance may be derived from surgery in phthisis pulmonalis.'

IV.

*THE MATERIA MEDICA.**

[Third Article.]

A Manual of Pharmacy. By William Thomas Brande, F.R.S. Lond. and Edin., Professor of Chemistry to the Royal Institution, and to the Society of Apothecaries, &c. &c. 1825.

Phytographie Médicale, ornée de Figures Coloriées de Grandeur Naturelle, &c. &c. Par Joseph Roques, Doct. en Méd., Ancien Médecin des Hospitaux Militaires, &c. &c. &c. Paris. 2 Tom. Quarto. 1825.

It has been urged as an apology for the neglect into which the works of the older pharmacologists have fallen, that their observations on the employment of remedies are altogether empirical. This doubtless is true to a considerable extent; but it applies no more to many of the writers on the materia medica of the two last centuries, than to those of our own times. The suggestions even of the oldest writers on this branch of medicine — viewing them as suggestions

* Continued from page 152.

only — are extremely useful, and are calculated to lead to many valuable results: these suggestions are also much fuller and more diversified, and, in some cases, even more judicious than the equally empirical notices contained in many modern works. In order to satisfy himself as to this point, let the reader turn to the writings of Dioscorides, Galen, Mesuai, Serapion, &c., and afterwards to our own Dispensatories and other manuals of the materia medica, and then judge for himself, whether or no the accounts of the medical uses of the various articles are more empirical in the former than in the latter. As long as the nature of disease remains but imperfectly understood, and whilst the physiological operation of remedies is left entirely unexplained by pharmacologists, they can at the best lay claim, for the therapeutical notices which they furnish, to no higher a grade of merit than rational empiricism: and in the eyes of those who wish to see higher objects attempted, these notices cannot seem to possess better claims even to this distinction, than those by many much earlier, and hence despised, authors. But to proceed.

Calumbæ Radix. — The plant to which this root belongs has not been ascertained. Sprengel thinks that it belongs to the *Menispermum palmatum*. Mr. Brande says nothing of the qualities of this substance, or of M. Planche's analysis of it — a subject surely peculiarly belonging to Mr. Brande's province, particularly when treating of calumba, in a work on pharmacy. It is, however, fortunate for those who come after them, that authors thus occasionally nod over their occupations. 'Aliquando bonus dormitat Homerus:' but why should we complain of that for which we ought to be thankful? The qualities of calumba will be found satisfactorily discussed in the excellent works of Thomson, Paris, and Duncan. The following remarks by Mr. Brande are judicious: —

'Calumba is a very good simple bitter, and perhaps more agreeable to delicate stomachs than most other medicines of this class; especially in the form of weak infusion, conjoined, if necessary, with aromatics, in dyspepsia, in diarrhœa, and in the after-treatment of cholera morbus. Alkalies, acids, and saline aperients, may also be administered with it, and it is not blackened by solutions of iron. The following is a good formula where flatulency and heartburn are attending on a slightly gouty habit, with a red deposit in the urine: —

'℞ Infus. Calumbæ f. ℥v.
Tincturæ Calumbæ f. ℥j.
Ammoniæ Subcarbon. ℥ss. M.
Fiat mistura; sumantur cochl. iij. ampla mane et meridie.

'Of the powdered root, from five to twenty grains may be taken three times a day, and it may be conveniently formed into pills with a few drops of water only.

'℞ Seminum Carui contus.
Calumbæ Rad. contus.
Rhæi Rad. contus. āā ℈j.
Aquæ ferventis f. ℥viij. Macera per horas duas et cola.

'℞ Liquoris Colati f. ℥iijss.
Tinctur. Rhæi f. ʒj.
Syrup. Cort. Aurant. f. ʒij. M.

'From a tea-spoonful to a table-spoonful of the above may be given, according to their age, to children who are troubled with diarrhœa occasioning debility during dentition; but care should be taken not to check such laxity of the bowels suddenly or unnecessarily, as it is often the comparatively harmless substitute of the more formidable evils that attend teething.'

M. Planche says, that calumba was found to be an excellent remedy, combined with various other medicines, in the epidemic dysentery which occurred in the French army during the last German campaign. It will generally prove serviceable if it be given in conjunction with the alkaline carbonates or neutral salts, in the visceral obstructions, and disordered functions of the stomach and bowels, of children; more especially if a small dose of hydrargyrum cum creta, with an alkaline subcarbonate, be exhibited every night for a due time. The combination of this root with the ferrum tartarizatum, or with the ferri sulphas, will be found very beneficial in a great proportion of the disorders of the primæ viæ of young subjects, and in a torpid state of the functions of the abdominal viscera. In conjunction with either the sulphate, the supertartrate, or the subcarbonate of potash, it is useful in mesenteric obstructions.

The following formula has proved beneficial in our practice, in chronic glandular swellings, in debility accompanied with increased sensibility of the nervous system, and with an irritable state of the vessels, and in various other disorders:—

℞ Calumbæ Radicis contusæ ʒss.
Calami Aromatici con. ℈j.
Capsici Annui Bac. cont. gr. x.
Aquæ ferventis f. ℥viij.
Macera per horas duas deinde cola.

℞ Liquoris Colaturæ ℥vss.
——— Potassæ Subcarbon. ʒijss.
Tinct. Myrrhæ ʒj.
Extract. Conii gr. xv.
Syrup. Cort. Aurantii ʒij. M.

The dose of this mixture, the relative proportion of its adjuvants, or even the substitution of others in their place, may be regulated according to the views of the practitioner.

Cambogia. *The Gum-resin of the Stalagmitis Cambogiodes.* — Camboge, when taken in the dose of from sixteen to twenty grains, produces great irritation of the mucous membrane of the digestive canal. This surface is reddened, somewhat tumified, and the sensibility of the whole canal is much increased by it. The exhalation usually poured out from the mucous tissue, and the secretion of its follicles, become much more abundant. The irritation extends to the muscular coat, and painful contractions are produced throughout the intestinal canal: hence result vomitings, griping, and colicky pains, and watery and abundant dejections.

When given in a dose large enough to occasion much irritation of the mucous surface of this tube, camboge is not absorbed into the circulation; and it seems doubtful if it be absorbed to any very sensible extent, even under more favourable circumstances. When it is dissolved in an alkaline solution, and given in small doses, and these frequently repeated, it may, however, act in this manner to some extent, as we then frequently find it to produce an increased flow of urine.

Camboge has been chiefly used as an adjuvant to other cathartics, and as a hydragogue purgative. The following formula was much praised by Bontius for anasarca, and by many subsequent authors; and we have reason to know that, in this disease, and, indeed, in the passive form of dropsy, and in worms, it is a most excellent remedy: —

> ℞ Cambogiæ, Aloës, et Ammoniaci, in pulvere, partes æquales: solve in aceto, dein liquorem cola, et consume donec crassitudinem idoneam habeat.

From five to fifteen grains of this mass, according to the purposes intended to be fulfilled by it, are given, and repeated according to circumstances.

When it is desirable to obtain diuretic as well as cathartic effects from camboge, the following formula, from the Hamburgh Dispensatory of 1716, will be found the most eligible: —

> ‘ ℞ Gummi Resini Cambogiæ ʒss. solve in
> Liquoris Carbonatis Potassæ ℥ss.
> Hujus solutionis capiat gtt. xx., quatuor vices in diem, in vehiculo quovis idoneo.’

We have tried this formula, and have observed watery evacuations follow its use, whilst the quantity of urine was

very materially increased. We have also observed similar effects follow the exhibition of camboge dissolved in oil. These facts are in opposition to the theory of a modern pharmacologist, but they admit, nevertheless, of explanation. Either of these solutions may be administered advantageously in the syrup of squills. They should not be given in large doses, but in moderate or small quantities, frequently repeated.

The anthelmintic properties of this substance, and the propriety of combining it with other purgatives, as jalap, calomel, &c., are too well known to require repetition at this place.

Camphor.* *Obtained from the Laurus Camphora, but found in other plants.* — There are few medicines whose physiological action is less precisely understood than that of camphor; and there are certainly as few which are more deserving of having their properties carefully examined into than it is. We have made several experiments with this substance upon ourselves, and have given it in various diseases, in unusual quantities, with a desire to obtain some information respecting its mode of operation on the animal economy. From these observations, as well as from the researches of other inquirers, we are led to conclude, that camphor acts according to the quantity which is prescribed, and the time which has elapsed from the period of its exhibition. When it is taken in a dose of from twenty to thirty grains, the following are the effects which are produced, and which seem to us to divide themselves into three stages, in each of which they vary very remarkably: —

1. Camphor, in the quantity mentioned above, occasions a considerable sensation of heat along the œsophagus and in the stomach. This sensation, however, is not quite similar to that following the ingestion of other stimulants, but is attended with a peculiar feeling of constriction, slight anxiety, and as if the energy of the internal organs were concentrating itself in the vicinity of the parts in contact with this substance. This peculiar sensation, which cannot well be described, continues for a longer or shorter time, sometimes occasioning thirst, and is at first accompanied by a somewhat more frequent action of the heart, and a more contracted state of the pulse, which, however, very soon becomes much

* The *κάφουρα* of Actuarius and others of the later Greek writers, and the *caphura* of the later Latin authors; but it was not known to the ancient Greeks and Romans. The *kaphor* of the Arabians, by whom it was introduced into medical practice. — See Serapion de Temp. Simp. p. 177. C. — c. 334. — Hist. Simp. IV. c. 135. — Parkinson, Theat. Bot. p. 1575.

slower, and, in the extremities especially, much smaller. The surface of the body also becomes much cooler, and a sense of chilliness and of coldness, much greater than the actual loss of temperature, is produced; yet all this time there is a feeling of internal warmth, and of increased tone of the abdominal organs, to which it seems as if the nervous energies of the more remote parts, and of the circumference of the system, were drawn. To these sensations are generally added, paleness of the countenance and some degree of vertigo, sometimes slight rigours of the extremities, occasionally pandiculation, &c., and every other sign calculated to lead a medical man, particularly if he himself be the subject of the experiment, to suppose that the vital energies are concentrated towards the stomach and the nervous system of organic life, and derived from the surface of the body and from the nervous centres of animal and intellectual relations: and the one class of effects is generally in proportion to the intensity of the other—the vertigo, rigours, pandiculation, and chilliness, being most marked, when the sense of painful warmth, constriction, &c., at the stomach, is greatest. The vertigo is not in this case the result of excitement and increased vascularity in the encephalon itself, but of a state the reverse of this; for the carotids pulsate slowly, and they are small in volume; the head is cool, the countenance shrunk and pale, the eyes somewhat sunk, and their albugineous coat particularly pale,—symptoms shewing that one of the primary effects of this substance is to derive the circulation from the brain. After an indefinite time, these primary effects pass off, and are followed by those which are secondary.

2. In about an hour or two, the energies of the circulation return to the circumference of the body: the pulse gradually becomes stronger, fuller, and more energetic than before the ingestion of the camphor; the animal heat is increased; the cutaneous perspiration moderately augmented; and the vertigo, rigours, &c., entirely disappear; the visage becomes fuller and more flushed, and determination to the head supervenes. These effects seem to us partly to arise from the circumstance of the stimulating effects of the camphor on that part of the sympathetic class of nerves supplying the stomach, being propagated to those parts of it which actuate the heart and vascular system generally; and partly to result from a partial absorption of the camphor into the circulation, which seems actually to take place, and which thus imparts a tonic stimulus to the vessels themselves, and the textures through which the blood circulates. In proof of this, we rely upon the experiments of Magendie and Orfila, and upon

what we have ourselves remarked, which go to prove the existence of camphor in the pulmonary exhalations, and in the secreted humours, &c.

3. After these secondary effects have continued for some time, they gradually subside: the nervous and muscular systems remain composed; the pulse is calmer and softer; the perspiration freer; and a refreshing sleep supervenes at last to the headach, which is often present in the second stage of the effects following the ingestion of this substance.

These are the usual effects of a large dose of camphor when it is not repeated. If the quantity taken be much less, the same progression of phenomena is evident; but each stage of its influence is less remarkable, as is the case with the phenomena themselves. When smaller doses are regularly continued every three, four, or five hours, the effects mentioned as characterising the second stage will be chiefly manifest, and these will be in proportion to the extent of the dose. When dissolved in spirits or in oil, camphor acts with greater activity, and is apparently more readily absorbed into the circulation. If the dose be too great, or too frequently repeated, when given in either of these modes of solution more particularly, it seems to over-excite the brain and nervous system, and even to occasion convulsions and death. Its antiseptic virtues are not inconsiderable.

With respect to its immediate action on the mucous surface of the digestive canal, it evidently excites that structure; and when exhibited in sufficient doses, it seems slightly to inflame it. It is chiefly, however, on the nervous system that it acts, but in a manner which varies with the state of this system at the time of its exhibition: — if this system be the seat of active excitement, small doses even will be soon followed by the secondary or stimulating effects of the drug; but if the nervous energy is exhausted by previous excitement, large and repeated doses will be required to rouse it to activity. It is entirely the secondary operation of the remedy that subdues the spasms and inordinate movements which accompany many diseases depending upon want of power and energy of system, more particularly the irregular movements attending the stage of exhaustion in fevers. In that particular state of the vital functions, also, which is characterised by inordinate and perverted action, accompanied by defect of power, it is generally very beneficial.

As to the effects of camphor in disease, much more may be said than the whole limits of this Number could permit. We shall notice only a few facts respecting this part of the subject, with the intention of turning attention to the more decided and appropriate employment of this very valuable

medicine. It ranks, in fevers, amongst our most approved means of cure; but it should be given with some caution in the stage of reaction, and then be always combined with nitre, tartarised antimony, or other antiphlogistic remedies. When exhibited in this manner, and in this stage of the fever, the dose should be small, and not very frequently repeated. The combination of it with nitre heightens its primary or cooling effects, whilst its stimulating influence upon the digestive organs are thereby diminished; and consequently its secondary effects are less remarkable. A similar mode of exhibiting it ought to be followed in many of the phlegmasiæ, particularly in inflammations of the lungs and kidneys, acute rheumatism, gout, &c.; in these, however, and in the former more particularly, tartarised antimony should be preferred to nitre; and in every case the abdominal secretions and the evacuations ought to be promoted. In the last stage of fever, when the powers of life betray exhaustion, camphor must be given in much larger doses: and when the energies of the constitution, and those of the nervous system more especially, are greatly depressed; when there are coma, low muttering delirium, subsultus tendinum, &c., and still more so, if there appear a tendency to a solution of the fluids and soft solids, camphor ought to be administered in very large doses, and repeated at intervals, which should vary according to the effects produced by it—if it rouse the energies of life, it may be given at intervals of four, five, or six hours; if its influence, even in large doses, be scarcely appreciable, it must be administered every two or every three hours.* Under these circumstances of disease, it may be given in a state of

* On this subject, the experience of Callisen agrees with our own. He gave camphor in the latter stages of fever, in doses of ten grains, and even increased it to thirty grains, according to its effects and the state of the patient: he generally repeated the dose every three or four hours. 'Singulas doses'—he says—'camphoræ majores deglutitas mox sequebatur notabilis diminutio caloris cutanei, pallor cutis, obscuratio visûs, respiratio frequens, laboriosa; pulsus minor, crebrior, inæqualis et intermittens; interdùm accedebant rigores. Semper insequebatur mutatio pulsûs ac respirationis, reliqua sæpe aberant, post maximam quoque dosin assumptam, interdùm omnia post minimam dosin magno gradu aderant. Omnia hæc symptomata citò et subitò oriebantur, brevi evanescebant, nec, continuato licet remedio ultrà horam dimidiam protrahebantur unquam. Deinde pulsus vibrabat tardior, regularis, et distinctè major quàm antè assumptam camphoram fuerat, respiratio fiebat libera; cutis, paulò antè frigida et pallida, jam calida tangebatur, rubicunda apparebat; occuli naturalem splendorem reassumebant. Tremores antè, vel mox post sumptam camphoram præsentes evanescebant. Stupor cessabat, et ægrotus mentis iterùm compos observabatur. Convulsiones, si adfuerant, cessabant, et ægrotus pro indole virium membra liberè movebat.'—*Relat. Epidem. Bilios Acta Reg. Societ. Medic. Haunieus.* Tom. I. p. 418.

solution in acetic acid; and this solution may be added to any infusion or mixture which seems most appropriate. Or it may be prescribed as follows: —

℞ Camphoræ ʒj.
Olei Amygdal. dulc. ʒij.
Pulv. Acaciæ ʒjss.
Aquæ distillatæ ℥iijss. Misce.

To this mixture may be added any other medicines which circumstances may suggest.

In epilepsy and hysteria, camphor is a much less efficacious remedy than assafœtida, valerian, or opium; but it may be combined with either of the three with much advantage, in the treatment of these diseases. There are certain forms of mania in which it is a most valuable medicine; and even in the most acute form of this disease, after copious depletions and active evacuations have been put in practice, it frequently produces very excellent effects, particularly when combined with a full dose of opium.

In the few cases of this disease which have come under our observation, we have prescribed it as now indicated. Amongst others, we may refer to a case, to which we were called about six years ago, of acute mania, occurring in a gentleman of a full and robust habit of body. He was attended by Mr. Carroll, a well-informed practitioner in Walworth, by whom he had been blooded and purged, until it became a question whether or not depletion could be pushed farther with propriety. Blood-letting, to the extent of twenty ounces, was practised on the evening on which we saw him, and ten grains of camphor, with two grains of opium, were given at bed-time. He slept during the night, was perfectly rational when he awoke next morning, and was able to attend his counting-house in the city in two or three days from that time. In another case, at which we had the pleasure of meeting Mr. Alcock, whose zeal and abilities as a practitioner and pathologist are well known to the profession, a similar combination of camphor and opium at bed-time, after the requisite evacuations had been practised, proved most beneficial. The patient slept well during the night, and awaked in a state of perfect rationality and composure. We have been induced to mention these cases, and to state the names of the medical gentlemen whom we had the pleasure of meeting on these occasions, by the circumstance of seeing the practice, which was employed both in these and in some other cases, subsequently promulgated as one which is altogether new. This is by no means the case, and neither ourselves, nor certainly those who have subsequently employed it, can have any claims to be con-

sidered the originators of the practice, as we find that it was recommended long before we adopted it. The exhibition of a combination of camphor and opium in mania requires much discrimination. In the cases in which these remedies may be used conjointly with propriety, the addition of nitre to them will be found most advantageous. The combination of camphor, nitre, and opium, was much praised by Friborg* in maniacal diseases; and the practice has subsequently been adopted by M. Esquirol, whose means of satisfying himself respecting its utility are most extensive.

The dose of camphor in mania, and, indeed, in all other diseases in which the remedy is prescribed, as well as the mode of exhibiting it, ought to be regulated entirely by the circumstances of the case, and the effects of the treatment previously put in practice. M. Esquirol usually directs a drachm of it to be dissolved in two ounces of acetic acid, and given in an aromatic infusion in the course of the twenty-four hours. We have found this mode of exhibiting the medicine particularly serviceable in puerperal and hysterical mania, but other appropriate remedies will often be required. Kinneir, Percival, and Perfect, recommended a nearly similar practice in mania; but although they prescribed camphor in considerable doses, they gave it generally in the form of pills — a form more calculated to irritate the mucous surface of the stomach, than to act decidedly upon the nervous system of animal life, for which latter purpose we give it in this disease.

The combination of camphor and nitre is, as we have already remarked, a most excellent febrifuge remedy in nearly all the types of fever — each type and stage of fever requiring, however, very different doses. The same combination is also serviceable in mania. It should, however, be recollected, that camphor acts more energetically when given in the form of an acetic or oleaginous solution, than when suspended in a mucilaginous mixture. In the former of these modes of exhibition, it ought never to be carried farther than two drachms in the twenty-four hours; but in conjunction with opium and the alkaline carbonates, and suspended in a mucilaginous mixture, or made into a bolus, it may be given even to a greater extent: it is this latter combination of it which is most serviceable in nephritic complaints, and in irritations of the urinary passages.

Camphor, it must also be remarked, is an excellent anthelmintic remedy, and is most advantageously combined with other medicines of the same description, and with tonics, in order to prevent the generation of worms.

* In Coll. Soc. Med. Haun., Vol. II. pp. 176—178.

Mr. Brande says, that 'I should consider five grains of camphor every four hours as a full dose.' It may be a *sufficient* dose under certain circumstances of disease; but we will venture to assert, that there are many others under which twice, thrice, and even four times that quantity ought to be given, in order that all the benefit which the remedy is capable of imparting may be obtained from it.

Camphor is advantageously combined with cinchona and other tonics; with assafœtida, æther, castor, and other antispasmodics; with the acetate of ammonia, antimonials, spirit. æther. nit., and other diaphoretics; with hyoscyamus, conium, digitalis, and other narcotics; with several anthelmintic remedies; and with various other medicines, which circumstances will suggest to the practitioner.

(*To be continued.*)

PART II.

ORIGINAL COMMUNICATIONS.

I. *Clinical Observations.* By C. Heineken, M.D.

In No. 112 of the Repository (April 1823), I published a case of diabetes mellitus. The subject of it, Agostinho Antonio Gouvéa, applied to me on the 3d of June, 1822, his complaint having commenced in February preceding. Early in September he was reported well; and his weight, which, when I first saw him, was about 130 pounds, had increased to 142. On the 8th of October it was 175 pounds; and I heard nothing more of him until 30th May, 1824, when he told me, that with the exception of such slight occasional urinary irregularities as hardly to attract his attention, he had always enjoyed as good health as previously to his illness, and had since, (I omitted to mention, in stating the symptoms, anaphrodisia,) become a father. He had persevered in taking animal food two or three times in the day, with bread, milk, farinaceous puddings, eggs, &c., but had always abstained from wine, beer, spirits, sugar, fruits, and vegetables; his bowels had always been regular; he perspired freely; had a good natural appetite; moderate thirst; but always more or less uneasiness at the pit of the stomach. His weight was then (30th May, 1824,) 185 pounds, being ten pounds more than in October 1822, and two pounds more than before his illness. He called upon me in consequence of having perceived his urine sweetish and colourless, attributable by him (*post hoc ergo propter hoc?*) to some irregularity of diet. I ordered ℥iv. ext. rhei, and ℥ij. pil. hydrarg., to be made into twenty-four pills, and one to be taken every night. In a few days

the urine became healthy, and remained so until the 1st November following, when it was sweet again; he was losing flesh, and had a constant anxiety at the scrobiculus cordis; he never perspired, unless under the most violent exertion. He complained of anaphrodisia and great prostration of strength, but his tongue was clean; appetite and thirst moderate, and bowels and pulse natural. He had, with very few deviations, persisted in the diet before stated; but whenever he had indulged in wine, fruit, or sugar, had always experienced some inconvenience.

℞ Pil. Hydrarg. gr. v. nocte maneque.

Emplast. lyttæ scrob. cordis, keeping it open; friction with oil; and a flannel waistcoat.

November 5th. — Weight 174 pounds, being one pound less than when reported well in October 1822, and eleven pounds less than in May of the present year (1824).

	Urine sweet.		6	wine quarts.	Drink 4
6th.	Ditto		4	———	—— 4
7th.	Ditto salt A.M.	Sweet P.M.	5½	———	—— 6
8th.	Ditto	Ditto	5½	———	—— 5
9th.	Ditto	Ditto	4	———	—— 4
11th.	Urine salt all day		4	———	—— 3½
13th.	Ditto salt A.M.	Sweet P.M.	4½	———	—— 5½
14th.	Ditto	Ditto	7	———	—— 7½
15th.	Ditto	Ditto	5½	———	—— 5
16th.	Urine sweet all day		6½	———	—— 6½
19th.	Ditto salt all day		6	———	—— 5
23d.	Ditto salt and sweet		5½	———	—— 5½

Weight 170 pounds. No perspiration, and not at all better. To continue the pills, and drink liq. calcis.

He went on in this manner to the 29th November. The urine sometimes sweet and salt within the same day; sometimes altogether salt; at others altogether sweet. The uneasiness at scrob. cordis was removed. The appetite, thirst, bowels, pulse, and tongue, healthy, and the gums had been long tender and spongy. There was no perspiration of consequence. On the 29th, the blue pill was omitted; a croton oil pill directed to be taken whenever the bowels might require it; the same diet, oil, friction, &c., continued. The blister was healed, and two grains of solid opium ordered thrice in the day, with as much liq. calcis as could conveniently be drunk.

December 1st.	Urine salt	3	quarts.	Drink 3
——— 2d.	———	3	———	—— 3½
——— 3d.	———	3	———	—— 2½
——— 4th.	———	3	———	—— 3
——— 5th.	———	2½	———	—— 3

6th. — Only sweats when working, and then but moderately; but the weather he complains of as cold for Madeira. The opium to be increased to three grains thrice daily.

16th. — The urine has not again become sweet, or unnatural in quantity or colour; he has no thirst; a good appetite, a clean tongue, and quick pulse; and he now sweats freely when he works

hard or uses much exercise. He has never suffered further inconvenience than drowsiness, when at rest, from the opium, which has been regularly taken; and half a drop of croton oil once or twice a week always kept the bowels open: his weight is 172 pounds. Two grains of opium to be now taken three times in the day, gradually reducing it; and the liq. calcis to be continued, no drink agreeing so well.

February 15th, 1825. — The opium was by degrees left off in December; he has taken nothing since, and is in every respect as well as in September 1822. He still continues the same description of diet.

It certainly would have been much more encouraging and satisfactory could I have stated that this man had remained perfectly well since recovering from the original attack in 1822; but as *tant pis* and *tant mieux* are, according to the plastic notions of not a few, in some instances nearly convertible terms, I shall, perhaps, be excused the gallicism if I say, that, on the whole, I know not whether the case is not rendered more interesting, and more instructive, by its very imperfection. It might not have appeared clear to all, that although the opium was, in the first attack, given in such large doses, and so long persisted in, all the credit was due to it; as I could not, in justice to a man labouring under, as far as my experience then went, a fatal disease, stand theorising and watching it step by step, under different remedies.

The very slight urinary derangement in May 1824 was immediately set to rights by the blue pill and rhubarb; but the more serious relapse in November of the same year (1824) was not to be so overcome. I determined to treat it simply by local applications to the seat of uneasiness, attention to the state of the skin, and the blue pill; but although this plan was steadily, and without deviation, adhered to for a month, little, if any, permanent and efficacious relief was obtained. In two days the effect of the opium was marked and decided; the urine never again became sweet; and if possible to ensure him from a relapse, he took it for three weeks, and he remains to this day well. I cannot, therefore, but conclude, so far as one case in which it has twice succeeded warrants, that when this disease is curable, opium is the remedy most likely to effect it. The case is also instructive as regards a long-continued animal diet. I observe it almost universally stated that patients object to, and revolt at this discipline, that it cannot be long maintained, &c. &c. Now this man has been upon a diet almost exclusively animal for nearly three years; and none is more opposite to that which the Portuguese are, from infancy, accustomed to — for one ounce of flesh they consume some pounds of vegetables. I know, too, that he has not deceived me in this matter. Surely, then, this is no feasible objection to this mode of treating diabetes, and I acknowledge my surprise at having seen it so often raised. Whether, after all, the man will fall a victim to the disease is still *sub judice*, and unless he survives me, shall be fairly judged. I think that he will not; for he remained perfectly well, and even stouter than before the attack, for two years. His relapse was then

very slight compared with the original attack, and it yielded immediately that the opium was had recourse to.

The following cases may, perhaps, not prove altogether unacceptable. The first would have annoyed me greatly at my outset in life, and might prejudice, and perhaps deservedly, any young man who, either from ignorance or inattention, should do as I did; and I acknowledge, that although in the second I suspected the head to be the seat of the disorder, yet it was only suspicion. I did not, as the father of the child was in the profession, do more than see it occasionally: it never was entrusted to my care; and more confidence was placed in his mode of accounting for the strabismus, costiveness, &c. &c., than would have been placed in the dictum of one not speaking *ex cathedrâ;* but, after all, and although it may appear tolerably clear on paper to others, and does now to me, the case was certainly very anomalous when it occurred, and deceived another practitioner, as well as the father and myself.

January 24th, 1822. — Rosa de Jesus, aged five. This child has a swelling of the right cheek, about the size of half a pigeon's egg. On opening the mouth, it seems to point just between the fold of the lip and the bicuspid tooth. I lanced it freely, and blood, but no matter, followed.

26th. — The swelling is much increased, and the submaxillary glands on the left (opposite) side are hard and swollen; the left eye is also slightly inflamed and partly closed. Upon more attentive examination, I find that no fluctuation is to be perceived in the swelling, but that, by placing one finger in the mouth when the puncture was made, and the other under the orbit, the whole tumour can be moved. The bicuspid and first molar tooth being loose, I removed them; the fangs were nearly absorbed, and the wounds bled freely. On passing a probe, it could be moved in every direction, without meeting with any bone or obstructing body; it gave but slight pain, and felt as though it were breaking down a soft diseased cerebral mass. The bleeding soon stopt spontaneously.

February 4th. — The tumour increases in size, and the other day bled spontaneously and profusely. The child breathes quickly, and with some stertor; the glandular swelling increases; the eye is closed, and the lids puffed; the feet are œdematous; there is constant inclination to sleep; the child eats well, and complains but little of pain. It should have been stated, that the tumour commenced without any known cause, about a fortnight before the child was brought to me, and that previously to that period it had been as healthy as most children under similar circumstances of poverty and privation.

10th. — Died yesterday.

On examination, the disease (fungus hæmatodes) was found to have originated in the antrum, the external parietes of which were absorbed. The meibomean follicles of the lid of the opposite eye were affected with the same disease, and also the submaxillary

glands of the same (left) side; those on the side of the original disease being sound.

The second case referred to was that of a child between four and five months old, stout and healthy, but habitually costive from birth. When it landed here, it was perceived to squint, but the father accounted for it, by having constantly watched the waves from the servant's arms during the voyage. It was lively, cheerful, and healthy, until eight or ten days before death, then becoming listless, fretful, feverish, and losing appetite. The father treated it for a week by moderate evacuants, never producing more than one or two motions. When I first saw it, the head struck me as somewhat bulky; the anterior fontanelle was large, and pressure upon it was irritating; the strabismus was stationary, and both pupils rather sluggish and dilated; the head was with difficulty maintained erect; and in following an object with the eye, the child preferred moving the whole body to the head alone. There was slight catching of the mouth, fingers, and toes; disinclination towards all motion and noise; fretfulness, but no moaning or crying, and nothing approaching to screaming or crying out; it was careless to all which usually attracts an infant's attention; there was no sudden or violent starting; no heat of head; no suffusion of eye; the skin was natural; urine abundant; bowels constipated; pulse but little quickened: — when asleep it was in an extended natural position; every muscle at rest, and the eyelids gently closed; it rouses gradually and quietly, and soon drops off again.

In two days I saw this child again; it was then much worse; the evacuations were dark and unhealthy; there was more listlessness and depression; the pulse was quicker, and the right pupil dilated and fixed. On the following day (five days from my first seeing it) it died.

Examination. — The toughest adhesion between membrane and skull that I ever remember; it was literally necessary to dissect them apart: a corner of the bone rupturing the brain, water spun out from the ventricles, which must have contained two ounces: coagulable lymph was found at the base of the pons varolii and basis cerebri in considerable quantity, and also on the walls of the left ventricle, evidently the effect of slow chronic inflammation. The membranes of the brain were vascular, and the medullary substance soft.

I purposely say nothing of the treatment, which was adapted to the erroneous view taken of the case, being only valuable as an admonitory one.

I have met with one case of sudden death in phthisis, which was peculiarly interesting to me at the time, having just been reading a report of Castaing's trial — a man who, whether innocent or guilty, was certainly condemned upon as opprobrious evidence as ever disgraced members of our profession. The lady whose death I refer to was in the last stage of consumption, but still able to

attend to her domestic duties. She had, during the day (it was in the country), been superintending the making of some wine: in the evening, without any previous complaint, or without its being known to any of her household that she had retired to her room, she was found lying on the bed dressed, and dead! Unfortunately the body was not examined.*

[We close Dr. Heineken's communication at this place. Dr. H. has felt aggrieved at Dr. Johnson's remarks, in the September Number of the Medico-Chirurgical Review, on his previous paper in this Journal: but confident that Dr. Johnson's mild feeling is universal, we have refrained from publishing Dr. Heineken's statement. We have, however, handed them over to Dr. Johnson for perusal, and are secure that, without any hint from us, he will be anxious to wipe away the impression existing in the mind of Dr. Heineken, of unfeeling criticism against an unresisting invalid.]

II. *Case of Phrenitis followed by Arteritis.* By J. Howell, Esq., Surgeon.

On the morning of the 11th April, I was desired to see Mr. M., residing in this neighbourhood, and found he had been suffering a considerable pain in the head for some days, for which he had applied leeches to the temples, and taken some purgative medicine, without relief. He now complained of a very acute darting pain in the head; his pulse was full, hard, and upwards of a hundred; his tongue very much loaded, and his breath remarkably offensive. There was no increase of the natural temperature of the skin; neither was the face flushed, nor the light offensive to the eyes. His bowels had been freely relaxed. I immediately took sixteen ounces of blood from a large orifice, which produced syncope, and purged him freely with calomel, followed by infusion of senna and sulphate of magnesia; I also directed the head to be shaved, and

* I omitted to state, in my paper on Madeira, No. VII., N.S. (July 1824,) that no greater mistake, and none so common, occurred, as that into which many medical men in England fall, of stating to patients that they can here have a choice of climate: the fact is, that we have only one locality fitted for the residence, during the winter, of patients with pulmonic disease, and that is the city; all the island above it is too cold and too damp; and even in summer, the range at which a consumptive person can command climate is very limited, for you reach a moist long before a proportionately cold atmosphere. Since that communication, scarlatina has appeared in the island. Its importation cannot be clearly traced, neither can it be positively disproved; it ran its course mildly, with but few exceptions, and has entirely disappeared. I cannot learn that a genuine case of croup has ever occurred here. An interesting case of compound dislocation of the elbow-joint, of which I cannot give the particulars, as I was only called in consultation, occurred some time back. A women fell the height of about forty feet from the projecting tiles of a house, feet foremost, into the paved street. Besides other superficial injuries, there was a compound dislocation of the elbow-joint, with a comminuted fracture of the condyle of the humerus. The wound closed by adhesion, and she recovered without one bad symptom.

the use of an evaporating lotion. In the evening I found the pain in the head very much increased, and the pulse as full and hard as it was in the morning, and 120 in the minute. With all this, I was very much surprised to find the blood I had taken in the morning had not the slightest indication of inflammation. I again bled him to syncope, and took about sixteen ounces, applied a dozen leeches to the head, and a blister to the occiput.

12th.—I found the blood still without any signs of inflammation. He had passed a better night, and had got some sleep; and although his head was easier, still he had a good deal of pain; and the pulse continued full, hard, and above a hundred. He had no other pain but that in the head; his bowels were free, and he voided a good deal of clear *pale* urine. I directed him to continue the lotion, and to take a saline mixture with the tincture of digitalis. In the evening of this day he was much the same, with a cool moist skin, and his tongue considerably cleaner.

13th.—I found he had again passed an easy night; but the pain in the head had increased this morning: the pulse was much the same as yesterday. I directed the leeches to be repeated, and the application of some blisters behind the ears. His bowels were not so freely open; he therefore took some calomel and antimony at bed-time.

I was called to him early on the 14th. He had passed a very restless night; the pain in the head very much increased; the skin hot and dry; the pulse remarkably hard, full, and 120; the bowels had been freely open during the night. I again bled him to twenty ounces, which produced complete syncope. About noon of this day he was seen by a physician; he was then easier; but this gentleman was remarkably struck with the immense volume and force of the pulse. Such, indeed, was the action of the heart, that it had become distinctly audible in any part of the bed-chamber. Still the blood I had taken in the morning was neither cupped or buffy, but loosely coagulated. He was merely directed to continue increased doses of digitalis, and to take some calomel at bed-time. In the evening, I found the pain had very much increased again; the pulse not at all altered; the countenance pale and anxious. Such was the natural firmness of this man's character, that, notwithstanding the severest sufferings, he remained calm and collected, and was ready to submit to any measures that could be suggested for his relief. I repeated the bleeding to sixteen ounces; he fainted, and upon recovery was much easier, and remained so during the night.

15th. — The head much easier; he had slept a little during the night; his pulse was considerably reduced. He now first complained of a slight sore throat, and a short, teasing, dry cough. He was directed to continue his medicine, and to use an acidulated gargle.

16th. — The cough and sore throat better; but the pain in the head as violent as ever; and he was much distressed with an incessant hiccough, although he felt no pain in the chest. The pulse

having its usual fulness and quickness, I took twenty ounces of blood from the temporal artery, which produced fainting; and with a view to relieve the hiccough, I directed for him an antispasmodic mixture. In the morning his head was much better, but the hiccough had never ceased, and was now so violent as to prevent his sleeping even for ten minutes. The pulse possessed its force and frequency, and the action of the heart remained throughout audible; the bowels were regular, and the evacuations healthy. He was now taking half drachm doses of tincture of digitalis, without it seeming to produce any effect. A blister was now applied to the scrobiculus cordis.

17th. — The head was much better, and the pulse, although upwards of a hundred, was much reduced in volume and force. The blister had acted well; but the hiccough continued severe, and had prevented him from sleeping in the night.

18th. — The head free from pain, and cool; but the hiccough had never ceased, and he complained of a like pain in the chest. The pulse was hard and full, and the action of the heart as violent as ever. A proposal to pursue the depleting plan was strongly objected to by his friends. The bowels being open, and the head cool and free from pain, I ventured, for the first time, to give him an opiate, hoping it might relieve the hiccough and procure a little sleep.

19th. — He had passed a very disturbed night; the hiccough had never left him five minutes. The head continued free from pain; and although he professed to have lost the pain in the chest, the pulse was as full and hard as ever, and 130. An erysepelas of the right side of the head and face had appeared during the night, but produced no inconvenience. With a view of subduing the immense action of the heart, and constant spasm of the diaphragm, I administered an enema made of infusion of tobacco, in the proportion of a scruple to the half pint. This remained half an hour, but produced no effect; I therefore injected another made by infusing a drachm of the plant in a pint of water, which remained about the same time, but with no better success. He was taking forty minims of the digitalis, and half a drachm of tincture of hyoscyamus every four hours.

20th. — The heart acting as violently as ever, the arteries feeling as if they would burst under the pressure of the finger; yet he had no pain, nor did he complain of any unpleasant feeling but the still violent hiccough. I gave him some nauseating doses of antimony; but as it appeared only to torment him, without affecting the pulse, I desisted, and directed the chest to be well rubbed with tartarised antimonial ointment.

21st. — He had less hiccough, and no pain; had slept a little during the night. He had a slight diarrhœa. The pulse much the same. The ointment not having produced any effect, I applied another blister to the chest. In the evening he had a little pain in the chest, and the hiccough as violent as ever. Upon urging the friends to allow me to bleed him again, they expressed a wish that

Mr. Callaway might see him. I should state, that the physician only saw him on the 14th and 15th. Mr. Callaway was astonished at the tremendous pulse, which he could not fail to be, for it is impossible for any language to convey an idea of its volume and force. Under the direction of Mr. Callaway, I took away twenty ounces of blood, and, for the first time, it was buffy and cupped in a remarkable degree. He was extremely faint, the hiccough left him, and he slept for an hour. He then returned to his former condition, the pulse and hiccough becoming as violent as ever. He was directed the following mixture: —

℞ Liquoris Plumbi Subacet. ♏xx.
Extracti Opii gr. j.
Aquæ distillat. ℥vj. M.
To take a quarter part every four hours.

22d. — He had taken the mixture, and had been very restless; he had some pain in the head and chest; the hiccough less violent, but constant; the pulse not so strong, but 120. He looked much worse, the countenance having assumed a dusky purple hue, and there was a considerable tumefaction of the face. The bowels continued free. The tongue to-day was dry and brown. He lost sixteen ounces more blood, which he bore pretty well. The blood was as strongly marked as that taken yesterday. He was directed the following pill every three hours: —

℞ Hyd. Submur. gr. ij.
Pulv. Opii gr. j.
Cons. q. s. Ft. pil.

In the evening his pulse was as full and hard as before the last bleeding. He lay in a stupor, and when roused complained of no kind of pain; but after answering a question, became delirious.

23d. — Had been very restless, and in a constant low muttering delirium. He had suffered a slight convulsive paroxysm, which lasted but a minute or two. The tumefaction of the face had subsided. The pulse hard, and 120; yet nothing like what it had been. The hiccough had nearly left him. His tongue was dry and brown; the bowels relaxed. He continued in this state till about seven in the evening, when the convulsive paroxysm recurred, and he expired.

The body was examined next day, in the presence of Mr. Callaway, and my neighbour Mr. Ruris. The brain was remarkably firm, but upon being cut into, exhibited an immense number of small red points, shewing the minute arteries very much distended, and the existence of recent inflammation. With the exception of this, there was no other diseased appearance in the cavity of the cranium. All the viscera of the thorax and abdomen were quite healthy; and no mark of disease could be discovered till the pulmonary artery was slit open: the inner coat of this vessel was found in a highly inflamed state, being beautifully injected from the semilunar valves to its division into right and left; the inflammation had not extended into the ventricle, nor into either of the

divisions of the artery. The heart itself, the aorta, the venæ cavæ, and all the neighbouring parts, did not present the slightest vestige of disease.

The subject of this horrible disease was about twenty-eight years of age, of rather a spare habit of body, a painter by trade, of steady and temperate habits, and, till this illness, had enjoyed uninterrupted good health.

III. *Case of Ruptured Tendon Patellæ, with Remarks.* By Edward Thompson, Esq., Whitehaven, Member of the Royal College of Surgeons, London.

At the request of a respected medical friend, Mr. Wylie, I examined the knee of Captain C., the patella of which had been dislocated, and left unreduced, from 1817. The motion, Mr. W. stated, was not at all impaired, when he first had an opportunity of seeing it, in 1819. About three days ago he again saw him, and found the motion as free, and stronger, if any thing. I visited him this day. On particularly examining the nature of the injury, it was discovered that the patella had been forcibly torn from its attachment to the tubercle of the tibia, and removed, by the contraction of the muscles fixed to it, five inches from its original situation. No part of the bone had been broken; the tendon alone had been ruptured. At the distance above named it constantly remains, except when the muscles on the front of the thigh are thrown into strong action; then it ascends from one-half to three-fourths of an inch higher. The lower edge of the bone does not appear to have any attachment to the parts in the neighbourhood; but on its sides it seems fixed to the muscles by a rather loose hold, which is more particularly perceived when the patella is extended; a dragging is then observed affecting the inner edges of the vasti. Those parts of the vasti muscles inserted into the aponeurosis leading to the head of the tibia, would not appear to have partaken at all of injury, and it is probably owing to this circumstance that the free motion of the joint is kept up. The thigh appears a good deal wasted, caused by the long and ineffectual bandaging of the part; the muscles of the leg have suffered no diminution in size, when compared with the other.

On requesting Captain C. to allow me to look at the limb, I was perfectly astonished at the freedom and ease with which he moved it in every direction, rising up and sitting down without the slightest difficulty. He told me that he could run, jump, and walk, without any impediment; and the only difficulty experienced was in walking up the rigging of the vessel, as he found it not easy to disengage the foot from the radlings. He could walk up stairs or down without experiencing the slightest obstruction, and enabled, without the assistance of any support, to perform any exercise with this injured limb, which the active nature of his duties required of him. He has no halt, nor does he swing out the leg, in order to

forward its motions, which is so perceptible in most cases of injured joint. Indeed, the facility of motion is singular, and but ill agrees with the notions hitherto entertained of the importance of the rotula with respect to the motions of the knee-joint. The only difference I could perceive, with reference to the action, between the limbs, was, that when the injured one was bent at a right angle, it could not, with all the muscular exertion the individual could use, be brought to a line with the thigh, when he was placed in a sitting posture; but when standing, he could throw the leg out with much force. The contour of the joint is destroyed, and that is all at which he need grieve, for the motion of the knee he has, to all appearance, as perfectly as the leg uninjured.

The accident was received at sea during a storm. He was resting against the rail of the vessel, when, on a sudden, he was thrown forward, and, in attempting to prevent himself from falling, the tendon of the patella was ruptured, merely by the force of the extensors, the right knee not coming to the deck at all. It was soon observed from that to be the knee which had suffered, and as they had no surgeon on board, the part was doctored, to use his expression, the best way they could. He states, that in seven weeks it broke three several times from its situation, to which they were enabled to bring it by bandages. When he came under the care of a surgeon, several weeks after the accident, nothing could be done. He says that one surgeon recommended him to have the part opened, and inflammation excited in the ruptured part; but to this he was not agreeable, which shewed his wisdom. The motion of the knee was at first very imperfect, but by degrees it became less so, till it arrived to its present strength and freedom.

This case I look upon as a very instructive one, for it informs us that in time a knee may regain a motion, nearly equal to what it first possessed before the reception of an injury, of the nature above described. There are some cases of fractured patella in which, by an over anxiety to bring the parts to approximate, an excess of inflammation is excited, which, if not exactly violent enough to cause death, not unfrequently produces permanent stiffness of the joint. Such are they in which the patella is split into many pieces, where it would be acting the part of a good surgeon to leave the cure almost to nature, rather than, by tight bandages, endanger life, by bringing particles of bone over each other, which, after all art can do, cannot be made to unite. I think, in my brief professional life, I have seen a case or two which were made worse by such attempts, than nature would have made them. A joint possessing the motion of the case above is certainly better than a stiff one; and in bad cases of fractured patella, as the latter effect is a very common consequence, it might be as well occasionally, after fully relaxing the parts, and keeping them so, to apply leeches, &c., leaving the rest to nature: trusting also to motion as early as the inflammation excited by the injury will admit. I am alluding to extreme cases, as more harm is done by efforts made to restore the bone to its original form, than any advantage gained; the commi-

nuted pieces of bone, perhaps, being better separated than joined, if this could be done. A joint intended to be treated in this way ought to be early submitted to a certain degree of action, for long quiescence must lead to that which it is intended to avoid,—want of power and motion. In cases where the patella has been either broken, or the tendon ruptured, and left unapproximated for several weeks, it would be worse than foolish to bandage up the limb and draw the parts together, as this could only tend to weaken the muscular power, which it ought to be our aim to increase. Action must be enforced, or the portions of the muscles that have received an excess of duty will be unequal to the task.

In the above case, the motion of the knee is no doubt affected by the increase of power gained by those portions of the vasti inserted into the aponeurosis affixed to the head of the tibia: to what strength they are able to attain Captain C. is a living instance, shewing, in a peculiar manner, the resources which nature has in her difficulties, and that even the patella may be wanting, without the motion of the knee being very materially affected.

August 7th, 1825.

IV. *Case of Chronic Hydrocephalus successfully Treated by Pressure.* By J. F. Barnard, Esq., Member of the Royal College of Surgeons.

I published, in the Medical Repository for October 1823, a case of chronic hydrocephalus successfully treated by pressure, at a very advanced period of the disease, and when there appeared to be little chance of the recovery of the patient. I have not had since that time an opportunity of proving the utility of the practice, until the occurrence of the present case, in which the disease was not so far advanced, and, consequently, recovery was more rapid than in the former.

A child of eighteen months old was brought to me on account of the size of its head, which had lately increased much, especially during the fortnight preceding the period at which I first saw it. The bones were then much separated, and the fontanelles distended by the included fluid. There were frequent convulsions, but not strabismus. The stomach and bowels were much disordered, and the excretions unhealthy and various, both in consistence and in colour. For three or four days I tried, by means of the usual remedies, to bring these organs to a more healthy state of action; but, being unsuccessful in my endeavours, I directed my attention to the head itself, ordered it to be closely shaved, and applied adhesive plaster tightly around it, in the manner described in the detail of my former case. I then ordered a little castor-oil to be given occasionally, if required. In the course of three days evidence of benefit was apparent to all:—the convulsions had ceased, the secretions from the bowels were becoming more healthy, the stools were regular, and the head much diminished in size, as

was satisfactorily shewn by the adhesive plaster (which was remarkably good) becoming loose and wrinkled in some places. The plaster was, of course, renewed, from time to time, as the diminution of the size of the head required; and from this time the child rapidly recovered.

In a case like this, it is needless to enter into a detail of the daily symptoms. Suffice it to say, that this practice was continued without the least variation for a month, at which time the child had regained its usual health and strength, and it still continues to enjoy both. The head is now — three months from the time of leaving off the pressure — of its natural size, and the bones are rapidly uniting.

The succesful result of this and the former case proves, I think, beyond a doubt, the great utility of this simple mode of practice, not only as a cure, but as a preventive of a hitherto almost invariably fatal disease. It is, I believe, founded on strictly scientific principles: for, by the application of the sticking plaster, we not only give support (which seems to be the thing particularly wanting) to the contents of the head; but by its pressure we bring about absorption of the effused fluid: in what way the pressure produces this effect has not been satisfactorily explained, but that it does so we know from experience.

From the history and result of these cases, I am inclined to think that the original disease is seated in the head, rather than in the stomach and bowels, which is a commonly received opinion, and is at first so slight as to pass unobserved, until it has produced a more apparent disorder in the bowels; and that the first or more proximate cause is a relaxation of the vessels of the membranes of the brain, and of the membranes and soft parietes themselves, attended with a want of due action of the arteries concerned in the formation of bone—rickety children being more frequently affected with water in the head.

Bath, 27th July, 1825.

PART III.

COLLECTION OF MEDICAL FACTS AND OBSERVATIONS.

Section I. — British.

I. *Antimonium Tartarizatum — that sold in a Pulverised State often Impure.*

Our readers are aware, that in the preparation of tartarised antimony, the liquor in which the ingredients are mixed should only be subjected to evaporation until crystals (that is, the crystals of ant. tart.) begin to form. From the following communication, how-

ever (*addressed to the Editor of the Lon. Journ. of Science*), there is reason to believe that this process is often carried much further by the manufacturer, and that the whole of the ingredients contained in the liquor are ultimately mixed together, and sold in the shops as pure tartar emetic — a circumstance which if true to any extent, will go far to account for the contraditory statements which sometimes appear with respect to the medicinal effects of this article: —

'Having repeatedly noticed a portion of insoluble matter in making the vinum antimonii tartarizati, I purchased some tartar emetic in *crystals*, and much to my astonishment was charged nearly double what I had previously paid for it in *powder*. I procured samples from several respectable druggists, and found in all cases the same inconsistency in price. Upon careful examination, however, of the powder (the article purchased in powder), this was explained, for I found in all the samples, after the triple tartrate (the ant. tart.) had been carefully washed out by cold water, at least ten per cent, and in two or three much more, of a powder comparatively insoluble, which proved to be principally *super-tartrate of potash*, and *tartrate of lime*.

'I strongly suspect,' the writer adds, 'that the manufacturers are in the habit, after boiling the tartar with the oxide of antimony and filtering, of evaporating to *dryness* immediately that portion which is to be sold in *powder*; which will at once explain the impurity and cheapness of this article, when compared with that which has been carefully *crystallised*.'—*Lon. Journ. of Science, July, p.* 243.

II. *Ascites — Singular Case of.*

A GIRL, thirteen years of age, the child of parents in extreme poverty, was seized, after an imperfect recovery from typhus, with pain in the region of the umbilicus, constant and sometimes very acute. The appetite was voracious, bowels irregular, countenance squalid, and body emaciated. A nutritious diet and various remedies were in consequence employed, but the abdomen rapidly enlarged, fluctuation took place, and the operation of *tapping* soon became necessary, and was repeated five times in about four months.

After the last operation a tumour formed at the umbilicus, soft, and easily reducible on pressure. As the abdomen enlarged again, this tumour increased to an enormous size, and the integuments became thin and pellucid. In it, then, when *tapping* again became necessary, it was determined to make the opening.

The introduction of the lancet was followed by an immense rush of water, *and subsequently by the protrusion of several transparent vesicles, which, as they gradually emerged from the aperture, became distended with water also.* The chain of vesicles thus formed reached from the umbilicus to the floor (the patient sitting on a chair), and was suspended by a pedicle as thick as the little finger. This pedicle being divided, the entire mass, which resembled an immense bunch of grapes, was removed. The wound soon healed, the umbilicus resumed its natural appearance, all pain

and uneasiness vanished, and up to this period (now twelve months) there has been no return of swelling or disease — June 1825. — R. Long, M.D., *in Lon. Med. Journ., Aug. p.* 114.

III. *On the Use of the Secale Cornutum.*

Many of the grasses and gramineous plants are, it is well known, subject to a disease to which vegetable pathologists have given the name of *clavus*. In this disease one or more grains are usually enlarged or elongated, and project from the spike or panicle to which they belong — they are of an irregular curved form, something like, but much smaller than the spur of a cock — of a light and brittle texture, a dark colour, and unpleasant taste.

Rye, if not the most subject to this disease, is at least the plant upon which it has been most frequently and most particularly observed; and the substance above described, when found upon this plant, is called, in England and America, *horned, spurred,* or *blasted rye;* in France, *ergot;* and by medical men, *secale cornutum.*

Various conjectures have been formed with respect to the origin of this substance, none of which, however, merit particular notice here, for they are all unsatisfactory.

Various diseases, also, in the human race have been attributed to the use of bread made from the diseased or blasted rye, and particularly a species of dry gangrene of the extremities, which sometimes has been observed to pervade entire districts; but the accounts which we have received with respect to these diseases are too unsatisfactory for us to draw any positive conclusions from them. Rye, however, of this description is in general considered as unwholesome; and *rye-bean* is said to have acquired among farmers the character of producing abortion in cattle, possibly from containing a portion of the diseased substance.

Of late years, the attention of medical men has been more particularly directed to the *secale cornutum*, as an article possessing great and peculiar powers in exciting the action of the gravid uterus; and the testimonies in its favour are now so numerous and so respectable, as to claim for it at least a careful trial, and diligent attention to its effects. We are told that about half a century ago this article was used both in France and in America, for the purpose of quickening and increasing the pains in lingering labours. It does not, however, appear to have been so employed at that period by medical men; and having in the hands of the midwives been observed at times to do harm, it fell into disuse, and was in a manner entirely forgotten, until Dr. Stearns, of New York, introduced it, as it is said, into regular practice, and called the attention of the profession to it a few years ago.*

Exhibited in large doses during the time of labour, it is said to produce generally one long-continued action of the uterus, which may last for more than an hour, or until the contents of that organ

* See Medical Repository, Vol. XIX. p. 279.

are expelled. When given in this manner, however, or under improper circumstances, it has proved, it is said, occasionally injurious to the mother, and more frequently so to the child.

But when the presentation is natural, the parts properly dilated, and the progress of the labour merely delayed by want of action in the uterus, a few moderate doses, exhibited at proper intervals, revive, it is alleged, and augment the vigour of the *pains*, so as to accelerate the birth of the child in a surprising manner.

In cases of abortion, and in cases where it was desirable to bring on premature labour, the *secale* has also been administered, but in general, it is said, with little or no apparent effect. Hence it has been supposed that it cannot produce action in the first instance, but that it simply has the power of increasing its strength, or of renewing it when suspended. This, however, is doubtful, for it has been exhibited in cases of uterine disease, in which it has produced its peculiar effects.*

These effects seem to be strictly confined to the uterus, and to that organ, perhaps, in an enlarged state — they generally arise speedily after the exhibition of a proper dose, are often violent, and resemble in all respects the natural *bearing-down pains* of labour.

With respect to the mode of exhibition, it may be given either in *substance* finely pulverised, or as an aqueous *infusion*. The *powder* may always be at hand, is easily exhibited, and acts perhaps more speedily — but the *infusion* is less apt to occasion nausea, and is said to be in the end equally efficacious.

Of the *powder*, one scruple is considered as an efficient dose; and an equivalent dose of the *infusion* is formed, by steeping for twenty minutes one drachm of the powder in three ounces of boiling water. This infusion is of a violet colour, nauseous taste, and slightly acrimonious.

Either of these, the *powder* or the *infusion*, may in general, it is said, with safety be repeated in the above doses, at intervals of an hour, should circumstances render such repetition necessary.

As the *secale cornutum* has not hitherto been much employed by British practitioners, the following cases, selected by Dr. Davies from his own practice and that of his friends, will probably prove more interesting to them, and more instructive, than any further remarks of a general nature.

IV. *Cases of Lingering Labour, &c., treated by the Secale Cornutum.*†

Natural Births. — 1. Howard, aged forty-seven, seventh labour. Had been delivered of one child still-born — at the end of fifteen hours after there was no return of *pain*, nor any attempt on the part of the uterus to expel the second child, though friction had been applied to the abdomen, and an enema had been administered — she had slept also, and breakfasted. An infusion of the *secale*

* Vide Cases 13 and 14.

† Extracted from a communication contained in the London Medical Journal for July and August, by Dr. Davies.

cornutum was now given* — in ten minutes after the *pains* came on, and within an hour the child and double placenta were delivered — mother and child both well.

2. Patient's third labour — membranes broken and waters discharged during the first twelve hours — at the end of thirty-six hours no *pains*, the child's head at the brim of the pelvis, the os uteri soft, dilatable, and larger than a crown-piece.

The infusion of the *secale* was now given — in five minutes after the *pains* returned, and within an hour the labour was over. The child, a large boy, was apparently still-born, but soon recovered.

3. Roberts — had been in labour upwards of thirty-six hours — had been bled, and an enema and opiate had been administered — was quite free from *pain*, but unable to lie down — the os uteri fully dilated, and the head firmly wedged in the brim of the pelvis — the parts puffy, but not hot.

The infusion of the *secale* given—in about five minutes after a sharp *pain*, in half an hour after the child born, and in less than another hour the placenta expelled.

The child was at first not very animated, but it soon did well. This was in March 1821.

4. Same patient — was again delivered (September 1822), after a long protracted and severe labour, by the aid of the *secale*, which operated in ten minutes after being taken — mother and child both well.

5. Gravel — two days and a night in severe labour, strength much exhausted, child's head impacted — the *secale* administered — child born in twelve minutes after — mother and child both well.

6. Mrs. R. — after being in labour eighteen hours, and much exhausted, was delivered of a fine child by the aid of the *secale* — mother and child both well.

Still-born Cases. — 7. Wall, aged twenty-nine — had been in labour (first child) about forty-four hours — parts fully dilated, presentation natural — one scruple of the *secale* in powder given — in about five minutes violent bearing-down *pains* came on, and in about two hours a *still-born* male child was expelled — the placenta was retained for a short time.

8. Mrs. L. — had been in labour for twenty hours, during the last five of which the os uteri had been fully dilated, and the child stationary — strength much exhausted, *pains* feeble.

An infusion of the *secale* given (*one scruple to two ounces of water*), which produced some effect on the pulse and *pains* — in ten minutes after a second dose of the same strength, which increased the *pains* to a great degree — in thirty-five minutes more, the child not having advanced, a third dose of the same kind was given — and in fifteen minutes more a fourth dose — to this violent

* *The infusion* employed in these *cases* (unless where it is otherwise expressed) was that just described as formed by adding one drachm of the *secale* to three ounces of boiling water.

uterine action immediately succeeded, and in a little time a large *still-born* child was expelled.

In this case, the perinæum and external parts seem to have continued tense and rigid almost up to the moment of delivery.

9. A. T. aged forty-two — first labour — after being in labour for more than three days, during the whole of which time the *pains* were feeble and inefficient, the infusion of *secale* was given — in half an hour after the *pains* increased considerably, and continued with much force until a *still-born* child was expelled—six hours after the infusion had been taken.

10. Mrs. P. aged forty-three — first child — upwards of eighteen hours in labour — head low in the pelvis — *pains* few and feeble — soft parts relaxed — the infusion of *secale* given — in less than ten minutes after a *pain* came on, which was followed by others, increasing in force and frequency for upwards of an hour, when a *still-born* child was expelled. In this case the placenta was retained by uterine contraction for about three hours after the birth of the child.

Cases of Abortion. — 11. Page, aged twenty-two — first pregnancy — fœtus expelled, apparently about the fifth month — in about six hours after, the placenta being still retained, the infusion of *secale* was given—*no effect of any kind produced.* Two common enemata were subsequently administered, which caused the discharge of a quantity of hardened fæces, and a continued desire to go to stool — in a few hours the placenta was found in the vagina and easily removed.

12. Mrs. ——, the mother of many children — abortion and removal of a fœtus in the fourth month — second fœtus and placentæ retained — laxatives and enemata were administered; and on the second day after the delivery of the first fœtus, three doses of a strong infusion of the *secale* were given, *which produced no effect of any kind.* On the fourth day a spontaneous discharge, first of water and then of blood, took place, and the second fœtus and the placentæ were after some difficulty removed.

Cases of Uterine Tumour.—13. Miss M. had been long suffering from uterine disease, and one large tumour had been removed from the vagina (by ligature), which was now filled by another — of this large portions occasionally came away, and in order to induce the uterus to expel the whole into the vagina, the *secale* was administered. Three doses, of twenty grains each, were given in the course of a few hours. By these, violent *bearing-down pains*, having all the characters of uterine contraction, were produced, which lasted for many hours — during one of these a large lump of the tumour came away.

In a few days the exhibition of the *secale* was repeated, and with a similar effect; but its use was then discontinued, the growth of the tumour appearing to increase more rapidly in proportion as parts of it were removed.

14. Dill — a tumour in the vagina coming down from the

uterus, very much resembling the preceding case. In order to bring this tumour more under command, the *secale* was given in scruple doses, and with effects very similar also. The tumour was then removed by ligature, and effectually it would seem, as it has not re-appeared.

V. GANGLIA — *On the Treatment of Ganglia, by Puncture.*

As these tumours are commonly seated upon tendons, they cannot be extirpated without exposing the latter; and should the wound not heal by adhesion, a tendinous and even a sloughing sore may be the consequence. Such an operation therefore is rarely had recourse to, and the common method of treating a ganglion is, to strike it smartly with a book or other light and solid body, so as to rupture the sac and disperse its contents. The thickness of the walls of the sac, however, often renders this operation extremely difficult or perhaps impossible, and even when it has been accomplished the success is not always certain, the swelling often after a short interval returning. The procedure besides is rude, painful, and altogether unprofessional.

Influenced by these considerations, Dr. Cumin, of Glasgow, was some time since led, as he tells us, to attempt the dispersion and cure of these tumours, *by dividing the sac freely with a cataract needle* (introduced obliquely through the skin), and then pressing the contents into the surrounding cellular tissue — after this a compress and bandage were applied, which were daily removed, and the tumour emptied by fresh pressure, until all remains of disease had disappeared.

Dr. Cumin states, that he has within a few months tried this method of cure in several cases, and that the result has been such as to confirm him in entertaining a favourable opinion of it. It should not, however, he adds, be employed indiscriminately — the favourable cases are those in which the tumour is tense and translucent, and rolls freely under the skin, shewing that the cellular tissue around is loose and healthy — but if the prominence of the tumour be inconsiderable, and the skin covering it be thickened or inflamed, the operation should be deferred, for if attempted it will in all probability not succeed, and may even be productive of more unpleasant consequences.—*Edin. Med. Journ., July, p.* 95.

VI. IRITIS — *On the Closure of the Pupil in Iritis.*

ALTHOUGH the closure or obliteration of the *pupil* is the most important symptom or consequence which takes place in iritis, no satisfactory explanation has as yet been offered of the manner in which it is produced.

The mere inflamed state of the *iris* will not account for it — nor the effusion of fibrine into the posterior chamber — nor intolerance of light, for this is not generally present — nor inflammation of the retina, for this is as rare.

But if, as seems more generally agreed on by anatomists, the *pupil* during sleep be always naturally in a closed or contracted

state,* this circumstance will go far to account for the remarkable symptom here alluded to; for during this period of rest adhesions would be more apt to take place than at any other time, and such adhesions would of course have the effect of retaining the pupil in a state of permanent contraction.

This suggestion, for which we are indebted to Mr. Mackenzie, of Glasgow, is one of practical importance, for if admitted it will lead to the employment of proper preventive measures, such as the application of the belladonna regularly *before sleep.*† — *Lon. Med. Journ., August, p.* 113.

VII. *Perforation of the Soft Palate—effectually Relieved by an Instrument composed of Caoutchouc — Case.*

Perforations of the soft palate, or velum pendulum palati, unconnected with disease of the bones, are comparatively of rare occurrence, and when such cases are met with, the means of relief hitherto employed are not in general very successful. The following case, therefore, in which effectual relief is said to have been obtained by means of a very simple instrument, may prove interesting: —

Case. — The subject of this case, a widow thirty-one years of age, had an opening in the velum pendulum, the consequence of an ulcer which had existed on this part eighteen months before. This opening was situated about one-third of an inch above the lower edge of the velum, and a little to the right of the mesial line. Its form approached that of a triangle, the base of which, about one-fourth of an inch in length, lay parallel to and next to the margin of the velum — the two sides were each a little longer. This was in July 1824, and at this time the edges of the opening were swelled and much excoriated, in consequence of the patient having worn for a few days one of the common artificial palates, composed of a bit of sponge and a thin plate of silver.

The impossibility of wearing an instrument of this kind in the present case, and the success of M. Roux at Paris, and Mr. Alcock in London, in closing by the natural process of adhesion openings in the palate, induced Mr. Allan,‡ the reporter on the present occasion, to make a similar attempt with this patient. Three times, therefore, the operation of paring the edges of the opening and bringing them together by means of ligatures was performed — but unsuccessfully, for each time, notwithstanding every precaution taken, the ligatures, within forty-eight hours after their application, were found to have cut their way through the edges of the opening.

The only advantage, therefore, gained by these operations was, that the opening was now brought to nearly a circular form, and

* The discovery of this fact we owe, it is said, to Fontana, and its truth has been admitted by Janin and Cuvier.

† It will be seen in our observations on Belladonna, in the August Number of the Repository, that we state that 'its effects upon the pupil render it an excellent adjuvant in the treatment of iritis.'—P. 148.

‡ Mr. Allan, surgeon, Leicester Square, London.

was better adapted in consequence to retain an instrument, to which it again became necessary to have recourse, for the purpose of stopping it up. Such an instrument, after two or three unsuccessful attempts, Mr. Allan states that he succeeded in forming of *caoutchouc* or pencil-rubber.

It consists simply of two small circular plates connected together by a short neck, like a stud or double button; and is formed out of one solid piece of rubber, as threads were found to cut through the material. It is easily introduced, and has been worn for weeks together, day and night, without inconvenience.

Of the advantages derived from its use some idea may be formed from the following statement: — Without it the patient could not take a full draught of any fluid (the greater part flowing back through the nostrils), nor urge her breath with sufficient force to extinguish a lighted candle, and her voice was so nasal, and her articulation so imperfect, that she had some difficulty in making herself understood in conversation. With it *in situ* the act of deglutition is perfect and easy, and the voice is so completely restored, that she speaks and even sings without any perceptible defect. Dec. 1824. — *Edin. Med. Journ., July, p.* 28.

VIII. *Spider's Web, Cob-web—Its Medicinal Efficacy in Intermittent Fever, &c.*

The *spider's web*, and even the *spider* itself, has been and still is employed in some places medicinally by the vulgar. By medical writers, however, these articles have rarely been mentioned but as objects of ridicule, or to be adduced as proofs or examples of the influence of the imagination in the cure of disease — any effect admitted by them being attributed solely to the horror or disgust produced by swallowing an offensive object. Dr. Robert Jackson, so well known as an army physician, published, however, a few years since, some observations upon this subject, which lead us to believe that the opinions entertained by the learned are erroneous, and that the old and vulgar notions with respect to the efficacy of the *web* as a remedy, in intermittent fever at least, are well founded — nay more, he asserts that it possesses powers in allaying pain, and spasms, and other forms of irritation, superior to opium or any other remedy known to him.

Nor can any of the beneficial effects witnessed by Dr. Jackson be attributed to the influence of mental operation, for his patients (almost all soldiers) were never made acquainted with the nature of the remedy employed, nor subjected whilst using it to the influence of any particular passion.

It was in the year 1801, says Dr. Jackson, that I first heard of *cob-web* as a cure for intermittent fever, from the late Dr. Gillespie, of Edinburgh, and I had soon an opportunity of trying its efficacy in the Army Depôt Hospital, where there were some cases of this disease, in which *bark* and *arsenic* and *mercury* had been tried in vain.

Of these cases, *four* were selected as subjects for experiment, to

each of whom the *web*, in doses of about *ten grains every two hours*, was administered with his own hand — it was in all successful, and *cob-web* pills from that time obtained a place in the formulæ of the hospital.

After this Dr. J. used the *web* extensively both in this country and in the West Indies, and in 1820 sums up the result of his experience with respect to it in the following terms: —

'I think I may venture to state, that the *cob-web* prevents the recurrence of the febrile paroxysm (in intermittent fever) more effectually and more abruptly than *bark, arsenic, or any other remedy* with which I am acquainted — to be effectual, however, it must not be exhibited when there are any symptoms of congestion or internal inflammation present. If the *web* was given in the time of the *intermission*, the return of the paroxysm was prevented — if at the *commencement of a paroxysm*, the symptoms were suppressed or intercepted — if at *a more advanced period*, all symptoms of irritation, such as tremours, spasms, and delirium, were either removed or reduced in violence.

'In cases, again, of febrile depression, deficient animation, and indifference to surrounding objects, the exhibition of eight or ten grains of the *web* was often followed by a peculiar kind of exhilaration, or sparkling of the eye, and animation of the countenance.

'Further, the power of the *web* has been tried and its efficacy proved in other forms of irritation besides those that are strictly febrile — thus, in spasmodic asthma, in periodic headach, in general restlessness, and in muscular irritabilities, its good effects are often signal.

'Finally, the *web* gives sleep, but not (it would seem) by *narcotic* power — tranquillity and sleep appearing on this occasion to be the simple consequence of release from irritation and pain.'

The *web* made use of by Dr. Jackson was, he says, that produced by the *black spider* which inhabits cellars, barns, and stables (the *aranea domestica* of Linn.) — that found upon hedges in autumn, he adds, does not possess the same power nor appear to be of the same nature — nor did that found by him in the West Indies, in consequence of which it became necessary to send to England for a supply. — *Jackson on Febrile Diseases, Lond.* 1820, *Vol. I. p.* 305.

Obs. — Whether the spider's web be really possessed of *all* the virtues here attributed to it, is a question which time and multiplied experience can alone resolve—but *chemical analysis* would speedily teach us whether the web of the *aranea domestica*, or the insect itself, contains any peculiar principle, calculated to act with energy upon the human frame, and to this point, therefore, the attention of the scientific should in the first instance be directed. Medical men were long incredulous with respect to the virtues attributed by the vulgar to *burnt sponge*, and would no doubt have still continued so, had not the chemist shewn, by detecting *iodine* in it, that the tales recorded of its efficacy *might* be true.

IX. *Vomiting — produced at will by Pressure on the Region of the Stomach — Case.*

On board the Alkmaar hospital-ship in the Baltic, a patient laboured under such frequent and violent irritation of the stomach, as to induce a belief, at the commencement of the case, that considerable morbid action was going on in that organ. Particular attention, therefore, was paid to the man, and after a little time it was observed that the vomiting regularly occurred at certain periods, (namely, when the physician to the fleet was paying his morning or evening visit to the sick,) and that in the absence of the medical officers the patient ate his allowance of food without any vomiting being produced.

These circumstances excited suspicion, the patient was in consequence narrowly watched, and it was discovered that at the time of the expected visit, and before the *vomiting* commenced, he was in the habit of making violent pressure on the region of the stomach, with his hand applied under the bed-clothes. Measures were in consequence taken to secure his hands in proper time, the *vomiting* immediately ceased, and the imposture being detected, the man was soon dismissed cured.

I have since, says Mr. C. Hutchinson, the reporter of this case, become convinced, both from observation in my own practice and from conversations with other medical men, that certain persons do possess the power of thus exciting vomiting at pleasure, by means of pressure applied to the region of the stomach. — *Lon. Med. Journ., August, p.* 87.

Section II. — Foreign.

I. *Upon the Electro-Magnetic Phenomena which are manifested in Acupuncturation.* By M. Pouillet.

These observations were made in company with M. J. Cloquet, to notice the effects of acupuncturation, and to discover what part electricity has in these singular phenomena.

The apparatus employed was a multiplier of Schweiger, disposed, as usual, in such a manner, that the circumvolutions of the thread might be in the plane of the magnetic meridian. The magnetic needle was supported by silk thread, without twisting, and a bell-glass preserved it from the agitation of the air. The extremities of the thread passed outwards under the edges of the glass; and it was left several feet long on the outside, to enable it to be lengthened or doubled in every way, without the body of the multiplier undergoing the least movement. To one of the threads a steel needle was fixed, for the purpose of effecting the acupuncturation, and to the other a second thread of wire was attached, also of steel, and from two to three feet long.

In the first experiment, the acupuncturation needle was passed somewhat obliquely to the depth of five or six lines in the arm of a patient, where the pain was most severe; and then he was made to

take the steel wire that was attached to the other extremity of the multiplier into his mouth. A voltaic circle was thus complete, composed of two parts: the one is the thread of the multiplier, and the other is the interval between the arm and the mouth of the patient. In a few moments, the magnetic needle of the multiplier was agitated, it oscillated regularly, and deviated considerably. There was, therefore, an electrical current, which traversed the whole thread of the apparatus, passed into the body of the patient, and entered the mouth and that part of the arm where the needle was introduced. The electrical fluid then is put in motion in acupuncturation. Experiments frequently repeated leave no doubt of the truth of the fact, and of its being general. These effects equally take place in health, and are by no means peculiar to the diseased state: neither is it confined to man; it was found to take place on experiments on animals.

Is this phenomenon purely electrical? In considering it, we may attribute the current that we observe, either to a current which exists in the body, and one part of which passes into the needle and the steel wire, as being better conductors, or, perhaps, to the oxidation only which the needle undergoes while it is in the puncture. If the last hypothesis is correct, a non-oxidizable metal will not produce any effect. The experimentors substituted, therefore, a needle of platina for the needle of steel; and to avoid the development of electricity which would result from the contact of different metals, or from the temperature of the points of contact, they substituted a platina wire instead of the steel, at the other end of the multiplier. On the repetition, with this new apparatus, of all the preceding experiments, which were varied in every possible manner, no movement could be discovered in the needle. No electricity was therefore developed in acupuncturation performed with platina. It was the same, also, when gold or silver was employed. Non-oxidizable metals, therefore, do not exhibit the least sign of electricity. It seems, then, that we may explain the natural phenomenon observed when iron or steel needles are employed, in the following manner:—The metal, inserted to a certain depth under the skin, into the muscles or the membranous parts of the body, is placed in contact with different substances, of different compositions; a chemical action ensues between them and the iron; they are partly decomposed, and the iron is oxidated. Now, the oxidation of a metal is never effected without the development of electricity. The positive fluid passes from one side, the negative from the other; and when, as in these experiments, a voltaic circle of sufficiently good conductors is formed, they re-unite, and thence the perpetual current that has been noticed. The combination which the iron makes in these circumstances is readily perceptible in the course of an hour after, or even after a shorter interval. The needle, when drawn from the puncture, has lost its metallic lustre; its surface is tarnished, and very visibly altered. It is the same appearance that we perceive upon bits of iron which have been taken from the body, after having remained there for some time

from accident. There is no doubt of the fact of combination; but it is true that it may be, accurately speaking, something else than oxidation.—*Journal de Physiologie, Avril.*

II. *Tuberculous Affection of the Brain, with Destruction of the Ethmoidal Nerves.*

James Beaufort entered, the 15th of August, 1824, into the surgical wards of *La Pitié*, on account of complete amaurosis. This complaint was preceded and accompanied with a continual suborbitar headach, and had commenced two years before. Its course had been progressive, but regular and rapid; once only the patient had suddenly recovered his sight, and distinguished clearly the objects that surrounded him. This fortunate change, however, lasted but a few moments, after which the blindness was as complete as before. He was thirty years of age, of a moderate height, and muscular; his appearance pale, and rather bloated, and his countenance presented that state of indifference which so well characterises complete amaurosis. He ate well, and digested easily, and was every day conducted into the yard appropriated to the patients, and walked with them. His intellect was in no ways weakened: twice, during the five months which elapsed between his entrance into the hospital and his death, be became suddenly insensible, and was agitated with epileptic convulsion. Lastly, (and this remark, connected with the appearances of the body after death, is not without interest), he took tobacco with pleasure, distinguished its different qualities, and was disagreeably affected by the smell from a suppuration with which one of the neighbouring patients was affected. These last particulars, however, were collected from the patients who were in the same ward, after his death. He died suddenly on the 15th of January, having only two hours before conversed with one of the patients.

Opening of the body, twenty-four hours after death.

Head. — The vessels of the pericranium, the sinuses of the dura mater, the vessels of the surface of the brain, were all gorged with black blood: an adhesion of the anterior lobes of the brain to the correspondent fossæ in the base of the skull, prevented the brain from being taken out in the usual manner, and induced a particular attention to the state of the diseased parts. The two lobules, confounded in their internal part, anteriorly and inferiorly, and considerably hardened in this point, appeared fixed in the æthmoidal fossa. Their section exhibited a substance similar to a tubercle, hard, round, tuberculated (*mammelonnée*), of the size of a large chesnut, developed at the expense of both lobules, and inserted into the superior part of the nasal fossæ, by the destruction of the cribriform plate of the æthmoid bone. No trace could be discovered of the olfactory nerves, nor their bulb, without doubt having been included in the tuberculous affection. The substance of the brain was softened, a little reddish, and '*diffluente*' around the diseased part; farther removed, less soft and viscous; farther still, it was in its natural state.

The medullary cords of the optic nerves appeared hollow: their commissure was softened. These two nerves, examined between the commissure and the eye, were grey, harder, and about one-third their usual size. Dissection shewed that the neurilema only was left, the medullary substance having been removed by absorption.

There was nothing peculiar in any other part.

M. Desmoulins has subjoined a note to this account, in which he endeavours to shew, that the æthmoidal nerves are not really the olfactory. In farther proof, he cites a case that has been published by M. Serres, where 'the nerves, the olfactory nerves, their peduncles, the part of the brain adjacent to these lobes, to their peduncles, and the roots of the peduncles, were perfectly sound, and yet the patient had lost the smell of one side. Now, on the same side, the ganglion of the fifth pair had undergone an alteration, which had destroyed all the grey substance, and softened and wasted the nervous filaments. The abolition of sense in the left nostril, coincident with the integrity of the nervous apparatus, which has been termed the olfactory, and with the alteration of the ganglion of the fifth pair, proves, then, that the olfactory nerves and lobes alone cannot exercise the sense of smell. A question may remain whether it can act, excepting with the assistance of the fifth pair. But then the fifth pair, reciprocally, should not alone be able to produce the sense of smell. Now, the preceding account proves that it can alone produce it.

From these two pathological facts, which are inverse experiments upon the same subjects, and from experiments exactly similar, repeated so frequently by Magendie upon animals, it results evidently, that the olfactory nerves and lobes are foreign to the sense of smell, or co-operate so little, that this sense continues to be exercised without their influence; and that, on the contrary, this sense resides essentially in those branches of the fifth pair which are distributed to the nostrils.—*Magendie's Journal, April* 1825.

These facts are certainly very highly important, and appear fully to justify the inferences that M. Desmoulins has drawn from them, so far as we have stated them. He has, however, gone farther in the paper from which the above was taken, and by a comparison with some of the lower animals, would conclude that the olfactory nerves are the source of faculties in animals which are wanting in man. His facts, however, are by no means conclusive, nor has any experiment yet been adduced in its favour. We are not aware even that the barbarous experiments of Spallanzani upon bats has induced a general belief in the deductions he drew from them. Under these circumstances, we have not thought it necessary to follow M. Desmoulins' speculations.—Editors.

III. *Fluid existing in the Skull and Vertebral Canal of Man and Mammiferous Animals.* By M. Magendie.

'When the dura mater or fibrous tunic of the medulla spinalis is exposed in living animals, it is readily recognisable that this mem-

brane does not touch the medulla, and that it is separated by a considerable interval. This space is full for the membrane, is distended, and resists atmospheric pressure. When holding the membrane against the light, we perceive that the matter filling it is transparent; and if we touch it alternately with two fingers, an evident fluctuation occurs in its cavity.

These facts leave no doubt of the existence of a fluid in the cavity of the dura mater vertebralis; but direct observation proves it still better. Every time that an opening is made in the membrane, fluid, having the character of serum, may be seen to issue with rapidity, and often to form a jet of three or four inches in height.

This liquid exists in all parts of the vertebral canal, and in all the mammifera, and at every age; but it is most abundant in the cervical and lumbar portions of the canal, and it is especially in great quantity on a level with the fourth ventricle, where it fills the interval which separates the medulla from the dura mater.'

M. Magendie next proceeded to ascertain if this fluid existed equally in the cavity of the cranium. For this purpose, he exposed the dura mater of the skull in a living animal, employing the greatest precautions not to injure; and he felt assured, that between this membrane and the dura mater there was a manifest interval, having the same appearance with the interval of the vertebral canal; and when a puncture was made in the dura mater, a fluid issued out. Similar observations were made upon the dura mater surrounding the cerebellum.

M. Magendie also made some investigations regarding the communication between the cavity of the cranium and of the vertebral canal, or rather of the cavity within these parts, which contains the fluids. The results, however, are rather contradictory. It does not appear certain that a free passage exists between the two in every case.—*Ibid.*

IV. *Of the Insensibility of the Retina.*

In the same journal, M. Magendie has made some observations upon the insensibility of the retina. The following relation sufficiently shews the nature of his inquiries:—

'I operated,' he says, 'upon a soft cataract, which it was not possible to depress at once; it yielded to pressure, and I was obliged to depress it piecemeal. Every time that I pushed a portion of the crystalline downwards, I perceived distinctly the resistance of the walls of the eye, and consequently I was certain that I must have pressed upon the retina: nevertheless, the patient made no complaint, and did not even appear to perceive it. Encouraged by this, I directed the needle to the bottom of the eye, and touched the retina very gently. The woman gave no indication of sensibility. I repeated the experiment five or six times, and the result was always the same; the retina, however, did not appear to be paralysed, for at the instant that I touched the retina, the patient expressed her delight at again perceiving the light.'—*Ibid.*

PART IV.

INTELLIGENCE RELATING TO MEDICINE AND THE MEDICAL SCIENCES,

FOREIGN AND DOMESTIC.

Oratio in Collegii Regalis Medicorum Londinensis, Ædibus Novis habita Die Dedicationis, Junii 25, 1825. Ab HENRICO HALFORD, Baronetto, Medico Regis Ordinario, Præside.

ETSI non vereor, Socii, ut vobis hoc festo die satisfaciam, quippe qui me tam benigno semper soliti sitis animo amplecti; quique operam curamque meam, qualescunque eæ demùm fuerint, in rebus vestris administrandis tam comiter omni tempore acceperitis; cùm me tamen tantâ doctorum Hospitum frequentiâ circumfusum video — cùm tot apud nos conspicio utriusque Senatûs lumina, tot publici consilii Auctores, tot Regiæ prosapiæ Principes, — atque, hos inter, illustrissimum illum Principem, rei militaris nostræ præsidium et decus, — pertimescere me, confiteor, et parum abesse, quin me muneris hodie suscepti pœniteat. Quâ nimirùm ratione, dicendo aliquid proferam eorum auribus et judicio dignum, qui, in maximis Imperii negotiis versati, inter eloquentissimos in curiâ eloquentiæ palmam facilè ferant? Quomodò eorum pertrectem animos, aut conciliem nobis eos, qui, etsi prima labra admoverint istis iisdem scientiæ fontibus, quibus et nosmetipsi in almâ Academiâ proluimus, ad majora tamen et ad altiora se continuò accinxerint, et nihil ultrà, in omni vitæ et studiorum decursû, aut commune nobiscum aut cognatum habuerint. Quòd sperandum tamen esset ab istâ benignitate, quæ honesti nihil ac liberalis à se alienum putat, id hodie, Optimates, voluntas in nos vestra comprobavit; et ex hôc magno illustrium virorum conventû planè intelligere licet, quanti faciant illi utilissimam et antiquissimam hanc artem nostram, et quantâ eam benevolentiâ, quanto favore prosequi velint.

Audacter igitur et hilari voce gratulor vobis, Socii, quòd hocce templum Apollinis dignum institutis et arte vestrâ, dignum Antecessoribus vestris, dignum hâc illustri Procerum coronâ refecistis,— quòd, è colluvione et tenebris emersi, tandem aliquandò in luce iterum et in splendore versamini.

Probè nôrant Majores nostri, quàm omni ex parte necessarium esset, Domum suam, unde procederent in publicum auctoritatis signa, in urbanâ frequentiâ, in congressione hominum, et in oculis civium posuisse. Jacta sunt igitur fundamenta Trojæ nostræ, (quam, temporum ratione et inclinatione ducti, non sine Diis Penatibus tamen, reliquimus,) eâ amplitudine et dignitate, quibus arx et præsidium publicæ salutis esse deberent. Immò, ita jacta sunt à viris prudentissimis, ut, dum necessitatibus rerum suarum commodè et elegantur inservirent, et jucundissimæ isti Sociorum convictioni satisfacerent, voluntatem eadem et reverentiam populi

sibi vindicarent. Jacta sunt autem et auspicatò et temporibus æquis. Quippe civilis belli molestiis et tempestatibus successerat modò Pax; et Pacis comites Otiique sociæ sunt Artes liberales. Medicina igitur, quæ jam inde ab ætate Linacri, necessitudinem cum litteris arctissimam habuerat, philosophiam quoque tum demum amplexa, scientiæ dignitatem adepta erat. Circuitum etenim sanguinis aliquot ante annos detexerat et demonstraverat Herveius istâ ipsâ philosophandi methodo, quam solam esse sanam et sinceram docuerat Verulamus, posteri autem perfectam prorsùs atque omnibus numeris absolutam esse decreverunt.

Quantùm contulerit ad philosophiæ istius, in quâ de Naturâ disputatur, studium incitandum admirabilis humani corporis fabricatio adeò felici solertiâ patefacta et exposita, non necesse est hodie dicere. Quod nobis certè rebusque nostris suprà omnia felix faustumque fuit, eo tempore quotquot essent in Physicis subtilissimi, quotquot in rerum causis exponendis exercitatissimi, ii Regio hortatù coierant, et in inclytam istam Societatem cooptabantur, è quâ, ceu fonte perenni, profluxit, (et, Præside isto eximio duce atque auspice, profluit indies, atque in omne porrò ævum profluxura est,) omnigena Scientia, et quicquid ad artium incrementa, aut ad vitæ cultioris utilitatem possit conferre.

Nec sanè mirandum est, Socii, quoniam cum hoc genere philosophiæ magnam habet familiaritatem Medicina, non minimam partem egregiæ istius Societatis medicam fuisse artem professos. Sumere autem vobis superbiam licet, quòd vestri fuerunt Entii, Cronii, Scarburii, Glissonii, (quorum ut erat quisque suæ artis peritissimus, ità naturæ interpretandæ scientissimus); quòd vestri sunt hodie, qui Chemiam altiùs scrutentur et perspiciant, 'qui errantium stellarum cursus, progressiones, institiones,' feliciter notent et intelligant.

Hâc opportunitate temporis antiquæ nostræ conditæ sunt ædes; quæ ut sit 'eadem nostræ fortuna Domûs,' faxit Deus Optimus Maximus!

Nec temerè et inconsultò in his precibus spem ponimus, quoniam nostra hæc Respublica optimis temperata est legibus et institutis, et in omni recto studio atque humanitate versamur. Neque enim quemquam priùs civitate nostrâ donamus, quàm disciplinis iis veteribus, (quæ, etsi non faciunt medicum, aptiorem tamen Medicinæ reddunt,) instructus fuerit; quàm eruditione, viro libero dignâ, penitùs fuerit imbutus; quàm, quid medicum deceat, quid omni ex parte pulchrum sit et honestum, didicerit. Longè enim aliud est in Materiâ Medicâ exercitatum esse, aliud mederi.

Nec majore studio, nec spe uberiore, nec amplioribus aut ad gratiam aut ad dignitatem præmiis commoti, hoc opus susceperunt Antecessores nostri, quàm quibus et nos hodierno die. Quidni enim? Pecuniam à prudentissimis et integerrimis Testamenti Radcliviani Curatoribus accepimus, ('non parcâ manu suffectam, sed liberâ,') quali ipse Radclivius munificentissimus, si in vivis foret, civibus suis, quos dilexit, quibus ipse vicissim in deliciis fuit, largiendo suppeditasset. O fortunatum Radclivium, et, siquis

alius, invidendum! cujus virtuti licuerit et in vitâ et in morte humano generi benefacere.

Nec vestro caruimus patrocinio, Illustres publici consilii Auctores! Quippe vos, felicis hujusce gentis famæ consulentes, et saluti vitæque civium prospicientes, non alienum à prudentiâ aut à dignitate vestrâ duxistis, nostris votis respondere, nostris rebus opitulari. Quòd igitur ab optimo Rege situm, ubi hoc artis nostræ theatrum, idemque bonarum litterarum domicilium, statueremus, vestram operam, favorem vestrum apud Principem interponendo, procuravistis; summas, quas possumus, gratias agimus, summas semper acturi, — dum hæc mœnia durando perstabunt, dum salutaris hæc professio laudem apud Britannos et observantiam habebit.

Sed, quod maximum est, Socii, et suprà omnia dona, quemcunque Vos in Præsidis locum elegeritis, Rex eum statim Regiorum Medicorum ordini adscribi jussit; sacram scilicet suam valetudinem vestris consiliis, vestræ curæ tuendam commissurus.

Si quis hujus beneficii gratiam institutis nostris, et disciplinis iis deberi putet, quas Majorum nostrorum sapientia, ad Medicinam ritè et decorè exercendam necessarias esse statuit; næ is nec ineptè neque sine consilio judicat. Recordamini etenim, Socii, quanta inter bella, quantam inter victoriarum messem, pacis studia, doctrinam, et litteras humaniores Pater Patriæ foverit atque aluerit; quali benignitate studiis iis debitos acceperit; quali honore memoriam eorum prosecutus sit, qui vitam per artes inventas excoluêre.

At quanti Rex bonus ille noster litteras faciat, argumentum est instar omnium Bibliotheca ista eximia à venerando Patre comparata, quàm in jus Populi cedere voluit. O magnificum et verè Regium munus! et à Te Principe uno post tot sæcula publicæ utilitati concessum! O sapienter factum! Probè etenim nôras, quantum illud ΨΥΧΗΣ ΙΑΤΡΕΙΟΝ, quòd Bibliothicæ magni illius Ægypti Regis inscriptum fuit, ad conformandas hominum mentes animosque valeat; quantum nos ad virtutem percipiendam colendamque moveant illustrium virorum imagines, ab omni vetustate litteris proditæ; quantum ad leges et instituta nostra pernoscenda, et ad æstimandam veram istam libertatem nostram ab illis oriundam, conferat veterum rerum publicarum contemplatio; quantum denique homini dignè de seipso sentire, dignè agere, suadeat scientia.

Te igitur, augustissime Rex! quòd in periculosissimis temporibus totam ferè Europam, cùm diuturno et difficili bello premeretur ab acerrimo hoste, non debellando nisi à nostro Duce nunquam victo, in libertatem et tranquillitatem vindicaveris, et, quantum cæteris gentibus militari gloriâ præstant, tantum tuos in artibus quoque Pacis antecellere volueris,—Te omni benevolentiâ complectimur,—Te grato semper animo colemus, — Te admirabimur, — Te amabimus,—nec de Tuis unquam laudibus posteri conticescent.

Quodcunque Antecessoribus nostris visum fuerit in ædificandâ Domo suâ moliri, id omne nos sedulò conati sumus in reficiendâ. Habueruntne igitur illi conclave, ubi Censores pro auctoritate et

dignitate suâ congredi possent? Habemus. Num Theatrum extrui voluerunt, in quo solennes eorum, qui merendo nos memores sui fecerint, laudationes instaurare possent; aut in quo, si placuisset, medicinæ studiosos instituerent docendo? Nos etiam extruximus: quanquam nostrûm est potiùs de doctis judicium facere, quàm indoctos docere. An Cœnaculum adparaverunt, ubi corpus commodè et jucundè reficerent Socii; et Bibliothecam aptam et concinnam, ubi, negotiis atque urbano opere defessi, vacui curâ ac labore, liberæ animi remissioni indulgerent? Adparavimus nos quoque. Quin vos dicite, Illustrissimi Auditores, (vos etenim perspexistis,) annon libri, imagines, quodcunque denique sit Atticum, apud nos etiam Atticè sint adservata.

Provisum est porrò nobis, quod Antecessoribus nostris admodum deerat, Museum; in quo reponamus, quicquid, ex Anatomiâ petitum, humanæ fabricationis structuram, morbo læsam vitiatamque, explicet. Quantum medicinæ inservire possint, (et certè plurimum possunt,) rationes ex Anatomiæ fontibus depromptæ, dudum perceperat Harveius: et, si vitæ ejus utilissimæ parcere voluisset Deus O. M. non dubitandum est quin Ipse eadem fundamenta supellectilis Anatomicæ posuisset, quæ nuperrimè summâ cum judicii et liberalitatis laude posuit Matthæus Baillie.

In hoc dilecto nomine fas sit mihi commorari paulùm, et dolere, quod huic excellenti viro, tot annos in eâdem nostrâ illâ laboriosissimâ vitæ ratione comiti, socio, amico, singulari in hanc domum pietate, hisce comitiis celebrioribus, huic solemnitati, huic illustrissimorum et nobilissimorum Hospitum cœtui non licuerit interesse: quanquam eum famæ satis diu vixisse scio, æternæ felicitati, quod humillimè spero, benè satis. Et enim, patre usus pio, à primâ usque adolescentiâ in explorando corpore humano fuerat versatissimus; et ex hac studiorum ratione sapientiam et potentiam Dei maximâ admiratione, summâ veneratione contemplatus est. Posteà verò, cùm ad medicinam exercendam se accinxisset, facilè sensit, quantulùm corpori, morbis et ægrâ valetudine laboranti, subventurus esset Medicus, nisi qui animi quoque motus, vires, adfectus, perciperet: animi, scilicet, unius et ejusdem cum corpore, tamen diversi, — consociati cum illo, sed distincti, — in ejus compagibus inclusi et involuti, nihilominùs tamen liberi — immortale quid perpetuò præsentientis atque præmonentis, et illud futurum cupientis, tamen et metuentis. Ab his contemplationibus potentiæ ac majestatis divinæ ad debitum numini cultum præstandum incitatus est, ad fidem in Deo habendam, et ad totum se ei submittendum. Hinc pia illa vivendi regula, hinc spectata integritas. Hinc illi omnia graviter, humaniter, amabiliter mos erat cogitare; — hinc, quod cogitaverat, planissimè ac verissimè dicere; — hinc nihil alteri facere, quod sibi faciendum nollet; — hinc candor, caritas: — sed me reprimo; quanquam haud vereor, Optimates, ne vobis in præstantissimi hujus viri laudibus longior fuisse videar: quippe vestrûm quamplurimi sanitatem ejus judicio et consiliis acceptam refertis. Nec timeo, ne mihi succenseatis, Socii, quòd eum his saltèm accumulaverim donis, qui tantum sibi vestrûm omnium

amorem vivus conciliaverit; qui industriæ, benevolentiæ, sanctitatis, innocentiæ exemplum (quod omnes utinam imitemur!) reliquerit.

Vos, autem, illustres Animi! qui dudùm, corporis vinculis soluti, piâ atque æternâ pace fruimini,—Vos, Linacer, Cai, Harvei, Radclivi, (quorum recordatio hoc festo die suavior apud nos et jucundior superest,) testor Vos, vestrâ sapientiâ fretos, vestris usos conciliis, vestrum hoc opus nos refecisse. Vos, olim, Græcarum litterarum lumen ab Italiâ in patriam transtulistis, Vos primi Medicos, doctos et eductos liberè, in civitatem hanc nostram benè moratam et legibus constitutam collegistis. Vos medicinam, explicato sanguinis revolubili cursu, rationalem fecistis, atque optimis hominum ingeniis dignam. Sic Artis Medicæ suus indies crevit honos; sic domus antiqua stetit inconcussa.

Nostrûm erit hæreditatem à vobis acceptam successoribus nostris integram et incontaminatam tradere: Nostrûm erit de Medicinâ, de Litteris, de Religione benè mereri. Sic nova hæc Domus stabit perpetua: Sic nostrûm quoque, et hujusce diei, grata et honoranda delabetur ad posteros memoria.

Remarks respecting the Coroner's Inquest held on a Patient who died in St. George's Hospital. By a disinterested Physician.*

It has never come to my knowledge to have heard of such utter contempt of evidence in a jury, nor such a want of comprehension of the duties that office imposes on a juryman, as were displayed by the jury of this inquest, and by its foreman—Mr. Bailley. I do not now speak of the merits of the practice — nor can I bring myself to believe that the jury had aught to do with those merits, otherwise every dissatisfied relative of a patient who has died in an hospital, or under the care of a practitioner or practitioners in private practice, may have the means of almost ruining the physician or surgeon who attended him, or of seriously injuring the institution in which he died, in a similar unjust manner as in the present case. — Of the merits of the practice, I have said, it is not my intention to speak,

* It may be proper to state, that these remarks are written by a physician known to, and justly respected by, the profession — of much eminence in one of the largest country towns, not in any way connected with hospitals, and no farther interested in this matter than his laudable zeal for the respectability of the profession, leads him to warn the unheeding part of it, that eagerly catch at whatever is calculated to lower those who are more eminent than themselves, from adopting a mode of conduct, or countenancing the diffusion of opinions, which can in no ways elevate themselves or promote their own interests, but which will inevitably—if so promoted — bring discredit upon the profession generally, and lower themselves with all above them. They may rest assured that they who adopt a line of conduct, which we here warn against, will not be the individuals who will rise in the general anarchy of professional feeling and conduct which these practices will occasion. — The Editors need not add, that, by giving these remarks insertion, with this note of approval, they may be considered as entirely approving of, and adopting the sentiments which it contains.

because it in no manner belongs to the view of the transaction which most intimately concerns all medical men possessed of those feelings which ought to imbue the mind of men of liberal education and of gentlemen, and who dislike to see matters peculiarly belonging to them, interesting their general reputations, and on which they themselves are alone capable of judging, decided upon by persons who, we will venture to say, are generally illiterate, and on topics connected with this inquest particularly uninformed: but I will speak of the verdict of the coroner's jury, of the very improper conduct of the coroner himself in suffering that verdict to be recorded, proceeding, as it did, under circumstances of the grossest impropriety, and in defiance of the testimony that had come before them, and of the effect it is calculated to have upon the profession and upon the community. The coroner and his jury had not even a complete statement of the case, and the medical evidence, such as it was, went to the justification of the treatment, yet the foreman, making himself both a party concerned and a judge in the matter, and both acting and speaking from prejudices derived from no very respectable source, bawls out — for no other term ought to be applied to it — 'I think he has died from negligence and bad treatment;' and forthwith, though the coroner appears to have known better, a verdict is given, which must remain among the county records '*as the true presentment*' of a jury, *whose foreman acknowledged, that he had procured himself to be impannelled because he thought the man had not been properly attended to;* and this verdict is found, when coolly inquired into, so thoroughly unsupported, that the foreman is under the necessity of making a handsome donation to the hospital, to prevent the inference that otherwise must have been drawn, that he had been influenced not merely by humanity, but base rancour against an individual. That any man should be so wanting in all sense of right, as to have supposed himself a proper person for a juryman, having formed his opinions previous to inquiring into the evidence, is a matter to me of no small surprise, and is only exceeded by my wonder at his afterwards acknowledging it. This, though it acquit not the juryman of gross ignorance, is at least demonstrative that his intentions were not malicious. But it is but right to look at the effect which an inquest thus turbulently held and hastily concluded is calculated to have both on the hospital and the surgeon to whose care the man had been consigned — it might, indeed, be carried farther, I mean to hospitals generally. Few people, comparatively speaking, can weigh evidence, but all can understand the plain language of a verdict; and though the very last thing which I would wish to see concealed would be the wrong treatment or the negligence exhibited in hospitals, medical men, as a body, have a right to demand, *that none but members of their own profession shall sit as judges upon them, because they only are capable of understanding the real merits of the question; they only can tell when a difference from the routine practice, or adherence*

to old plans, arises from ignorance or real science. Had this been the case in the present instance, questionless the inquiry would have been longer, and the satisfaction of those examining into the evidence more complete, while they who only can comprehend a verdict would have gone away impressed with truth instead of falsehood. But now the result of the after-inquiry will never be able to wipe off from the minds of many the prejudices they have imbibed, both against the hospital and against the surgeon; and many will continue to say, that some truth must have been united with it, or a jury of twelve Englishmen would never have come to such a verdict. Among the poor and the uninformed, also, the ill-will already borne against all hospitals, and their ready belief of every tale of bad food, bad practice, negligence, inattention, &c., in which already they love to believe, will be increased, and the utility of charitable establishments of this kind, to say the very least, materially lessened. And to all this it may be said, that a single case only has happened, and from a single case nothing need be apprehended. True, if it remain a single case; but it is from the repetition of single cases that effect is made upon the public mind, which, unless timely opposed, will be as detrimental to science as to humanity. For the effect of these kind of legal calumnies is to check science, and to bind surgeons down in eternal trammels, till they would become as mechanical and as worthless a race as the legislated Chinese, who have moved in the same dull circle, without retrograde and without advance, for so many centuries. And against humanity it will act in two ways: — it will prevent many real objects of charity taking advantage of such institutions; and it will leave them to be occupied by those only who are utterly and thoroughly destitute, and who, consequently, having no friends to watch over them, or to regard the attention they may receive, will be dependent upon the humane feelings of the officers of the charity only for proper care. And though these might safely be relied upon while the present race remains, who have had the influence of a contrary system, it requires but little knowledge of mankind to know that our very best feelings have something selfish attached to them; and that in the attention a medical man pays to the poor, he looks, at the same time, to their welfare and his own, and is not less stimulated by the hope of advancing his own reputation and fortune, than by the benefits he is enabled to confer upon a fellow-creature. His humane feelings once excited, he will be induced, indeed, to go very far where no self-interest is manifestly served; but the difficulty of exciting these will be just in proportion to their apparent separation from the personal advantage of the surgeon.

It was not till after the above had been written, that I perceived that what I have said only from inference has really happened, and that one of the daily papers has persisted in the truth of a charge which has been so completely refuted. With men like this writer, who ' live by lying and slandering, and slake their thirst by evil speaking,' no assertion of mine probably will have any weight, nor,

indeed, do I regard such persons as worthy of a serious endeavour to convince them. Yet it may be as well to remind even such individuals, that the reputation of the living is of as much importance as the treatment of the dead, and that that is but a sorry cause which can only be supported by adding falsehood to falsehood, and malignity to injustice. To impute evil conduct to the nurses because they exculpate themselves, to disbelieve a witness because he speaks not as the slanderer wills, may, indeed, be the proper office of these modern liberalists; but certain I am, that no honest, no conscientious man can look at the manner in which this subject has been treated by one part of the public daily press, without feelings of disgust and shame — disgust at that hypocrisy which, under the pretence of compassion for the dead, seeks only to calumniate the living; and shame, that a country which owes so much to public discussion, should nurse within its bosom such a perverter of the blessing — shame, in fact, to be compelled to acknowledge him as a countryman. One assertion, however, I will dare to make, and sure I am that it cannot be refuted. Negligence and inattention to the comforts of hospital patients can scarcely ever happen, so public and so open to investigation are these establishments, and so little reluctance do the objects of their relief exhibit in complaining even when there is no reason for complaint. And with respect to medical and surgical treatment, though occasionally improper persons may be appointed to these institutions (and this is but occasionally), the inmates of hospitals are infinitely more certain of the very best management, than nine-tenths of those who have never been objects of charity.

I have been induced to make these remarks, because, though the daily press took the matter up with great bitterness, excepting the Editor of the *New Times*, no one has been honest enough to retract their first opinions, or, at least, have done so in a single paragraph, while whole columns were devoted to abuse of the surgeon and the institution. How this can be reconciled to just dealing, I know not — to me it seems that their object is to pander to the vile taste of the populace by perpetual calumny, but that to notice things of good report, or give the public correct information, is considered as a very subordinate part of their duty. They are, indeed, in the language of Lord Bacon, among those who, possessed of ' a natural malignity, do not affect the good of others, but in other men's calamities are, as it were, in season, and are even on the loading parts.' E.

Extraordinary Recovery from Accidental Empalement.

Dr. Woodbury, of Bedford, New Hampshire, has related, in the New England Journal of Medicine and Surgery, for January 1825, the following singular case. We give it in his own words :—

' A healthy girl, in the fifteenth year of her age, of a large size, had menstruated one year, and had the appearance of a woman in every respect, fell from a height upon a stake when playing in a

barn. The stake, first striking on the tuberosity of the ischium, passed laterally into the anus, up the rectum about two inches, thence through it on its left side, up the body in an oblique direction, and out of the left breast about three inches from the nipple. It was impossible by the strength of one man to detach the body from the stake; it was therefore broken off.

'The stake passed through her body twenty-seven inches; it was three inches in circumference at the least end, and five inches at the largest end. It came out of her breast six or seven inches, so that she kept hold of it with both hands while the stake was in her. The stake was made out of a young hemlock, and the bark with the knots were just stripped off.

'On my arrival I found her in bed with no covering but her clothes: her friends thought her dying. Her pulse was scarcely perceptible, her breathing short and hurried, with a cold sweat on her skin: she had an extremely ghastly countenance. She did not incline to say any thing, but submitted to the examination without any apparent concern or sensation. She made no complaint, and said she had no pain, but was somewhat faint. There was but a trifling hæmorrhage from the wounds.

'After the application of simple dressing to the wounds, I endeavoured to excite the system, and gave her spirit of lavender with a cup of tea. She soon began to breathe better, her pulse became more perceptible, and her skin more moist and warm. I now left her for the night—this being about nine o'clock in the evening, with directions that if she should get relief, to let me have information, thinking that she could not survive many hours.

'July 25. Found my patient more at ease, but still making some complaint of pain in the abdomen. She talked freely, said she felt better, and was hungry. Had not had any stool, nor passed any water since the accident. Pulse 98, with some fulness. Took away one pint of blood from the arm, gave her oleum ricini, dressed the wounds simply as before, and ordered her for food water after Indian meal had been boiled in it. At times she had a slight cough, which excited some uneasiness at the time.

'26. The oil had not operated, had no discharge of water, complained of soreness of the abdomen, with some swelling above the pubis, with a distinct line of inflammation in the direction which the stake took. The cough produces more pain at the time of coughing than it had done before. Pulse 100, with hardness. Took away one pint of blood from the arm, and drew away three pints of urine with the catheter, which gave immediate relief. Dressed the wounds as yesterday, and ordered the same food as before. Repeated the oleum ricini; and, in case it did not operate, ordered half an ounce of sulphate of magnesia every two hours until this did.

'27. At this visit I met Dr. Spalding in consultation. Found the physic had operated, and had given ease. Pulse 90. Complains of some soreness of the abdomen; drew away one pint and a half of urine; dressed the wounds as before: food the same.

'At five o'clock in the afternoon I visited my patient again:

found her pulse 100; some cough; pain in the breast and abdomen. Took away one pint and a half of blood from the arm; and drew away one quart of urine, which gave great relief.

'28. Found my patient better in every respect.' From this time to the completion of the cure, there was no uncommon appearance observed. She evidently improved daily. I drew off her urine seventeen days in succession, after which it became unnecessary; and bled her during confinement five times: she subsisted those seventeen days wholly on water in which Indian meal had been boiled. In her first attempt to walk, her body inclined a little to the left, but she soon became erect.' She was confined six weeks, and now enjoys good health.

French Mineral Waters.

The French have scarcely yet learnt to emulate the gaiety and relaxation enjoyed by the wealthy and industrious part of our own population at celebrated watering places. They have no towns at all resembling Bath or Cheltenham, or Brighton or Leamington. Some approach to this appears likely, however, to be made in some parts of that country in the course of a few years; and considering the numerous English residents alone who are to be found abroad, and the number of invalids included amongst them, an attempt to establish a celebrated spa would probably be successful. Even at present, a knowledge of the mineral waters which are beginning to excite attention, may be serviceable to the English practitioners residing on the Continent. The acidulated mineral waters of Andabre (*Aveyron*) have for some time enjoyed a degree of reputation in scrofulous affections, and there are at present baths erecting there. An analysis of the waters is promised in a short time. A more valuable, or, at least, a more rare kind of mineral water has been discovered about a league from Toulouse, near the great road to Castres. The water is termed an acidulated ferruginous water, and the following is said to be its analysis: —

	Grammes Fr.
Carbonic acid	0,0812
Subcarbonate of iron	0,1310
Subcarbonate of lime	0,3128
Subcarbonate of magnesia	0,0151
Muriate of soda	0,1935
Muriate of magnesia	0,0208
Bituminous or resinous matter	0,0078
Sulphate of soda	0,0773
Sulphate of lime	0,0202
Silex	0,0117
Vegetable matter	0,0106

Prolapsus Uteri.

M. Girardin has recently proposed a radical cure for this affection, the principle of which is to effect an obliteration of the vagina.

Birth of Males and Females.

A SERIES of observations, rather diligent and curious, we imagine, than useful or philosophical, have been made by M. Bailly, of the French Institute, connected with the subject of the relative births of male and female children. These were briefly alluded to in our July Number. From exact registers kept in one locality, it appears, he says, that there were more female conceptions than male conceptions in the months of March and July; and these two months, he observes, are, the first on account of the occurrence of *Lent*, and the second on account of the heat of the weather, the parts of the year least favourable to the activity of the generative powers, at least with a view to fecundation. M. B. is desirous that physicians and public officers should take pains to verify these remarks by means of exact registers of the number of each sex born in each village, parish, or town, month by month, and year by year, for a long period, noticing the kinds of food and labour of the inhabitants in different months; and the medical topography of the places in which the observations are made; extending their views to the lower animals, cows, sheep, goats, pigeons, and rabbits; stating the mean temperature of each month, and any thing else capable of fortifying or debilitating man or animals within certain periods. M. Bailly speaks of the *importance* of this investigation; but as it is one of great labour, it seems incumbent upon him to define exactly what advantages, individual or national, he proposes to derive from it.

Small-Pox.

WE lament to find that this disease, which was some time ago reported to be banished from Denmark by diligent vaccination, has re-appeared there with such severity as to call for the interference of government. A part of the marine hospital at Copenhagen has been allotted to patients affected with small-pox, and every means has been employed to promote vaccination. No severe case of small-pox after vaccination has been noticed in that establishment, but many deaths have occurred in the unvaccinated.

Geneeskundig Handboek.

A GERMAN writer, of the name of Buchner, seems very likely to favour the world with a series of abridgements longer than the original works. He has constructed a very ingenious manual for the use of students, in which even the critics of his own country cannot help being in some degree struck with the fact, that on the subject of contagions, which they remark has been disposed of by Quarin in two hundred and twenty-five pages, by Frank in three hundred and twenty-one, by Vogel in four hundred and sixty-four, by Hufeland in one hundred and one, by Consbruch in fifty-two, and by Richter in three hundred and thirty-two, he has expanded his observations over *seven hundred and eighty-eight pages*. This *manual* is published in parts, and promises to be very convenient to those students who can afford to keep a mule to carry it about.

Vinegar River.—Natural Acidulous Waters in South America.

The volcanic mountain Puracé forms part of the central chain of the Andes of New Grenada. From this mountain a river descends, the waters of which are sensibly *acid* to the taste. Hence the inhabitants of the country, who know no acid but vinegar, call it *Rio Vinagre*, or *Vinegar River.*

The acidity of these waters, however, is not caused by the prescence of vinegar, but by that of the muriatic and sulphuric acids, the latter of which is in much greater proportion than the former. In the same neighbourhood, a few small streams similarly impregnated have also been found, but no other example of this singular phenomenon has as yet, we believe, been observed elsewhere. At their sources these waters are all said to be very hot, but they soon acquire the temperature of the atmosphere, and ultimately discharge themselves into a river of common water which descends from the same chain, where they prove for several leagues entirely destructive of the fish.

In a recent number of the Philosophical Magazine, *Feb.* 1825, a long article on this subject may be found, from the pen of Humboldt, to which we may refer for the particulars of a late analysis of these waters, and further details.

Medical Matriculations in Edinburgh.

From the following statement of the number of Medical Matriculations which have taken place in the University of Edinburgh during the last five years, it will be seen that the afflux of students of this description to that celebrated school still continues to increase.

		Nos.
In 1820 — 21,	.....	754
1821 — 22,	.....	817
1822 — 23,	.....	867
1823 — 24,	.....	870
1824 — 25,	.....	905, to April.

A considerable number are stated to have been in attendance on the medical classes when this return was made up, who had not then matriculated; many of whom were however expected to do so in the course of the summer session, which would render the number for the present year still greater.—*Edin. Med. Journ. April*, 1825.

Circulation of the Blood—Dr. Barry's Memoirs upon.

We learn by the French Journals, that Dr. Barry, an English army surgeon settled for some time in Paris, lately read before the Royal Academy of Sciences in that city a memoir '*On the Motions of the Blood in the Veins.*'—In this memoir, the author, after detailing the train of reasoning by which he was led to some novel and curious experiments upon living animals, comes to the conclusion, that the dilatation of the thoracic cavities at the moment of *inspiration* produces the same effects upon the fluids contained in the veins and symphatics, that the ascent of the pistous does in the pump.

Although the doctrine of a *thoracic vacuum*, as connected with

the motions of the blood, is not new, yet the notions hitherto entertained with respect to it have been exceedingly vague and uncertain—we are gratified to find, therefore, that the observations and experiments of Dr. Barry were of such a nature as to create a considerable sensation in the Academy, and to induce that learned body to appoint two of its most distinguished members (MM. CUVIER and DUMERIL) to see Dr. Barry repeat his experiments, and report upon the subject. The result we shall take care to communicate to our readers in due time.

Hydrocele.

M. LARREY presented a young military man at a late sitting of the Section of Surgery of the French Academy, on whom he had performed a radical cure of hydrocele, without employing any other means of exciting inflammation in the tunica vaginalis, than allowing an elastic gum catheter to remain for a few moments within the opening.

New Mode of Securing Anatomical Preparations in Spirits.

DR. MACARTNEY, of the University of Dublin, has employed a thin plate of Indian rubber as a covering for preparation jars, in place of the former laborious and offensive one, by means of putrid bladder, sheet-lead, &c.

It is essential that the Indian rubber should be painted or varnished, after which not the slightest evaporation of the spirits takes place. The material, by its elasticity, adapts itself to the variations in the volume of the contents of the jar from different temperatures, and thus removes the principal cause of the escape of the spirits.

It is probable that leather coated with Indian rubber, and painted, would answer as well as the rubber itself, by which the expense would be greatly diminished.

Clinical Remarks on the Diseases most prevalent during the preceding Month.

THE weather during August has been much cooler than in the preceding month: rain fell plentifully on the 2d and 3d of the month, and till the last three days it has continued showery ever since.

Cholera, which was rare during the great heat of July, has prevailed to a considerable extent in August, and still appears rather on the increase. We have heard of some fatal cases in old people and in children, but have not lost any patients by this disease ourselves. Generally speaking, it has been mild, attended with slight vomiting and occasional diarrhœa, but more frequently only with tenesmus. Cramp has been of rare occurrence. Aperients have almost always been required, the discharge from the bowels being generally insufficient without them. In only one instance, where the diarrhœa was unequivocal and had continued several days, did we venture to give opium alone; the patient at the time being affected with violent cramps. Relapses have been rather frequent, and, as usual, more severe than the original attack. These were most common, however, when no recourse had been had the first time to medical assistance.

Disorders of the head have prevailed also to a considerable extent, but still not so much as in July. Among very young children, we have seen several instances of paraplegia, without any additional very severe symptoms. Most of them are gradually recovering under depletion and great attention to the bowels, which in every instance have been greatly disordered; in one or two cases no improvement has been made, and it is to be feared that the child will remain a cripple.

The frequently inflammatory nature of dropsy is now pretty generally acknowledged, but it is still little acted upon in practice. Several instances have come under our own care within the last two months, which have terminated well and speedily by active depletion. In the case of a carpenter, fifty years of age, who had just recovered from fever, the right leg and thigh were most enormously distended to at least double the natural size. He was immediately bled, and elaterium ordered in the dose of a quarter of a grain every hour till it operated. In two days the limb was very nearly completely reduced, and he is now convalescent. In a girl of nineteen years of age, a dressmaker, the inflammatory nature of this disease was equally well-marked, and the relief from depletion as great. She was of a strong and plethoric habit, and subject to frequent epistaxis. The legs, from the knees downwards, only were swelled, but were in this part as thick as the thigh. The effusion had endured for nearly three years, and till it took place she had been subject to severe headachs, which had continued, but in a much slighter degree, ever since. Within the last six weeks, however, the effusion had greatly increased, and the unpleasant feelings in the head had entirely disappeared, the relief of headach appearing to be proportioned to the increase of the œdema. The pulse was hard and very full, and the catamenia scanty. Bleeding and purging have completely removed the effusion in little more than a week, though much care will probably be required to prevent a return.

Menorrhagia has been frequent during the hot weather; in some females, however, the heat appeared to have a contrary effect, and to retard menstruation for some time.

Feverish complaints have been rather more prevalent than during July, and in some instances severe. One case only of continued fever has proved fatal, however, within our knowledge.

Puerperal fever has been prevalent, particularly in London. Two cases have come before us. In these the exhibition of the oleum terebinthinæ, after one large blood-letting, proved most beneficial. Both the patients recovered. These are the only instances of this disease which have occurred to us for several months, wherein we have had an opportunity of exhibiting this remedy. In a case of low nervous fever supervening to the puerperal state, which had been very judiciously treated in its earlier stages, the patient was evidently benefited by this medicine. At the time when it was prescribed, the powers of life had sunk very low: the pulse, which had been remarkably quick and weak, could not now be counted at

the wrist; the breath was cold; the tongue covered by a thick, dark-brown coating, and the teeth and lips by an adhesive sordes: there were also floccitation, low delirium, coldness of the skin and extremities, and other symptoms denoting impending dissolution. A large blister was ordered to be placed over the epigastric centre, and a large dose of the oleum terebinthinæ with some oleum ricini to be given by the mouth. The powers of life immediately rallied, the patient recovered, and was dicharged from the public institution at which she was a patient.

In a case of puerperal mania, which occurred in the same institution as the former case, camphor in full doses, after blood-letting and alvine evacuations, proved eminently beneficial.*—EDITORS.

Report of Medical Plants which may be gathered during September, embracing those which are in Flower, &c.

I.—MEDICAL PLANTS FLOWERING IN SEPTEMBER.

When the officinal parts are mentioned, it denotes that these may be gathered during the month.]

Anthemis Nobilis. Flowers.
Artemisia Santonica. Tops.
Colchicum Autumnale. Flowers and Root.
Crocus Sativus. Stigmata of the Flowers.
Ricinus Communis.

II.—OFFICINAL PARTS OF PLANTS WHICH MAY BE GATHERED IN SEPTEMBER.

Root of the *Althæa Officinalis.*
Seeds of the *Anethum Graveolens.*
Seeds of the *Anethum Fœniculum.*
Root of the *Angelica Archangelica.* (Found about Birmingham.)
Leaves of the *Arbutus Uvæ Ursi.* (Found in Scotland.)
Boletus Ignarius.
Root of the *Daphne Mezereum.*
Capsule and Seeds of the *Datura Stramonium.* (About London.)
Root of the *Eringium Maritimum.*
Roots of the *Inula Helenium.*
Root of the *Leontodon Taraxacum.*
Seeds of the *Linum Usitatissimum.*
Berries of the *Rhamnus Catharticus.*
Berries of the *Sambucus Nigra.*
Stalks of the *Solanum Dulcamara.*

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

[No publications will be announced under this head, except those which are actually received by the Editors, from the Author or Publisher.]

1. Elements of the Theory and Practice of Physic, designed for the use of Students. By George Gregory, M.D. Licentiate of the Royal College of Physicians, in London, Secretary of the Medical and Chirurgical Society of London, Physician to the Small-Pox and Vaccination Hospital, and Senior

* See the remarks on Camphor at pp. 249 and 250 of the present Number.

Physician to the St. George's and St. James's Dispensaries. Second Edition, with Additions and Amendments. 8vo. Pp. xvii. 667. Burgess and Hill, 1825.

*** This Edition of Dr. Gregory's useful Manual is printed in a convenient form. "Every part of the work," he informs us in his preface, "has been carefully revised, and many additions to it have been made, suggested partly by the recent observations of contemporary writers, and partly by the Author's more extended experience."

2. Remarks on Irritative Fever, commonly called the Plymouth Dock-Yard Disease; with Mr. Dryden's detailed Account of the Fatal Cases, including that of the lamented Surgeon, Dr. Bell. Dedicated, with permission, to Commissioner Shield. By John Butler, M.D., F.R.S., F.L.S. and W.S., Fellow of the Royal College of Physicians, Edinburgh, and of the Royal College of Surgeons in London, &c. &c. 8vo. Pp. 312. Underwoods. London, 1825.

3. Practical Observations on certain Pathological Relations which exist between the Kidneys and other Organs of the Human Body, especially the Brain, Mucous Membranes, and Liver. By John Fosbroke, Surgeon, Cheltenham. 8vo. Pp. 150. Whittaker, London, 1825.

4. Heads of Lectures on Mental Diseases. By Alexander Morrison, M.D. of the Royal Colleges of Physicians of London and Edinburgh, Inspecting Physician of the Surry Lunatic Houses, Physician in Ordinary to his Royal Highness the Duke of York, &c. &c.

5. Small-Pox and Cow-Pox: comprehending a Concise History of those Diseases, and a Comparison between Inoculation for Small-Pox and Vaccination, founded upon a Statistical Account of their Effects in Cambridge. With a Plan for the universal extension of Vaccination: addressed to the Public. By John Jennings Cribb, Member of the Royal College of Surgeons. 8vo. Pp. 88. Underwoods. London, 1825.

6. The Syphonic Theory, or Brief Observations on the Circulation of the Blood, and on Respiration, as connected therewith. By Edward Hopley, Surgeon, R.N. 8vo. Pp. 40. London, 1825.

7. Traité Anatomico-Pathologique des Fièvres Intermittentes Simples et Pernicieuses, fondé sur des Observations Cliniques, sur des faits de Physiologie et Pathologie Comparécs, sur des Autopsies Cadaveriques, et sur des Recherches Statistiques, recuilliés en Italie, et principalement à l'Hôspital du Saint Esprit de Rome, pendant les années 1820, 1821, et 1822. Par. E. M. Bailly, de Blois, Docteur en Médécene, &c. &c. 8vo. Pp. xvii. 533. xvi. App. 64. Paris, 1825.

Conversations on the Theory and Practice of Physiological Medicine; or Dialogues between a Savant and a Young Physician, a Disciple of Professor Broussais. Translated from the French. Pp. 326. Burgess and Hill, London, 1825.

NOTICE OF LECTURES.

Dr. Copland will commence his next Course of Lectures on the Theory and Practice of Medicine, and on Materia Medica, on Monday, the 3d of October, in Great Pulteney Street, Golden Square.

MEDICAL JURISPRUDENCE.—Dr. Gordon Smith will commence a Course of Lectures early in October. For a Prospectus containing particulars, apply to the Publishers, or to Messrs. Callow and Wilson, Highley and Son, Anderson, and Burgess and Hill, Medical Booksellers.

Mr. Frost begins his next Course of Lectures on Botany, about the middle of October.

LITERARY INTELLIGENCE.

In the Press,

A TREATISE ON DIET,

With a View to refute several prevailing Opinions, and to establish, on practical grounds, a System of Rules, for the Prevention and Cure of the various Diseases incident to a Disordered State of the Digestive Functions.

By J. A. PARIS, M.D., F.R.S., Fellow of the Royal College of Physicians.

*** We are glad to perceive that Dr. Paris has announced his intention of publishing a work on Diet; he has already thrown out some hints upon this subject in his popular book on Pharmacology, which we are quite satisfied will afford a valuable basis for a practical work. The inquiry into the philosophy of diet is complicated in its numerous relations, and requires much varied knowledge for its successful pursuit.

DR. COPLAND is preparing for publication a Dictionary of Pathology and Practice of Medicine, in one very large octavo volume. — This work will be followed by a Dictionary of Materia Medica and Therapeutics.

Quarterly Report of Prices of SUBSTANCES *employed in* PHARMACY.

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Alumen		0	6
Ammoniæ Murias		1	8
—— Subcarbonas		2	0
Amygdalæ dulces		3	6
Ammoniacum (Gutt.)		7	6
—— (Lump.)		3	9
Anthemidis Flores		3	0
Antimonii oxydum Ver.		6	0
—— sulphuretum præp.		3	6
—— sulphuretum præp.	unc.	0	6
Antimonium Tartarizatum	unc.	0	4
Arsenicum Alb. Sublim.	lb.	2	6
Assafœtidæ Gummi-resina	lb.	4	6
Aurantii Cortex		3	10
Argenti Nitras	unc.	5	9
Balsamum Peruvianum	lb.	20	0
—— Tolutanum		48	0
Benzoinum elect.		8	6
Bismuthi Subnitras	unc.	1	0
Calamina præparata		0	6
Calcis Murias	unc.	0	3
—— Muriatis solutio	lb.	1	0
Calumbæ	lb.	10	0
Cambogia		7	6
Camphora		4	9
Canellæ Cortex elect.		2	6
Cantharis	lb.	11	0
Cardamomi Semina	lb.	7	6
Cascarillæ Cortex elect.		1	6
Castoreum	unc.	3	0
Castor Russ	oz.	15	0
Catechu Extractum	lb.	2	6
Cetaceum		3	0
Cera alba		3	4
—— flava		3	3
Cinchonæ cordifoliæ Cortex (yellow)		8	6
—— lancifoliæ Cortex (quilled)		12	0
—— oblongifoliæ Cortex (red)		12	0
CinnamomiCortex		14	0

		s.	d.
Coccus (Coccinella)	unc.	2	6
Colocynthidis Pulpa Turk.	lb.	6	9
Copaiba		6	0
Colchici Radix (sic.)		2	6
Croci stigmata	unc.	3	0
Cupri sulphas	lb.	1	0
Cuprum ammoniatum		8	0
Cuspariæ Cortex		3	0
Confectio aromatica		6	0
—— Aurantiorum		2	6
—— Cassiæ	lb.	6	0
—— Opii		6	0
—— Piperis Nigri	lb.	3	6
—— Rosæ caninæ		1	8
—— Rosæ gallicæ		2	0
—— Rutæ	unc.	0	6
—— Scammoniæ	unc.	2	6
—— Sennæ		3	0
Emplastrum Ammon. c. Hydrar.	lb.	6	6
—— Cantharidis		6	6
—— Hydrargyri		3	0
—— Opii		3	6
—— Resinæ		1	8
—— Saponis		1	8
Extractum Aconiti	unc.	0	10
—— Anthemidis	lb.	7	0
—— Belladonnæ	unc.	1	6
—— Cinchonæ		3	0
—— Cinchonæ resinosum		4	6
—— Colocynthidis		4	6
—— Colocynthidis comp.		2	0
—— Conii		0	6
—— Elaterii		35	0
—— Gentianæ		0	4
—— Glycyrrhizæ	lb.	7	0
—— Hæmatoxyli	unc.	0	5
—— Humuli		1	0
—— Hyoscyami		1	0
—— Jalapæ	1s. 6d. Res.	3	6
—— Lactucæ Sativæ	unc.	1	0
—— —— Virosæ	unc.	1	0
—— Opii		4	6
—— Papaveris		0	9
—— Rhæi		2	0
—— Sarsaparillæ		2	0
—— Stramonii Sem.	unc.	5	0
—— Taraxaci		0	9
Ferri subcarbonas præcip.	lb.	3	6
—— sulphas		1	0
Ferrum ammoniatum		3	4
—— tartarizatum		3	4
Galbani Gummi-resina		14	0
Gentianæ Radix elect.		1	6

	s.	d.
Guaiaci resina	12	0
Hydrargyrum purificatum	5	6
——— præcipitatum album	8	0
——— cum creta	3	9
Hydrargyri Oxymurias ....unc.	0	8
——— Submurias	0	8
——— Nitrico-Oxydum	0	8
——— Oxydum Cinereum	1	
——— Oxydum rubrum	4	6
——— Sulphuretum nigrum	0	4
——— ——— rubrum	0	6
Hellebori nigri Radix ....lb.	2	6
Ipecacuanhæ Radix	17	0
——— Pulvis	19	0
Jalapæ Radix	6	0
——— Pulvis	7	0
Kino	7	0
Liquor Plumbi subacetatis ....P. lb.	0	9
——— Ammoniæ ....1 0..2 6	5	3
——— Arsenicalis ....lb.	3	0
——— Potassæ	1	4
Linimentum Æruginis ....lb.	3	6
——— Camphoræ comp.	5	0
——— Saponis comp.	5	0
Lichen	2	0
Magnesia	7	0
Magnesiæ Subcarbonas....2 6	3	6
——— Sulphas	0	6
Manna	5	6
——— communis	3	0
Moschus pod. (32s.) ....in gr. unc.	46	0
Mastiche ....lb.	8	6
Myristicæ Nuclei	10	4
Myrrha	7	0
Olibanum	3	0
Opopanacis gummi resina	20	0
Opium (Turkey)	36	0
Oleum Æthereum ....oz.	2	6
——— Amygdalarum ....lb.	3	0
——— Anisi ....unc.	1	8
——— Anthemidis	6	0
——— Cassiæ	6	0
——— Caryophilli	4	6
——— Cajuputi	4	0
——— Carui	1	6
——— Juniperi Ang.	6	0
——— Lavandulæ	2	6
——— Lini ....cong.	4	0
——— Menthæ piperitæ ....unc.	3	10
——— Menthæ viridis Ang.	4	6
——— Origani ....unc.	1	0
——— Pimentæ ....unc.	5	6
——— Pulegii ....unc.	4	6
——— Ricini optim.	3	6
——— Rosmarini ....unc.	0	9
——— Succini	0	6
——— Sulphuratum ....P. lb.	1	2
——— Terebinthinæ	1	4
——— ——— rectificatum	2	0
Olivæ Oleum ....cong.	12	0
——— ——— secundum	11	0
Papaveris Capsulæ ....(per 100)	2	9
Pix Abietina ....lb.	1	0
Plumbi Acetas	1	6
——— Subcarbonas ....lb.	0	8
——— Oxydum semi-vitreum	0	8
Potassa Fusa ....unc.	0	6
——— cum Calce	0	2
Potassæ Nitras 0 6	1	0
——— Acetas	7	0
——— Carbonas	2	6

	s.	d.
Potassæ Subcarbonas	1	0
——— Sulphas	1	0
——— Sulphuretum	3	0
——— Supersulphas	2	4
——— Tartras	2	9
——— Supertartras	1	6
Pilulæ Hydrargyri ....unc.	0	6
Pulvis Antimonialis	0	4
——— Cinnamomi compos. ....unc.	1	0
——— Contrayervæ comp.	0	3
——— Ipecacuanhæ compos. ....unc.	0	8
——— Scammoniæ compos. ....unc.	3	6
——— Tragacanthæ comp.	0	4
Resina Flava ....lb.	0	4
Rhæi Radix (Russia)	28	6
——— (East India) opt.	10	0
Rosæ petala	0	0
Sapo (Spanish)	2	6
Sarsaparillæ Radix (Jam.)	5	6
Scammoniæ Gummi-Resina ....unc.	5	0
Scillæ Radix siccat. ....lb.	1	9
Senegæ Radix	3	6
Sennæ Folia....5 0	6	0
Serpentariæ Radix	5	6
Simaroubæ Cortex	3	6
Sodæ subboras	2	9
——— Sulphas	0	6
——— Carbonas	5	0
——— Subcarbonas	1	6
——— ——— exsiccata	3	9
Soda tartarizata	2	0
Spongia usta ....unc.	1	6
Spiritus Ammoniæ....M. lb.	4	6
——— ——— aromaticus	4	0
——— ——— fœtidus	4	6
——— ——— succinatus	4	0
——— Cinnamomi	3	0
——— Colchici Ammon. ....unc.	0	5
——— Lavandulæ ....lb.	5	0
——— Myristicæ	3	6
——— Pimentæ	3	0
——— Rosmarini	4	0
——— Ætheris Aromaticus	9	0
——— ——— Nitrici....3 6	5	0
——— ——— Sulphurici	6	0
——— ——— Compositus	6	6
——— Vini rectificatus ....cong.	0	0
Syrupus Papaveris ....lb.	1	8
——— Sarsaparillæ ....lb.	9	0
——— Tolutanus ....lb.	2	6
Sulphur Sublimatum	0	6
——— Lotum	1	6
——— Præcipitatum	1	3
Tamarindi Pulpa opt.	2	6
Terebinthina Vulgaris	0	10
——— Canadensis	6	0
——— Chia	10	6
Tinct. Ferri muriatis	5	0
Tragacantha Gummi	8	0
Valerianæ Radix	1	4
Veratri Radix	1	10
Vinum Colchici	4	0
——— Ipecacuanhæ	4	6
——— Opii	8	0
Unguentum Hydrargyri fortius	4	0
——— ——— Nitratis	5	6
——— ——— Nitrico-oxydi	4	0
Uvæ Ursi Folia	3	3
Zinci Oxydum	5	0
——— Sulphas purif.	1	8
Zingiberis Radix opt.	4	0

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	s.	d.
Brucine ....dr.	28	0
Emetine du Codex ....dr.	25	0
Hydriod. Potass. ....oz. 9s. dr.	1	6
Iodine ....oz.	8	0
——— Tincture ....oz.	2	0
Morphine Crystall. ....dr.	21	0
——— Acetate ....dr.	20	0

	s.	d.
Morphine Acetate Liquor ..oz. 18s. dr.	2	6
Hydrocyan. Acid (Scheele's), twice the strength of Vauquelin's oz. 3s. 8d. dr.	0	6
Quinine Sulphate ....oz. 40s. dr.	6	0
Strychnine ....dr.	26	0
Veratrine ....dr.	30	0

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THE METEOROLOGICAL JOURNAL,

From the 19th of JULY to the 20th of AUGUST, 1825.

By Messrs. HARRIS and Co.

Mathematical Instrument Makers, 50 High Holborn.

July.	Moon.	Rain Guage.	Therm. 9 A. M.	Therm. Max.	Therm. Min.	Barom. 9 A. M.	Barom. 10 P. M.	De Luc's Hygrom. 9 A. M.	De Luc's Hygrom. 10 P. M.	Winds. 9 A. M.	Winds. 10 P. M	Atmo. Variation. 9 A. M.	Atmo. Variation. 2 P. M.	Atmo. Variation. 10 P. M.
20			73	79	58	30 17	30 16	64	64	E	SE	Fine	Fine	Fine
21			64	72	51	30 14	30 11	67	64	NE	ENE	Clo.	——	——
22	☽		62	79	55	30 10	29 98	62	55	NE	W	Fine	——	——
23			61	67	50	29 93	29 93	64	59	ENE	NE	Clo.	Clo.	——
24			60	67	50	29 97	29 08	61	67	NE	NE	Fine	——	——
25			60	68	55	30 17	30 17	62	55	NE	NNE	——	——	——
26			62	68	52	30 18	30 17	66	64	NNE	NNE	Clo.	——	——
27			62	70	54	30 13	30 13	66	74	NE	ESE	Fine	Fine	——
28			66	78	55	30 09	30 09	61	69	ENE	ENE	——	——	——
29	●		64	73	50	30 08	30 05	64	66	E	E	——	——	——
30			63	73	56	30 04	29 93	66	52	E	SE	——	——	——
31			58	80	60	29 93	29 90	65	53	E	SE	——	——	——
1			66	81	67	29 90	29 90	66	53	SE	W	Clo.	——	——
2			72	77	59	29 88	29 88	56	69	W	SW	——	Rain	Clo.
3		,28	64	72	60	29 85	29 85	72	69	SW	SW	——	Clo.	——
4			69	71	57	29 57	29 23	76	79	W	SW	——	Rain	Rain
5		,27	64	71	56	29 40	29 53	66	64	NW	W	——	Fine	——
6	☾		60	75	55	29 55	29 58	72	69	W	W	Rain	Rain	Fine
7		,27	65	71	57	29 68	29 72	65	57	W	W	Fine	Clo.	Clo.
8			62	69	59	29 59	29 61	71	56	WSW	W	Rain	Fine	Fine
9			63	70	53	29 61	29 60	70	65	W	W	Fine	——	——
10			59	65	53	29 54	29 71	71	69	W	NNW	——	Rain	Rain
11		,25	59	66	56	29 87	29 95	74	72	N	N	Clo.	Fine	Fine
12			66	70	59	29 96	29 86	75	60	NW	W	Fine	——	——
13			52	65	59	29 60	29 36	80	66	WSW	W	Clo.	Clo.	Clo.
14	☽		63	67	49	29 33	29 34	67	69	WNW	NW	Fine	Fine	Fine
15		,38	57	67	56	29 37	29 54	78	77	WNW	NW	Rain	Clo.	Clo.
16			61	68	59	29 71	29 75	79	72	NNW	W	——	——	Fine
17		,05	68	65	50	29 75	29 77	66	76	NW	WSW	Fine	——	Rain
18			61	68	57	29 85	30 03	75	70	N	N	Clo.	Fine	Clo.
19			60	68	58	30 10	30 06	72	68	NW	NNE	——	Clo.	Fine

The quantity of rain fallen in July was 4-100ths of an inch.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the EDITORS, to the care of Messrs. T. and G. UNDERWOOD, 32 Fleet Street.

THE LONDON MEDICAL

REPOSITORY AND REVIEW.

No. 142. OCTOBER 1, 1825. Vol. XXIV.

No. IV.——NEW SERIES.——Vol. I.

PART I.

REVIEW.

I.

PATHOLOGY OF THE DIGESTIVE MUCOUS MEMBRANE.

[First Article.]

De la Membrane Muqueuse Gastro-Intestine, dans l'Etat Sain et dans l'Etat Inflammatoire, ou Recherches d'Anatomie Pathologique, &c. Par C. Billard. Paris, 1825. Pp. 565.

Practical Remarks upon Indigestion, &c. By John Howship, Assistant-Surgeon to St. George's Infirmary, &c. London, 1825. Pp. 204.

If the progress which pathological anatomy appears to have made within the last thirty years be accurately considered, it will be found much less to consist in the accumulation of facts actually unknown before, than in the clearer arrangement and description of those already collected. This is partly the result of additional investigation, enabling anatomists to appreciate with greater correctness the labours of their predecessors, and partly the consequence of those views of the general structure of the body, for the more thorough elucidation of which, at least, if not for their origin, we are indebted to the scientific and highly talented Bichat. The truth of both these observations will be manifest to any one who will compare the facts continually published by the continental pathologists of the present day, with the reports of Bonetus, Morgagni, or any other of the great anatomists of the last century. The benefit conferred, however, upon science by the moderns is not the less certain, because few of their facts are really novel discoveries, for they have rendered the acquisition of pathological anatomy much easier, by shewing the appearances observed in the body as a series of well-marked changes, dependent upon difference of structure,

in great measure, for their distinguishing peculiarities, instead of as a number of confused and isolated facts. The labours of the French anatomists have particularly contributed to this desirable end, many of whom, dedicating themselves to the observation of changes which single organs undergo, have given us monographs upon morbid anatomy of the very highest value. Among these we may name the work which has been placed at the head of this article, although in it we have to lament the separation of the symptoms noticed during life, at least in very many instances, from the appearances observed on examination after death. This fault is one, however, neither peculiar to M. Billard nor even to the Continent; but as it is much easier to note mere morbid appearances than to watch diligently the phenomena of disease, so frequently in England do we meet men who can run over a long catalogue of the former, the result of their own investigations, while by the bedside their errors in diagnosis are almost inconceivable. It must be very evident, that the cultivation of morbid anatomy can never be advantageous to medicine, unless combined with an accurate knowledge of symptoms; and it has been, we doubt not, from these two departments of science being found so often disunited that many of the older practitioners regard *post mortem* examinations as nothing contributing to the formation of a good physician. As, however, opportunity is presented to us, we shall endeavour, in some measure, in giving an account of M. Billard's work, to supply this defect, though we must premise, that our means of doing so, either from the works of others or from our own observations, are very scanty. Many of the most accurate descriptions of diseases have been given by those who cultivated morbid anatomy in a very slight degree; and hence, though they enable us to trace the great features of maladies with sufficient readiness, they have neglected to mark those slight differences of symptoms which may often be supposed to denote peculiar organic lesions. Another and not less difficulty has arisen from symptoms apparently very similar not being always attended with similar results, so that it has been conceived scarcely possible that a patient who has recovered, and one who has sunk under sufferings in appearance the same, can really have been similarly affected. To make ourselves clearer, we would observe, that many must have remarked those symptoms which, according to the researches of M. Andral, indicate considerable ulcerations of the mucous coat of the intestines, when yet the patient has so rapidly recovered, as to make us, upon reflection, hardly deem it possible that any extensive disorganisation could have had place. The farther investiga-

tion, however, of this subject, and the conclusion to which, as a general fact, we may arrive by late investigations, in a great measure remove this last difficulty, since they prove to us, that ulcerations will heal in the alimentary canal as well as in the external parts of the body; and may, perhaps, occasionally exhibit the same rapid progress towards recovery as is sometimes seen in external ulcers. Neither ought it to be forgotten, that the most violent symptom may precede the diseased alteration of structure, so that we may properly regard the former rather as indicatory actions, which, if not interrupted, will lead to the former, than as produced by certain changes of structure already affected. This is, indeed, the manner in which pathological investigations ought always to be conducted; for otherwise, in looking only at the morbid alterations as a cause of the symptoms that were exhibited during life, and not as the result of actions giving rise to those symptoms, we contemplate in our *post mortem* examinations nothing but incurable diseases. For when, after most distressing sufferings, we discover scirrhous or scrofulous tumours, or any other of those morbid formations or disorganisations which, on the surface of the body, we know either to be altogether or frequently incurable, and think not otherwise respecting them than that they have given rise to certain symptoms, these symptoms henceforth become nothing else than indications of hopeless maladies: but when, looking backwards, we seek for the earlier manifestations of deranged health, we seek, at the same time, to learn their danger and the necessity of combating them. This view, however, has unfortunately been seldom followed, and hence, perhaps, the improvement of medical practice has not been commensurate with the extension of pathological anatomy. There is, however, yet another source to which we may justly trace the difficulty of recognising at all times the external manifestations of internal organic changes; and this is, that they are frequently so slight, as not to be noticed till they have passed beyond the stage of cure, and sometimes have never even been suspected till examination after death has shewn them to exist. And if, on the one hand, we have to guard ourselves against the danger of considering every aberration from the usual appearances as diseased or unnatural, so equally, on the other hand, is it necessary to be careful that we deny not the existence of disease because during life no symptom had led to its suspicion. If illustration of the necessity of this caution were yet wanting, it might readily be given in either case: the division of the spleen into lobes, or the venous flush of the intestines, shew the one; while the adhesions of the lungs, and (what very lately we saw) the matting

together of the intestines by coagulable lymph, without pain, exhibit the other. The former are not the effects of disease, nor the latter consistent with health; and the suspicion once excited, that these may be attendant upon symptoms which have not hitherto been considered as proceeding from such disease, may both lead to its earlier recognition and its prevention. In these remarks, we well know that there is nothing very new, nor any thing which has not been frequently stated, more ably than we can do it, before: the importance of them, however, may, we trust, well excuse their repetition, for to us it appears that the difficulties and the precautions which we have mentioned can never be too strongly impressed upon the minds of pathological anatomists, nor too constantly kept in view.

In our researches into the diseases of the digestive mucous membranes, an account of which we are now about to lay before our readers, we have too often had to lament the neglect of that care which we have inculcated; and to this we must be permitted, at least in great measure, to attribute the deficiencies that it will exhibit. The importance of the mucous membrane, as the seat of some of the most essential functions of the animal body, has been well noticed by Bichat; and the villosities of the mucous coat of the intestines (it has been observed by the lamented Béclard) are fully entitled to the name of the radicles of animals, since they serve the same office in the animal body as the true radicle in vegetable bodies. It would be idle to take up the time of our readers in a long description of this membrane, because to those who have studied anatomy, however slightly, its general appearance must be well known, and for those who have not, no description could ever suffice. There are, however, some peculiarities in its appearance, not inconsistent with the healthy performance, at least so far as we are at present informed, of the functions to which it is destined, that require some notice. The principal of these have a reference to its colour, its thickness, and its consistency.

With regard to its colour, Morgagni, as also other anatomists of his day, were fully aware that a florid tint did not always indicate inflammation, and that floridness might be either the consequence of simple venous congestion, or of irritation in a particular part of the membrane, as from a lumbricus in the last hours of life. It is, however, more particularly to Dr. Yelloly that we are indebted for calling the attention of the profession to this phenomenon. From having met with many instances of extreme vascularity in the stomach, when no symptom during life had given reason

to suspect any affection of that organ, he was induced to examine more accurately the general state of the villous coat, and, in the fourth volume of the Medico-Chirurgical Transactions, he has related the appearances in 'twenty successive dissections made with a particular view to the state of the stomach.' Without entering minutely into the dissection of each case, it will be sufficient to state, that there was great vascularity in some part of the stomach in the majority, no indication in many having been offered during life of stomachic affection. Thus, in a man who died of apoplexy, without having exhibited any disorder of the stomach, 'a considerable portion of the great end of that organ was found very vascular, with occasional appearance of extravasation, in form of small points.' In another instance, in which the patient died from pulmonary consumption, having complained nothing of unpleasant feelings in the stomach, 'two square inches of the lesser curvature, and a portion at the great end, exhibited minute florid vascularity and slight pointed extravasation.' Dr. Yelloly examined also the stomach of five malefactors who were hung for murder, and who, before their execution, were in good health. In the first, 'the whole cavity was found lined with dark-coloured blood, which being washed off, discovered the whole surface of the villous coat of a dark red colour.' In this case, the individual had been much convulsed in the last moments of life; and though the appearances ought not to be considered inflammatory, neither can they be regarded as natural. In the third, the external surface was marked with distended veins, and 'there were florid patches of vascularity in various parts of the whole inner surface of the stomach.' In the fourth, 'the colour of the villous coat throughout was of a light crimson, varying slightly, however, in degree of brightness, sometimes being almost florid, and sometimes rather dark.' Dr. Yelloly has stated in general terms, that appearances of vascular fulness are not to be regarded as unequivocal marks of disease; and farther forward, he refers the vascularity in such cases to congestion in the veins, 'careful dissection discovering a fine net-work of veins between the villous and the muscular coat, from which the minute vascularity of the former evidently proceeds.' From this conclusion we know not that it would become us to dissent, at least so far as concerns those cases which were the peculiar objects of Dr. Yelloly's consideration; but it has appeared to us, that many of these changes may or may not be the consequences of disease, as they are or are not accompanied by other circumstances. Certainly no one would presume to

assert, that the blush which appears on the skin after a slight blow is disease, though, should the system be unhealthy, and favourably disposed to take on an inflammatory action, such an efflorescence might be the commencement of a serious inflammation. In the very essential function, also, of perspiration, how frequently do we view it as a serious symptom of disease, although at other times it is a healthy action, and its suppression is attended or followed by serious functional disorder. Thus, M. Andral has noticed, as, indeed, every practitioner of common observation may have noticed, diarrhœa to occur in consequence of the sudden suspension of cutaneous perspiration. The same opinions might be illustrated by very many other facts of a similar nature; and while it thus happens with symptoms, it no less frequently happens with organic appearances. M. Billard, fully aware of this circumstance, has described every appearance as proceeding or not proceeding from disease, or, what appear with him analogous terms, inflammatory or passive. Without entering upon those speculative questions respecting the activeness or passiveness of the vessels, which have been argued and contested in this country, within the last few years, with very unphilosophical acrimony, M. Billard has confined himself to the consideration of those manifest facts, regarding which no difference can exist, however differently we may view the processes that lead to them, whether we are the partisans of Dr. Thomson, Dr. Philip, Dr. Hastings, Dr. Parry, or Mr. James. For ourselves, we can only state, that, for the most part, it seems nothing more than an idle war of words, and that much good temper has been lost, with very little benefit to any party. To return, however, to M. Billard. We think that we are conferring a real benefit upon our readers by inserting the compendium he has given of inflammatory and passive erubescence: —

' *Inflammatory.*	*Passive.*
' With or without manifest thickening of the membrane.	The same.
' Indifferently in a depending or an elevated part.	Almost always in a depending part.
' Without general injection of the abdominal vessels, and without any obstacle to the course of the blood, sometimes consisting in only a slight local injection.	With general injection of the abdominal vessels, and with an obstacle to the course of the blood, rarely being an isolated local injection, but frequently occupying a fold of the intestine, or the whole intestine.
' With considerable tender-	A power of raising the mu-

ness of the submucous cellular texture, and a capability of raising the mucous coat in large patches.	cous membrane in shreds only, which is the case in health.
'With thickening and abundance of the intestinal mucus, and sometimes with sanguineous exhalation.	Without abundance or thickening of the intestinal mucus, but sometimes with sanguineous exudation.'

This enumeration, it should be remembered, refers not to the general results of inflammation of the mucous membrane, but only to the difference existing between erubescence, when it is to be considered inflammatory, and when the effects only of passive congestion.

Here, then, the question presents itself, how far the inflammatory appearances are indicated during life? One of the most important symptoms of inflammation, and which is looked for by most practitioners, is the occurrence of permanent pain in the part affected; yet nothing is more certain than that inflammation may exist, and that the formation of fictitious membranes, believed by all to be products of inflammation, may occur, without any painful sensation; and, on the other hand, that pain in an organ may exist, may be aggravated by pressure, and may remain for a considerable time, without exhibiting, should death take place, any of those morbid phenomena that we usually regard as the result of an inflammatory action. In the painful disorders of the stomach, we almost constantly find the pain to be intermittent, and it is evidently not in every case of the same nature. Mr. Howship appears inclined to believe that most of the chronic affections of the stomach, when accompanied with severe pain, proceed from spasm of the muscular coat, and cites the relief afforded by what have been termed antispasmodic medicines as giving probability to the opinion. Without acceding to the correctness of this mode of reasoning, it is very certain that in many instances such pain does proceed from spasm, and that opium, ammonia, or brandy, will cause not only the pain to disappear, but prevent its recurrence; and when we mean spasm, we intend pain proceeding from muscular contraction, in the same manner as irritation of the uterus or the parts adjoining produce contractile efforts and pain in that organ. And in both these cases, every moderately attentive practitioner must be well aware that pressure is frequently intolerable, though in a very few hours the pain will disappear without the employment of any remedy. Even in this instance, however, it might be contended, and probably with correctness, that slight inflammatory action may have been the consequence of the spasm,

although, not being the natural predisposition of the organ, and produced only by violent excitement, it had afterwards spontaneously subsided: but it is manifest that this would be very different when there was originally a tendency to inflammation, and that in this case no such favourable result would ensue. Here the inflammatory process might be expected to proceed, and to end in some organic morbid change. Accordingly, while it has frequently seemed to us that mere spasmodic pain has after a short time completely disappeared, till it has been again excited by the application of some fresh stimulus, as indigestible food, violent affections of the mind, or similar circumstances, the intervals between the attacks being perfectly free from pain — in inflammation of the organ the pain never entirely subsides, or, at least, can always be discovered by pressure upon the epigastrium, even when the patient himself has no suspicion of its existence. Now, we believe this pain, thus constant, but, as in every affection, subject to exacerbations, to indicate an inflammatory state of the mucous membrane of the stomach, and giving rise to, or accompanying, the severer forms of dyspepsia. Neither is the relief afforded by narcotics, as opium, hydrocyanic acid, or tobacco, any evidence against this, because they are calculated to relieve pain from whatever cause proceeding. And that very slight irritation will produce an inflammatory blush, and that this blush may be accompanied with pain, we have the farther proof from the marks induced by intestinal worms, and by the pain caused by their presence. Morgagni particularly cites the irritation of lumbrici as capable of inducing a redness in any part of the villous coat of the intestines during the last hours of life, and which redness is not always inflammatory, but if this can be produced at all, then may it also proceed to real inflammation. Again, we have this additional proof, that inflammatory action must be present — there is frequently pain in the stomach increased by pressure, and relieved temporarily by local depletion, which yet only is permanently cured by the rejection of the parasite — there is hæmatemesis, and this to a violent degree, which can only be explained by supposing, in the language of Dr. Parry, an increased momentum to the part. In the instance of an Irishman, who complained of great pain in the stomach, with frequent vomiting and purging of blood, all the symptoms disappeared after vomiting a large lumbricus; and the application of leeches we have very frequently seen serviceable in relieving pain under similar circumstances, though the only real cure is to be obtained by ejecting the exciting cause. Among the cases of which Dr. Yelloly has given an account, we appear to have even ana-

tomical proof that gastrodynia frequently proceeds from inflammatory action. In a man who died from pleuritis, but who had suffered from occasional pains in the stomach for some years, there was 'a reddish blush over the principal part, and some of the plicæ near the pylorus were much elevated, dark-coloured, and semi-cartilaginous;' and in another man who had died from fever, having latterly suffered from irritability of the stomach, 'the whole surface of that organ was covered with florid vascularity, sometimes in distinct vessels, sometimes in pointed extravasations.' It may seem very useless to many persons to dwell much upon what, perhaps, appears to them a very insignificant affection; and we, indeed, much fear that even in practice the slighter stomach complaints are very carelessly treated, or managed in the wholesale with blue pill and infusion of gentian and senna. So far as our experience has gone, however, and it has not been very limited, as much mischief is effected by one of these classes of practitioners as the other; and the idle expectant and the bigoted Abernethian are equally incompetent to the management of these cases. No one, certainly, of the present day, has done so much service to medical and surgical science as Mr. Abernethy, and it is not against him that our strictures are directed, but against those who, following his directions to the letter in every case, believing almost that man has no other organ than a stomach, and that in every individual it is similarly constituted, are utterly unable to appreciate his general principles. They regard not his science — they look only to his instruments, not aware that he himself modifies them in different ways, as circumstances demand. We would, however, hope, that if such men ever condescend to read any thing beyond the few pages in Mr. Abernethy's works on digestion, and should by chance peruse the remarks we have made upon the incipient inflammation of this organ, they may be led to believe that even local treatment may be occasionally necessary, and that, like the 'Oh Lord! Sir,' of Shakspeare's clown, 'things may serve long, but not serve for ever.'

The mucous membrane undergoes changes, also, with respect to its thickness. Bichat has said generally, that he has seen it vary from the thickness of a few lines in the maxillary sinus to half an inch in the bladder; the latter, of course, being diseased. It is certainly difficult to recognise very minute differences of this kind, excepting great attention and experience have been paid to it. As a general fact, M. Billard affirms the mucous membrane of the duodenum to be the thickest, the stomach to hold the next place, and then the rectum, jejunum, ileum, and colon, in the order in which

we have placed them. How far this is to be depended upon we know not; but M. Billard himself does not speak very positively on this head, nor is it easy to assign any reason for such a variance. It appears, however, that sometimes it becomes enormously thickened without any morbid alteration of structure, the only difference between it in this state and its usual appearance being the increased thickness. We know of no symptoms peculiarly denoting this state of the intestines, but we should rather expect that eventually it would become scirrhous. In a dissection of which M. Billard has given an account, the intestine had externally its ordinary size, but its cavity was diminished to one-half its usual diameter. When divided, three different shades could be distinguished along the cut edge: the first thin as a sheet of paper, and answering to the serous membrane; the second somewhat thicker, being the muscular tunic; and the third at least four lines in thickness, red, and corresponding to the mucous membrane. The internal tunic was thickened from the commencement of the transverse branch of the colon to the termination of the rectum. The individual in whom this happened was an idiot, and had been very severely affected with diarrhœa. There were, however, marks of inflammation in different parts of the mucous membrane.

When speaking above of the erubescence in the villous coat of the stomach, we considered it in its two states, of inflammatory action, and when free from inflammation. This membrane, however, takes other colours, apparently in consequence of inflammation and extravasation; and, in fact, following the analogy between it and the skin on the surface of the body, so clearly exposed by Béclard, we may observe similar changes of colour in the one part as in the other, and most probably from the same causes. The purple colour, the slate colour, &c., lose also much of their interests from their scarcely ever being found alone, but in most cases united with lesions more important and more decided. Before, however, entering upon the exposition of these lesions, it may be right to notice the alteration which is frequently effected in the nature of the mucus. The most common result, says Béclard, of inflammation of the mucous membrane, is an increase in the quantity, and a change in the quality of its secretion. The most frequent and manifest difference is an increased fluidity in the mucus, and this, as M. Billard states, is almost always the consequence of inflammation. We are not, indeed, certain that we might not say constantly so, for though the author just quoted qualifies the assertion, 'because he had seen the fæcal matter very fluid, very abundant, and not more consistent than serum, when the villous

coat did not exhibit the slightest appearance of inflammation,' the late Dr. Parry would probably have considered it, and perhaps correctly, still as the consequence of inflammation, but that the inflammation had been resolved by the abundant secretion, or, in his own language, that the excessive momentum had thus been removed. It appears to be by exciting this kind of subacute inflammation that many purgatives, such as neutral salts, &c. act, which, however, if carried too far, as sometimes happens with drastic purgatives, as elaterium and croton oil, produce such active inflammation as to require the most decided antiphlogistic treatment.

We are not acquainted with any chemical experiments tending to shew, whether the alteration in the quality of the mucus consists merely in the addition of watery particles, or whether there is a real change in its composition. From our own observations, we are rather disposed to believe that the former is the case.

The mucous membrane, however, not unfrequently secretes pus, without any lesion of its substance, which we may now state upon the authority of Béclard, though it has been frequently observed and mentioned before. We believe that there is no part of the mucous membrane in which this may not take place; at least, we have frequently seen purulent dejections where there was no reason to suspect ulceration of the bowels. It is certainly, however, in the membrane lining the bronchial tubes that it most frequently occurs; and the ingenious spcculations of authors upon the difference of pus and mucus lose all their interest when they are not only inadequate to, but unnecessary for, the purposes of diagnosis. We have seen within the last few weeks several instances of the most profuse purulent expectoration, in which, we believe, no ulceration was present, and which, at least, recovered very rapidly. It is long since we have ceased to pay much attention to the nature of the expectorated matter, since the only case in which it is useful to the distinction of disease is, where it proceeds from scrofulous tubercles, the cheesy matter of which is readily recognised. Sometimes, likewise, the mucus changes its colour, and exhibits a crimson hue, not exactly resembling blood, but which might lead us to suppose the tint owing to a mixture of that fluid. We have frequently seen this where no loss of substance could be traced after death. That blood frequently flows from the bowels in large quantity, without the rupture of any large vessel, is also well known; and it is, we think, M. Bayle who, in the consideration of some kinds of hæmoptysis, is inclined to believe the expectoration rather to be of the nature of a secretion than hæmorrhage. However this may be, there seems no

reason to believe the phenomena or the causes to be at all different, whether situated in the intestinal canal or the bronchial tubes. In the former case, however, it is not always easy to distinguish the origin of the discharge, that is, whether from the general surface of the intestines or from internal hæmorrhoids, for these last are not always clearly indicated. It has frequently appeared to us that the discharge of blood per anum has been very serviceable; and where, in the commencement of cholera, it has been rather profuse, we never recollect to have seen a fatal termination; of course, excluding those violent hæmorrhages which induce great and instant debility. At all times, we believe it dangerous to stop suddenly sanguineous discharges from the bowels, which is sometimes more easily affected than might be at first supposed. The principal changes, therefore, of the fluid secretion of the mucous membrane are, from pure mucus to a much more liquid state than natural, to a more or less perfect resemblance of pus, to a crimson tint, unmixed with coagula, to a mixture of mucus with pure blood, and to a variety of shades between these. The symptoms preceding these alterations are almost universally such as indicate considerable inflammatory action, or, at least, an excessive local momentum, and they are, perhaps, to be regarded as, in a great measure, natural curative processes. But the discharge from the mucous membrane is also very frequently much more tenacious than natural, and there is a much smaller quantity of watery matter than is usual. This condition of the mucus is frequently cited by M. Billard as an effect of inflammation, although he believes it also to occur without any inflammatory action. We have seen, indeed, cases of obstipation in which the mucus appeared to be altogether wanting; and Dr. Stafford, in an inaugural dissertation 'De Naturâ et Usu Medicamentorum Purgantium,' states, that in cases of long costiveness the fæces remain figured, indeed, 'intùs autem niger, acrisque pulvis esse inventi sunt,' but are internally black, dry, and acrid. The consequences of this affection seem, in the first instance, a diminished peristaltic action of the bowels, and consequently costiveness, and the second, inflammation and symptoms in almost every respect resembling those of hernia. It is quite clear, that when this deficiency of mucus happens, those medicines will be serviceable that induce an increase in the secretion; but when constipation has long had place, it can scarcely be expected that these alone will be sufficient. A case of constipation of the bowels, related by Mr. Kite in his Essays, strongly illustrates this remark. A stout, strong man, having suffered much from an intermittent fever, was subject to fre-

quent costiveness, and on the occasion of Mr. Kite's treating him, had had no evacuation for fifteen days. Salts, and calomel, senna, jalap, colocynth, castor oil, had been given in vain; and, at length, in despair, having noticed that cold had before given some relief, Mr. Kite ordered 'two or three pailsful of the coldest water to be poured over his legs, so that his feet and ancles were, of course, constantly immersed in the liquid. This operation was perpetually repeated for the space of ten minutes, when he was so much affected by the intense cold, that I judged it prudent to desist. He was wiped dry and put to bed. Within the half hour, being then pretty well recovered, a pint and a half of cold water was injected by clyster, and almost immediately after wet napkins were applied cold to the abdomen, and renewed as they became in the least warm. The effect of this treatment was so strongly marked that it was really astonishing, for in a few minutes he had a profuse evacuation of uncommonly hard and large fæces, and this was followed by several thinner ones.' It does not appear to us that the necessity of stimulating the muscular action of the intestines could be more strongly illustrated than in the present instance. Perhaps it may be proper to mention, that the 'belly was hard, and immediately below the navel it was swelled somewhat irregularly: the pain was violent, but tensive, at times remitting, and increasing much on pressure.'

Where, as it generally happens, the diminished secretion of mucus takes place in the superior part of the large intestines, the fæces become exceedingly hard, and not unfrequently give rise, by the irritation they produce, to an increased secretion in the last few inches of the rectum. This gut is thus stimulated to continual contraction, and the mucus is expelled almost as soon as it is formed. Cases of this kind have been very often mistaken for diarrhœa, and the remedies proper for this disease have been administered, as might be expected, without relief. In the fourth volume of the Medical Observations and Inquiries, a very instructive instance of this nature is related. An old gentleman was supposed to be labouring under obstinate diarrhœa. He had very frequent motions to stool, and the motions extremely urgent. Some thin excrement was always discharged on these occasions. The pains gradually lessened for a time, and then returned with like violence and the same effects. The relater of the case, suspecting, from the accompanying circumstances, that it was really a case of constipation, caused the rectum to be examined, when a considerable quantity of large hardened scybala were brought away, and the patient was effectually relieved from that moment. An opinion seems to have prevailed at the time, that purgatives

interfered with the efficacy of bark, and hence, that drug being given in large quantities, without attention to the alvine discharges, the author supposes contributed very much to the production of such disease, by uniting with the fæces, and forming with them large and hard scybala. That this might be partly the case may be allowed; yet as such instances mostly occur in old people, when the secretions generally are much more scanty than in early life, the real cause we conceive to lie in the diminished secretion of the mucus. It is by no means an unusual occurrence for those in advanced life to have an evacuation only once in two or three days; and any attempt to render it more frequent produces great constitutional disorder. We once attended upon an old woman, between seventy and eighty years of age, who never oftener than once a week evacuated the bowels, enjoying at the same time excellent health. It is, we apprehend, also, from a deficiency in the secretion of mucus that those calcarious accumulations take place in persons much in the habit of taking magnesia, the symptoms attendant upon which are frequently very distressing, if their cause be not understood. This also happens most frequently in aged persons; and occasionally by mechanical means alone can the hardened mass be removed. It ought to be remembered, however, that though generally the secretion of mucus is diminished, and is much more tenacious in old age than in earlier life, still sometimes the contrary has place, and, in the language of Bichat, 'the mucous fluid augments to such a degree, that it constitutes the catarrhus senilis;' yet even then secretion is effected tardily, the disease assumes a chronic form, and seldom terminates but with life.

The mucous tunic appears subject, also, sometimes to the phlegmonous inflammation, in which case an adscititious membrane is formed, as in croup. We are not acquainted with any chemical investigations into the nature of the secretion in this disease, nor whether it differs from the adhesive matter thrown out upon the serous membrane; but there is a striking difference in its appearance. The same action, however, takes place in the villous coat of the intestines, and sometimes so completely, that the new production bears the appearance, in shape at least, of the intestine. Dr. Baillie, in the Medical and Chirurgical Transactions, mentions a preparation in Dr. Hunter's Collection, 'very much resembling the gut, which had been discharged during a violent purging;' and 'accompanying it, there is a considerable portion of the inner membrane of the intestine covered with a layer of coagulable lymph, which had been separated and discharged by stool.' The particulars of this case Dr. Baillie was unacquainted with; but the individual lived two years

afterwards. In no diseases is the truth of Dr. Baillie's remark more evident, that the same symptoms do not always indicate the same morbid changes, than in the disorders of the alimentary canal. Very much is yet wanting before we can become so well acquainted with those minute differences in the symptoms, during life, of the diseases of the intestines, as to be enabled to foretell decidedly what will be the appearances on dissection, In the case in question, Dr. Baillie himself has given us no assistance. Some time ago, we had under our care a boy about ten years of age, who was seized suddenly with violent pain in the abdomen, much increased by pressure, sickness, pyrexia, and, in short, all those symptoms which we have been taught to believe depend upon an intus-susception of the bowels. The inflammation was partly overcome by very decided antiphlogistic treatment, but still no feculent dejection could be obtained. At length, a tubular membrane was passed, nearly two inches in length, and at first having the appearance of intestine, but in which no decided organisation could be traced; after which the fæces became natural, and the individual is now in a very good state of health. We should be inclined, in this instance, to believe that the membrane was not the product of an intus-susception, in which a part of the gut had sloughed, but an artificial secretion, which had caused an obstruction in the bowels, and which, at length, being thrown off, permitted them to resume their natural functions. It ought to be noticed, that the boy continued to discharge smaller pieces of the same kind of substance for several days after the tubular portion had come away. Other instances of a similar but less marked character have also occurred to us.

M. Béclard has mentioned that the matter thus excreted is usually passed in small laminæ, but appears to consider it generally, if not always, as the consequence of high inflammatory action. The membranous substances that are occasionally discharged from the bowels differ, however, so very much in their external appearances, that it is impossible to assert positively that Béclard is wrong with regard to the secretion we have been considering; but it is very certain, that substances somewhat similar are often noticed in the chronic disorders of the alimentary canal. An instance of the kind occurred to ourselves in a young woman very much afflicted with tænia, and with very many distressing symptoms of hysteria and dyspepsia. After the tænia were expelled by the oil of turpentine, she brought to us a considerable quantity of a substance about two lines in thickness, and varying in size from half an inch to an inch square, and having at first sight the appearance of thin wash leather, which she had rejected per anum. She continued to pass

this matter for several weeks, and as it diminished in quantity her general health returned.* The matter was submitted to experiment by a chemist, upon whom we can rely, and the following was the result of his investigation:—'Boiled in distilled water, it remained undissolved, and its firmness was rather increased by the process.

'It was dissolved after digesting several days in muriatic and nitric acid and in solution of potash, and the solutions continued transparent when diluted with distilled water. From the nitric solution thus weakened, a precipitate was thrown down by subacetate of lead, but not with oxymuriate of mercury.'

To these experiments, which seem to prove it nothing else than mucus, but varied from mucus in its usual state, in the closer arrangement of its atoms, it may be added, that some of it was kept in the same water for three weeks without undergoing any change.

We have seen substances, also, very similar to adipocire, discharged from the bowels in one case where severe pain of the abdomen had been experienced for a considerable time. The discharge of this matter was always attended with relief.

Sometimes, also, small white particles, resembling the oxide of white arsenic, are met with in the intestines, which, according to M. Orfila, are composed of fat and albumen. We are not acquainted with any particular symptoms accompanying the production of these bodies.

These are the principal alterations in the mucous secretion, with the causes of which it is too manifest that we are very little acquainted. To know, however, that such changes do occur, and that the diseases accompanying them are often very serious in their consequences, is the first step to a more accurate acquaintance with the morbid processes themselves, and may serve as a stimulus to watch very vigilantly even minute aberrations from health.

Here, for the present, we conclude our consideration of the maladies of this membrane; and in a future Number we hope to lay before our readers an account of some of those morbid organic changes to which late pathological investigations have shewn it to be especially liable.

* We have also observed these laminar exudations sometimes to occur in the exanthematæ, particularly in scarlatina. Those of a tubular form are not so frequently met with; yet even they are by no means very rare. Whatever form they assume, they seem to be the result of inflammatory action, although this action may be different in degree.—Dr. Powel, in a paper on this subject, in the sixth volume of the Transactions of the College of Physicians, thinks differently; but whilst he does so, he furnishes proof against himself, for he states the existence of great pain in every instance. M. Villermé takes a more correct view of the subject in the 32d volume of the Dictionnaire des Sciences Médicales.

II.

*THE ART OF DETECTING DISEASES.**

[Fourth Article.]

An Essay on the Symptoms and History of Diseases, considered chiefly in their Relation to Diagnosis. By MARSHALL HALL, M.D., F.R.S.E. 1822.

Symptomatology; or the Art of Detecting Diseases. By ALEXANDER P. BUCHAN, M.D., F.L.S. 1824.

Novus Thesaurus Semiotices Pathologicæ, quem collegit atque edidit MAUR. HASPER, Med. Chir. atq. Philos. Doctor. 1825.

Manuel de Clinique, ou des Méthodes d'Exploration en Médecine, et des Signes Diagnostiques des Maladies. Par L. MARTINET. 1825.

Séméiologie Générale, ou Traité des Signes et de leur Valeur dans les Maladies. Par F. J. DOUBLE. 5 tom. 1811—1825.

THE INTELLECTUAL AND SENSORIAL FUNCTIONS.—When the medical attendant has with more or less care investigated the principal circumstances already touched upon, he is not likely to remain ignorant of the state of the patient's intellect. As, however, he may occasionally be consulted exclusively on that subject, and as it is connected with such affections of the senses as have not yet been noticed, some observations on this head will neither be uninteresting nor useless to the reader.

Into the important question of insanity, as it regards Legal Medicine, we shall scarcely enter on this occasion. Justice could not be done at the end of a paper to a matter involving so many social and individual interests, and still wrapped, after all that has been written and all that has been said upon it, in great obscurity. We shall restrict ourselves to observing, that the object of the practitioner, when consulted in cases of this kind, is not to avow, far less to invent, brief, apothegmatic, and sententious definitions of madness, as of something always divided by visible and uniform boundaries from sanity; but, by the help of clear views of sound mind, to determine whether the departure from that state, in the case concerning which his opinion is required, is such as to disable the person in question from taking care of himself, or from managing his own affairs, or such as to endanger the safety of those about him; such, in short, as to warrant superintendence, coercion, or confinement. On the various deceptions against which the medical man must be on his guard, the avarice of friends, the impatience of heirs, and the proverbial cunning of lunatics, we shall not here expatiate. Lovers have been advised to judge of the object of their mis-

* Concluded from page 233.

placed affections by their behaviour to others rather than to themselves; and the physician should generally be less influenced by the supposed lunatic's manner towards himself, than by that which he adopts to those around him; being neither imposed upon by the caution of a man prepared for, or suspicious of, the nature of his visit, nor by the careless eccentricities of an original but ill-regulated mind, nor by the natural but incautious earnestness and warmth of one falsely and villainously impugned. With these attentions, and by a deliberate and judicious trial of the several faculties of the patient's understanding, and a keen observation of his voice, manner, and actions, as well as of his countenance, we hold it as impossible to be deceived.

As regards the symptoms of the mind becoming diseased, it can seldom be necessary, considering how limited the operation of the higher faculties is in the generality of mankind, to go deeper than to notice the state of the perceptions, the degree in which they are remembered or imagined, so as to be compared, when past, with one another, or with those now present, and to the power and order with which ideas are associated in the mind; for the erring judgment will be found to hang on some error in one or more of these simple, and as it were elementary, operations of the intellect.

An inability to command the attention is felt in the commencement of fever, and during the severity of inflammatory disorders. Loss of memory is very observable in both old and young persons who are disposed to palsy. An agitated mind is occasionally a mere indication of some intestinal irritation, or of change of determination from repelled eruptions, or suppressed discharges: examples of this kind occur daily.

'There are individuals,' says M. Double, 'who, from a particular constitution, readily become delirious on the occurrence of a slight degree of fever; and the delirium is in these instances less serious and alarming than when it takes place in those whose temperament is not naturally disposed to it.'*

We cannot consider M. Double correct in saying, that at the commencement of acute disorders the attention is diminished *before* any other faculties of the mind, and that comparison and judgment remain sound; and also, that in convalescence the attention is first regained, and the comparison and judgment not acquired until later.† Comparison is but a more extended attention, and is always exerted when one object is distinguished from another: judgment is the result of the perfect exercise of both these faculties; and for the same reason that we may suppose the perfect possession of

* Semeïology, Vol. II. p. 489. † Vol. II. p. 475.

the comparing and judging powers to be re-acquired a little later after illness than simple attention, we see that they cannot subsist at all after the attention is lost in incipient illness, and, as far as we have any experience, they certainly do not. Something might be said of the order of the return of memory, if memory was not excluded from M. Double's list of mental faculties altogether. It would be irrelevant to our subject to pursue these questions further; but we cannot help remarking, that the terms employed by medical writers and medical witnesses, in speaking of the operations and character of the mind, appear to us to have been at all times, and to be at present, in the utmost degree vague and unsettled.

The senses are intended to convey to us a knowledge of such properties in the things by which we are surrounded as our preservation requires; and the impressions they receive are so regulated as, in a state of health, to be not only useful, but a source of enjoyment. But when the parts of our system on which these impressions are made become diseased, their susceptibility to impressions is either diminished or increased, the just measure of the impression is not preserved, and the sense becomes morbidly dull or acute; too low for pleasure, or too intense for comfort, and in both cases deprived of much of its natural utility. It is generally some degree of one or the other of these morbid conditions of the nervous system, which produces so many singular varieties of distress in those who are called *nervous* patients, and who are too often in an actual state of disease. The peculiarities of sensation under which they suffer are probably in numerous cases dependent on aggravated derangement of the digestive organs; but it is not at all fanciful to attribute them, in other instances, to a depraved condition of the nervous tissue itself. They generally shew a tendency to mental disease, and often accompany it. Increased sensibility is, in many examples, the apparent result of the first degree of increased determination of blood to the head; diminished sensibility of the excess of that state. Each is sometimes the precursor, and sometimes the consequence, of paralysis: and both are frequent symptoms of mania. The acute temporary sensibility which sometimes follows loss of blood from the head, is thus easily explained, as well as the more commonly observed effect of circumstances which increase the action of the heart. Exhaustion of mind or body, and long exposure to excessive cold, render the sensations obtuse. Diminished sensibility of the surface is often seen in paralysis, and is said to be very marked in the cholera of India: the same symptom is now and then seen in chorea. Individuals whose constitution

has been injured by the action of mercurial vapours, have complained that the sensibility of the surface was increased to a painful degree; and this lamentable state, in which the slightest change of temperature produces an inordinate impression, occasionally afflicts those who have suffered from obstinate intermittents. Depravation of the several senses attends various forms of paralysis, and some affections of the stomach.

Spectra are frequent precursors of epilepsy, and have thus been the origin of many ghost-stories, and, what is worse, the cause of death to many a poor and helpless old woman suspected of witchcraft. Hallucinations of sight may arise from a disturbed circulation within the head; or from a pre-occupied mind, and an active and over-heated imagination. The hearing is sometimes the deluded sense; music or voices, words or the conversation of many people, being heard in the air or under-ground, or round about the perplexed patient. When delusions assail two senses at the same time, our utmost exertions are required to prevent the person so affected being overcome by the deception: the evidence of a true sense easily corrects the inventions of a false sense; but when two or more senses conspire to betray, their evidence is not so easily disproved, and the healthy state of the mind is in danger of being overthrown. Temporary impairment of the sense of sight may be occasioned by the presence of some offending matter in the stomach: * slight affections of touch, hearing, and the other senses, are not so carefully observed, or it is probable they would be found to arise out of the same accidents. Sparks, black spots, and other momentary appearances before the eyes, depend on disturbance of the brain or the optic nerve, or some of the humours of the eye, sometimes of a trifling nature and temporary duration, but not rarely more serious. Imaginary colours and forms are said by M. Double to precede some critical hæmorrhages. † More permanent and more marked depravation of the sense of sight, or hearing, or of any other sense, have generally a connexion with mania or melancholia. Various sounds in the ears are of no other consequence than as indications of the state of the brain, and may arise from irritation or exhaustion, from plethora or debility. The sound which we have most frequently known to be a forerunner or accompaniment of an attack of paralysis and of apoplexy, has been compared by the patients to the sound of a mill or of a spinning-wheel; and we have learnt to associate an idea of danger with this sound more than with others. We have

* Double, Vol. II. p. 418. † Vol. II. p. 427.

found maniacs, and persons disposed to mania, more generally complain of hearing a sudden and loud shout or explosion: the sound of voices is also very common to them.

Sensations of bitterness and sourness most commonly arise from a disordered stomach; those of saltness and sweetness are, perhaps, oftenest observed in hæmoptysis and phthisis, and have been attributed to some decomposition of the blood. A taste of copper is said to be sometimes present in intermittents:* it is a well-known effect of mercurial medicines. M. Double mentions instances of patients being incommoded for some days by a putrid smell, which was not perceived by the attendants, but was proved by the event to depend on a gangrenous process within the abdomen.† The same inconvenience is often occasioned by small ulcers in the nose or throat; but is sometimes felt without any evident or discoverable cause. It is difficult to say whether we should arrange under the sense of touch the peculiar feeling spoken of not only by confirmed hypochondriacs and melancholic patients, but by those whose departure from a healthy condition of the nervous system has reached no farther than depression, so far habitual as always to fill up the pauses between one kind of accidental excitement and another;—we mean the sensation of uneasiness referred invariably by such persons to the epigastrium. The nature of these observations fortunately does not make it incumbent upon us to explain what has never yet been explained; but whether it proceeds directly from an affection of the nerves of the abdomen, or is but the indication of a perturbed and unhealthy stomach, it is a symptom which should always rouse our vigilance. We do not think it quite superfluous to warn the active and officious practitioner that he should not be too meddling with cases of impaired sensation in old people. Diminished powers of sensation are the natural accompaniments of their time of life,

> 'For nature, as it grows again toward earth,
> Is fashioned for the journey, dull, and heavy.'‡

Although, therefore, we are to expect to hear our more advanced patients complaining, with some surprise, of diminished sight or hearing, we are not to mistake the accidents of age for the products of disease, or to imagine we can control what is but the beginning of that death which is creeping over the whole frame.

The function of sleep (for we think this expression is justifiable) is also to be considered; not only because the

* Double, Vol. II. p. 458. † Vol. II. p. 469.
‡ Timon of Athens, Act II.

deprivation of it adds to the patient's debility, and the excess of it to his mental or bodily oppression, but because its impairment to any considerable degree indicates a state of brain, or a condition of the cerebral circulation, very unfavourable to the permanent integrity of the mental faculties. There is either an excitability of mind in which the slightest cause produces involuntary attention, memory, or imagination, or such an excited state of the nervous system as is incompatible with the exclusion of disproportionate impressions. Want of sleep, when only occasional, is not seldom a mere consequence of gastric or intestinal irritation, and easily cured. In aged persons the scale of all the functions is reduced, and of sleep among the rest. A propensity to sleep accompanies the forms of indigestion called bilious.

'Drowsiness is frequently an antecedent sign of *apoplexy*; but it may also arise from a loaded or disordered state of the stomach. It is, in other cases, and especially in the diseases of children, one of the first symptoms to awake alarm and fear of disease within the head.'*

The state of sleep seems also to dispose many patients to epilepsy; but what is very curious, there are epileptic patients, even those who have a paroxysm almost daily, in whom the disorder *never* manifests itself when the patient is in a recumbent posture, or during the night. Sleep suddenly interrupted by a frightful dream, in a patient labouring under thoracic inflammation, is a symptom of a serious nature, often indicative of hydrothorax; and also a symptom in diseases of the heart. In children, this kind of fright and disturbance is a familiar result of disordered bowels. Troubled dreams may arise from indigestion, from the state of pregnancy, or be caused by hearty suppers, an inconvenient position, an insufficient dose of narcotics, or an anxious mind. To dream of rivers, lakes, and seas, is mentioned by Hippocrates as a symptom of hydrothorax, and by others as peculiarly a sign of effusion in the brain. The readers of the Confessions of an English Opium-Eater† will remember, that this was among the torments of one part of his singular experience of the powers of opium and laudanum.

Though sleep is so generally welcome, and so great a blessing to all sorts and conditions of men, as fully to justify Sancho Panza's blessing on the 'first inventor' of it; and though few practitioners have not found it the commencement of convalescence, and seen it, when prolonged and tranquil, the beginning of recovery in bad cases of fever; yet even sleep in many cases of debility and wasting is produc-

* Hall, sect. 281. † Lond. Magazine, Sept. and Oct. 1821.

tive of no comfort or refreshment, and we find the distressed and worn-out patient complaining most on awaking. This is, perhaps, a result of the lowered action of an already feeble heart.

'Sleep,' observes Dr. Hall, 'would appear to exercise a peculiar influence over the circulation; — many children perspire profusely during sleep, especially in a state of weakness: sleep often induces flushing during the progress of febrile complaints; and in cases of *hectic* or *slow symptomatic fever*, the last morning sleep, as I have already observed, is particularly apt to be attended with profuse perspirations, to prevent which many patients keep themselves awake.' *

In a striking case of dyspepsia, tending to nervous apoplexy, we have seen a patient, on awaking, quite assured, from his feelings, that he was about to die. Thus, in erythismus, in exposure to extreme cold, and after opium taken to excess, and in very old people, irresistible sleep is often the harbinger of death: and in those worn out by long disease, we frequently find death making its advances in the soft and unalarming shape of placid sleep, which passes on to the sleep which is eternal.

It should be observed, that there is hardly any circumstances concerning which sick people are so little able to give true evidence to the practitioner, as concerning the kind of sleep they have enjoyed, or its duration. The most active mind is generally so far overpowered by languor and suffering, and the unusual confinement attendant on sickness, that time passes away unoccupied and unnoticed; the morning and evening, the day and night, succeed each other unmarked by any variety of incident, or any great diversity of situation and feeling, and a kind of unconsciousness usurps dominion over considerable portions of time. There is also another source of deception: the nurse is not always the most veracious person in the world —

> 'The nurse sleeps sweetly, hired to watch the sick,
> Whom snoring she disturbs' ——

and having herself passed the night in a very agreeable state of oblivion, is willing to believe, and anxious to represent, that the patient has been equally fortunate.

Whether it is from the brain being oppressed in consequence of the general position of the body during sleep, or whether the state of sleep has some peculiar and unknown effect upon the brain, we shall not pretend to determine; but persons disposed to melancholia are, we think, invariably unhappy on awaking: even the peculiar feeling already men-

* Sect. 288.

tioned as referred to the epigastrium is most oppressive at this time; and the whole state of the hypochondriac is such, that many have wholly given way to their supposed inability to face the business of the world again, and have kept their beds for years.

The temper, which we may daily observe influenced by the state of the stomach, is curiously affected by some disorders not immediately connected with disturbance of that organ. We see an attack of paralysis convert the mild and amiable into the irritable and impatient; an effect partly referrible to the disease having increased the nervous susceptibility to all impressions, and partly, no doubt, to be accounted for by the other effects of that distressing visitation, the inability to move about readily, or to speak clearly, or to indicate what is meant or what is wanted intelligibly, with the painful dependence upon others consequent on this loss of power and activity. The temper is said by Dr. Bree, who writes from very painful experience, to be much disturbed at the approach of an asthmatic paroxysm, and we have often remarked the correctness of the observation. The earliest indications of insanity are often visible in an aggravated impatience of temper, or fits of passion induced by slight and disproportionate causes; and, perhaps, as far as the happiness of those around them is concerned, the worst cases of mental derangement are those which do not go beyond this, and of which the paroxysms are only known to the patient's own family, and, without seeming to justify confinement, are largely destructive of comfort to their children or dependents. Remarkable patience is often exemplified in the course of chronic diseases, and there is in such instances a visible enhancement of the negative blessing of ease by alternations of pain. Despondency in a patient as to the result of his disorder is assuredly, on the whole, a symptom to excite alarm. We have seen and heard of many singular examples of prophetic fears being realised, when all but the patient himself were sanguine. Dr. Hall seems to think these warnings most frequently true in inflammation of the bowels.

'In cases of serious and fatal disease, and especially, I think, in inflammation of the bowels, the patient frequently expresses his conviction of an approaching dissolution—"tanquam conscia foret natura, vitam ad finem properare."'*

Forebodings of this kind are, however, probably much more frequently false than true in various maladies, acute and chronic. The following curious indication assigned by M. Double to *hypochondriasis* ought not to be omitted: it

* Sect. 299.

would be difficult to find a stronger instance of a proneness to build conclusions on a slight foundation: —

'Sadness and melancholy are connected, either as causes or effects, with a great number of chronic maladies. This state is too often designated hypochondriasis by physicians. When this moral affection is long continued, it is one of the first symptoms, and a sufficiently sure one, of the invasion of hydrothorax. I could cite many examples of this from cases occurring in my own practice. I shall merely mention one, which all the physicians of the capital had an opportunity of observing. Our colleague Jean Roy, of honourable memory, and who died of thoracic dropsy, the symptoms of which were scarcely manifested until some months before the fatal event, had long before lost that amiable liveliness and sprightly gaiety which used to make his company so agreeable.'*

Languor, and diminution of the power of motion; indolence, slow speech, or total loss of it; inaptitude to mental exertions, hebetude of the senses, or total insensibility, — all indicate a state of brain either not sufficiently stimulated, or oppressed by fulness of the vessels, by effusion, or by some kind of pressure. Agitation, vehemence, restlessness, loud and voluble talking; preternatural acuteness of the senses, and irregular flights of the mind, — indicate a brain excited by determination of blood, by sympathy with other organs, or by other causes which admit of no explanation. Both states may be produced in every variety of degree; and a certain degree of either may, of course, be constitutional. The first class of these conditions constitute parts of palsy, apoplexy, states of exhaustion, the low stage of fever, and such diseases as impede the passage of the blood through the lungs, and consequently its return from the head. The second class includes phenomena which occur in the stage of febrile excitement, in the early stage of inflammation of parts within the cranium, in the majority of the disorders called nervous, and most markedly in the most severe; in hysteria, in epilepsia, in the onset of paralysis, but, above all, in the high state of mania. All these conditions may be attended with vertigo and noise in the ears, so that these symptoms are always to be compared with the rest. There are individuals whose spirits are so nicely balanced, that the surest sign of approaching fever is an exalted, and, for the time, a highly agreeable, state of imagination; and to this is sometimes added a peculiarly distinct recollection of circumstances long since past. Some are much more affected by slight variations in diet than others: thus, one man shall be destitute of

* Vol. II. p. 510.

every virtue for half an hour before dinner; too hearty a meal shall produce the deepest melancholy; and a glass of cyder generate the most fearful fit of despondency. Other symptoms manifested in various parts of the body, consequent on disordered states of the brain, have already been noticed; and on this subject, as far as it relates to the distinction of diseases, we have said enough.

Such is a very imperfect outline of the plan, which may be followed with advantage, in an attempt to weigh and estimate the import of separate symptoms, and of symptoms in connexion with each other. The subject embraces the whole field of disease; and a view of its extent, and a consideration of the complexity and interchangeable relations of its parts, are alone sufficient to shew, that excellence in medicine calls for the efforts of a mind capable at once of conceiving what is vast, and comprehending what is minute. Our object has been rather to direct the student to a just estimation of the dependence to be placed on symptoms in general, and to shew the principal points on which the attention must be fixed, than to dictate axioms, or to attempt an enumeration of all that is to be learnt, or, when learnt, remembered. Those who have paid most attention to the subject are best acquainted with its difficulties, which arise partly, of course, from its extent, and partly from the change of connexion by which all the phenomena of the human body are so bound together, and linked with each other, as to baffle all attempts at isolating any one entirely from the rest. It is for this reason, also, that, although the observation of symptoms must, in the first place, be separate, distinct, successive, their combination, or rather an observation of the particular manner in which they are combined, is a matter of equal necessity, and demands the careful exercise of all the faculties of the understanding.

We are desirous of guarding even the most inexperienced reader from imbibing an error from any part of the observations in the first part of our papers on the value of experience; we know that the varieties of disease are so numerous, and its forms so diversified, that after a very long life the physician may meet with cases that defy classification under any known division, and which must be referred, from pure ignorance, to the common class of *anomalous* affections.

'Every experienced man,' observes an enlightened member of our profession, 'must have felt the harassing difficulty of discovering the real nature and the causes of diseases, and he must have equally felt the deep responsibility of directing safe

and efficacious treatment; *nor does extended practice clear away those difficulties.*' *

It is on this account, among others, that no success, no prosperity, no experience, should induce any abatement of the practitioner's vigilance — a quality as essential to the maintenance as to the establishment of his reputation. It may occur to many of our readers, that within the sphere of their professional acquaintance there is some fortunate practitioner who has gained a large share of public confidence with much less trouble than we have supposed to be necessary, and who commands the obedience and ensures the faith of his patients, by an abrupt, decisive manner; by asking very few questions, and giving a positive opinion after a short examination. We shall not go so far as to say that this is a game which only *adepts* in acting can play without immediate disgrace; but we would ask those who can scarcely avoid being influenced by the sudden ascent of such persons to places for which, in the eyes of their own profession, they are in no degree qualified, whether, on the other hand, their neighbourhood does not afford some example of men, whose investigations into disease are marked by the opposite extreme of caution, and who go so much into the particulars of every case, that scarcely less than a full account of the birth, parentage, and education of the patient, will satisfy them, and who yet satisfy their patients? The only wise and honest deduction to be made from this reflection is, that these men act according to their natural disposition and character; and that if, neglecting that which belongs to ourselves, we attempt to imitate either, we shall neither satisfy our patients nor our own minds. Our only object should be, to find out and to relieve the disease. We may safely leave the rest to the common sense and discrimination of mankind. Trick, and pretension, and dishonesty, may procure more hasty success; but if we look into the lives of the children of fortune who rise or grow rich by those means, we shall find that the constant tendency of such arts is to canker the heart, and undermine the whole moral character. The great test of our skill, in the eyes of our patient, will generally be the degree of benefit he derives from our exertions; and if we endeavour, to the utmost of our ability, to do our duty to him and to our Maker, we may, and we ought to disregard every meaner consideration.

It remains for us to say a few words concerning the general merits of the works of which the titles are placed at the head of this article. Of Dr. Buchan's *Lecture,* but little can be

* Sir A. Carlisle on the Disorders of Old Age.

said in praise. The information it contains is scanty, inconveniently arranged, and not always to be depended upon. But we cannot part with this respectable author without an expression of admiration for the benevolent sentiments and conduct recommended in the concluding pages of his work: the diffusion of such sentiments among physicians, added to their ample powers of being useful, would make them truly the benefactors of mankind. M. Double's work is most agreeably written, and contains a great deal of information; but it is much too long for general perusal: it contains many things taken up on trust, and at variance with experience; whilst its value as a work of reference is only impaired by rather too frequent details, unconnected with the main subject. For example, in speaking of the symptoms to be found in the state of the *nails*, M. Double describes their form and structure; enters largely into their pathology; and goes much at length into cases in which inflammation, &c. was induced by cutting them too close; among the rest, mentioning one case in which this accident *cured* a dropsy. Still, however, the Sémeïologie Générale is a work of very high character, and deserves to be better known to the English reader: few can peruse it without advantage, and whoever refers to it will probably gain something by the reference. Dr. Hall's book offers to the reader many useful references in a small compass, and is evidently the production of an observing and accomplished physician. The work of M. Martinet, which we have classed with the rest, might, for the subject, have been spoken of separately, had not its object been evidently the same as that of the others. It is intended apparently as a pocket-manual for the student; the first part relating to the different modes of examination of patients, including succinct and clear descriptions of the mode of performing percussion, auscultation, mensuration of the chest, pressure, &c., and stating the indications to be derived from each. The second part contains, under distinct heads, short but accurate descriptions of diseases, and of the morbid appearances commonly presented by them; arranged according to the parts, organs, or tissues of the body, which they affect; including the effects of different poisons, and the anatomical character of the various accidental productions of the body, as tubercles, scirrhus, melanosis, &c. M. Martinet has undoubtedly crowded a great deal of useful information into his little book, and it is well calculated to be of assistance to the student. We feel, it is true, a certain degree of jealousy of all works of this kind, grounded on an apprehension of their becoming substitutes for the original sources of knowledge, and therefore lessening the student's industry:

but if they do not lead to this inconvenience, there can be no objection urged against them.

After all, it yet remains to be determined whether the laborious abstraction of symptoms made by most of these authors be really very serviceable: whether it is not an attempt to shorten the road to that acquirement which is, in its nature, the result of a more prolonged and painful process than the mere inspection of lists of symptoms and signs, or the committing of single aphorisms to memory. The separate facts presented to the attention in this manner are never easily connected with the diseases to which they refer or belong: there is a difficulty in completing the association of each separate idea with the distant affection of which it forms a part; and, consequently, even supposing the aphorisms to be infallible, the knowledge thus obtained is exceedingly small. The same reasons undoubtedly make the chance of serious error less: but as very little will be retained by the student, and as the bad may quite as readily be remembered as the good, and by being implicitly relied on lead to very fatal mistakes, we should, on the whole, be inclined to pronounce this form of teaching nosology by separate symptoms as rather dangerous than at all useful. Besides these considerations, as no two men see alike, or read the same things, it will never be possible for an author to devise a work of this kind which shall so command conviction, or, indeed, which shall or can be so unerringly true to nature, as to become either a favourite or a safe book of reference. Most men, finding how much they learn from their own experience, and fancying that they learn more, are exceedingly disposed to set a high value on the knowledge thus acquired, and proportionably inclined to dispute the results which have been attained by the exertion of the senses of other men. In circumstances of real danger, in combinations of disease unusually difficult, we cannot refer the anxious practitioner with confidence to any list professing to give the full value of single symptoms. He must, we believe, be content, like those who preceded him, with considering the whole series of symptoms, comparing it carefully with the whole recorded series in the description of diseases having the most numerous points of resemblance with that which is the immediate subject of his doubt and fear. It is only when some anomalous and very marked symptom is thrown into the series, that he can, with much propriety, or much hope of assistance, refer to works in which this symptom may have been noticed by itself. Such works are, doubtless, pleasing to the reader, especially when his memory is occupied in retaining the facts which, within his own experience, either accord with, or are

repugnant to, the axioms he peruses. Appearances which he remembers, and which, perhaps, he did not understand, become sometimes thus explained; and his powers of observation are roused and strengthened. We may apply a remark to studies of this nature, which has been applied to we forget what metaphysical processes: — that they are like the clue employed in the labyrinth, of no service towards facilitating our advance, and only useful when we wish to retrace our steps. Such a use of works on semeiology would be far too limited to encourage authors to labour in the department at all, if the careful arrangement and observation of *groups* of symptoms, which must now and then occupy the attention of those engaged in such pursuits, were not as valuable, nay as essential, to the smallest understanding of disease, as the separation of the parts of the groups, as the subjects from which oracular conclusions may be drawn, is unconnected with it, and unlikely to promote a knowledge of disease. Daily observation shews us the mistaken practice which results from applying the name of a malady, that is, the name of a certain collection of symptoms, to such collections as want many to complete the definition.

When to this we add the consideration, that much of the knowledge which it is, at least, the aim and object of these works to impart, is, in its very essence, *incommunicable*, — consisting often of appearances delicate, evanescent, inappreciable except to finer organisations; — of an experience which, as it cannot be imparted, can only be useful to him who has gathered it; and that the errors of such works, of all works, perhaps, the most open to error, must necessarily be productive of extensive mischief, because the works tend to make the readers very confident even when they are very wrong: and yet more, for the proof of which we might refer to many chapters of M. Double's work for warning examples, that the close and separate consideration of signs often lead to very gross mistakes, by diverting the mind from the general aspect of the malady, — it scarcely becomes a question whether the writer or lecturer does not make a fatal present to his readers or hearers when he writes or speaks exclusively on symptomatology. Some good must result from the careful cultivation of every branch of medical science, but the greatest part of the good must always arise from the connexion of the particular branch with the parent trunk. It may flourish in that connexion, and conduce to the general health of the whole tree; but if it is detached, it must soon wither and decay, and encumber the ground.

Much yet remains to be done by the student. For the perfect understanding of difficult cases, the most laboured

examination will not always suffice. Our plan must be followed out in the study: we must devote some space of time to more tranquil reflection than can be pursued in the house of sickness, among anxious friends who listen eagerly to every interrogatory, and draw hasty conclusions even from the expression of the practitioner's countenance. It can seldom happen that suspicion does not point to some one organ in particular, or to some one or two in conjunction, as concerned in the malady to be thus studied: but when there is such vagueness regarding the precise state of the disease in any case, as is productive of extreme doubt concerning the plan of treatment promising the most advantage, then, by way of refreshing the memory, and preparing the imagination for every probable suggestion, we should advise the patient study we have recommended to be commenced by a reference to the best authors on the subject of morbid anatomy to which convenient access can be had. The consideration of the morbid states which have been found incidental to the organ or organs in question, particularly if accompanied with some notice of the distinguishing symptoms, will in a great number of instances be sufficient to fasten our regards on some one disease, or some intelligible combination of diseases, and we are then to pursue the study of such disease or diseases in the writings of practical authors. But it is highly important to remember, that the morbid changes of which we read were preceded by morbid actions; and that we are most probably called upon to control such actions for the *prevention* of such changes. If every studious man's experience did not tell him how swiftly time flies in such pleasing exercises of the mind, we might propose that the principal facts connected with the anatomy and physiology of the part supposed to be implicated in the disease should be referred to, even previous to what has just been directed. The student may, or rather must, attend to this; but those who are engaged in actual practice must often rely on the stores of recollection, justly apprehensive of extending the plan of their inquiries so far, that the attention may be forcibly called away before all the parts of the plan have been completed, and before they have attained the chief end of their researches. Yet, perhaps, few of us are not conscious of devoting certain portions of our time to miscellaneous studies, or even to pleasures, which ought not to be permitted to interfere with such studies as concern the very serious business of our profession; for in this we are peculiarly situated, and, doubtless, called upon for peculiar sacrifices. Industry, and a very careful apportionment of our time, can alone enable us to take such precautions as may

prevent our anatomical and physiological knowledge fading gradually and unsuspectedly away. The study of the form, situation, connexions, office, and diseases of an organ, are, in a practical point of view, too much implicated with each other to admit of advantageous separation; and in the absence of better means, and amidst the prejudices of society, we must often be content to have recourse to the best anatomical descriptions, aided by the best representations of natural and morbid anatomical conditions, that we can procure.

Something of this kind being premised, we turn, but we should not turn too hastily, to the practical authors. We have no hesitation in advising that this branch of inquiry be begun with a perusal of what may be said on the disease or diseases in question, in whatever work may have formed the text-book of the master of physic under whom we may have studied. A revival of the clear, unprejudiced conceptions of that period of our progress, and a re-perusal of our notes of the lecturer's commentary on the text, will always be found to bring the mind into a better state for being exerted, and to revive more of its knowledge at once, than any plan that can be pursued. Another important benefit derived from a recapitulation of those lectures is, that we are thereby more strongly guarded against too hasty a concurrence in the specious theories we shall meet with in the sequel, and consequently against losing our time in the trial of such fanciful experiments as have often been tried before, and have too often been found to fail. Many of the opinions which, in turn, have swayed or sway the judgment of the medical world will there be found noticed, deprived of the glittering and deceptious ornaments in which the fancy or the skill of their authors have arrayed them, and reduced to their simple value.

Next in order, we may open the best general treatise on the study of medicine which may be extant; and principally for this reason, that, in our ardent search after important and not obvious truths, we may not overlook such as are more on the surface. All readers have one or two favourite works of practical reference on which they are accustomed to repose a certain share of confidence, and it is not our present business to point out the particular merits of some that might be named. Having done this, we shall be well prepared to receive especial assistance from authors who have written separate treatises, exclusively relating to the disease or diseases which we have in view throughout these exercises. Nor should we be discouraged by recollecting that the same books have formerly been taken from our shelves with the

same design; for we shall scarcely fail to find, as time and practice and reflection improve us, that we read in our author what we did not read before. Our chief care must be, fearing to be overwhelmed with the weight of too many authorities, to select the best. This selection will, of course, always be materially influenced by the libraries which are within reach of the practitioner; and perhaps the greatest difficulties will now and then be found to beset him whose resources in this respect are the most extensive. We all feel that we *may* consult too many authors, and ask too many opinions; but the fear of losing something of value causes us, in general, only to terminate our researches when our means of prosecuting them are exhausted. It may be well, however, to keep in mind that some of the most accomplished writers have had access to very-few books in the early part of their education; and that some of the greatest improvers of our profession have not been remarkable for an extensive acquaintance with its literature — a fact which throws great light on the profitable and creative nature of mental activity, or, if we may be allowed the phrase, of deliberate and perfect mental digestion and assimilation.

For such information as, not being firmly established or sufficiently corroborated, is not yet collected into systems of physic, we have recourse to medical journals. Works of this kind become the repositories of many valuable facts, the full utility of which is only felt when their indexes are referred to on particular questions: and they are of especial service in aiding or directing our views in cases where we suspect any unusual departure from the common forms of disease. It is rather in this manner, than as leading to successful plans of cure, that these volumes of periodical literature become of any use in a library. Single cases, in which they abound, are often successful from causes which the practitioner was least of all inclined to suspect; and their publication is often hastily determined on. The imitators wonder that in *their* hands the highly vaunted plan fails, until a few more years reveal the secret to them in the neglected records of cases once, perhaps, intended for publication by themselves, but kept back so long that they are looked upon in a light so new and so different from the original one, that they can scarcely enough congratulate themselves on the accidental retention. And further, let us say, on this somewhat personal subject, and as regards a desired reference to works of importance and research, let no man deceive himself into the belief that he is well acquainted with an author's writings

because he has read an able review, or even a copious analysis of them. No honest reviewer would wish to stultify his readers up to this point. As a means of general information, such kind of critical writing is both interesting and instructive: but the mind of a man who is ambitious of being learned, exact, and profound, must be disciplined by a careful and frequent perusal of original writings. Without this discipline, his views will become habitually limited, he will become prone to 'jump to conclusions,' and subsequently unable to contend with the difficulties of any comprehensive subject of thought. A clever reviewer, a judicious analyser, may pick out for us the most striking passages, and we may fancy ourselves much improved by the practical axioms we thus endeavour to lay up in the chambers of the memory; but those axioms are capable of good and evil application, and we require to know by what processes they have been elaborated. It is the severe perusal of the *whole* of an author's book (always supposing him to be an author of merit) that can alone admit us into the workshop of his mind, and allow us to see him draw forth, from a vast and confused mass of facts, those clear and justly formed ideas which come recommended to us by their beauty and their truth. A review or analysis may shew us the brief result of an author's voyage of discovery, but we must accompany him to learn how to adventure ourselves, and to pursue our course successfully, in the boundless sea of medical investigation on which it may be our destiny and our duty to steer. Still, we are to remember, that 'some books are to be tasted, others to be swallowed, and some few to be chewed and digested;' and that 'some books also may be read by deputy, and extracts made of them by others:' and, supposing the reviewer to possess intelligence and integrity, this is what he does for the reader: he selects, he condenses, he presents general views of collected works on similar subjects; at once sparing the reader much time and fatigue and disappointment, and pointing out to him those paths in which he may proceed with a certainty of being rewarded.

There is yet one method of obtaining knowledge in doubtful and obscure cases, which has not been mentioned. We mean a recourse to the living authority of our elders. Large stores of practical wisdom will often be found to have been accumulated by those whose habits have been averse from published communications of it; and the great advantage of this sort of reference is, that the difficulty is placed before one who, not having to contend with it himself, and

his reputation not being concerned in the result, brings the powers of his mind to bear upon it without anxiety or apprehension. It is a matter of regret that, from the peculiar formalities, delicacies, perhaps jealousies, of our profession, these confidential references are not very common. Believing, as we do, that the difficulty often rests with the junior party, we hope every day has a tendency to make it less.

During all this reading and consulting, during all this laborious inquiry, let it be kept in our recollection that the information and wisdom, the facts and observations, the theories and explanations, thus displayed before us, can only be useful to us when they become objects on which we exercise the faculties of our own minds. Too implicit a credence of what we read and hear may lead to an immense accumulation of facts in the memory, but it does not enlarge the understanding, and it impedes the free exercise of the intellect. Close attention to our author, due examination of his arguments, and a minute and accurate comparison of his evidence with that of others, and with our own experience, can alone guide us in such a case of difficulty as we set out by supposing: but with these precautions, if we are not deterred by the first view of a series of efforts which, in detail, will be found delightful, we shall reap such a reward as indefatigable students and conscientious practitioners can alone feel, or appreciate, or deserve. We shall either rise from our studies relieved from doubts which have harassed and disquieted us, or we shall become resigned to what the imperfection of human knowledge makes inevitable: and shall, in the one case, have the rich satisfaction of devising such a well-ordered plan of treatment as will be crowned with success, and so experience the highest pleasures of a noble profession; or, in less favourable circumstances, our consciences will be void of reproach, and we shall not, by any want of happier results to our endeavours, be deprived of the enduring consciousness of having, at least, done our duty.

III.

*THE MATERIA MEDICA.**

[Fourth Article.]

A Manual of Pharmacy. By WILLIAM THOMAS BRANDE, F.R.S. Lond. and Edin., Professor of Chemistry to the Royal Institution, and to the Society of Apothecaries, &c. &c. 1825.

Phytographie Médicale, ornée de Figures Coloriées de Grandeur Naturelle, &c. &c. Par JOSEPH ROQUES, Doct. en Méd., Ancien Médecin des Hospitaux Militaires, &c. &c. &c. Paris. 2 Tom. Quarto. 1825.

CANELLÆ CORTEX. *The bark of the Canella Alba.*—This substance is chiefly valuable as an adjunct to vegetable tonics, and to several purgative medicines belonging to the same kingdom. Mr. Brande says that it has nothing to recommend the preference of it to other aromatics. But this is not the case; for it has this to recommend it, that it combines, with many of the properties of a warm aromatic, those of a vegetable tonic. It is, therefore, as experience has fully shewn, better suited, than many other aromatics, to various derangements depending upon a sluggish action of the prima via, and it forms the most appropriate adjunct to vegetable aperients and cathartics, in several diseases arising from, or connected with, a deficient or otherwise deranged action of the alimentary canal. We are truly grateful to Mr. Brande when he contributes to our information, but it surely is not inconsistent with that gratitude, and with the fullest candour, to reject what is in opposition to our own experience, and to that of the most eminent observers of the effects of remedies, particularly when it comes before us in the shape of assertion, unsupported either by argument or by proof. The analyses of this bark by Henry, Petroz, and Robinet, are not mentioned by Brande.

CANTHARIDES.† *Cantharis Vesicatoria.*—We are much surprised that Mr. Brande, professing, as he does, to have

* Continued from page 251.

† *Class. Ref.*—Κανθαρίδες, Hippocrat. de Morb. Intern. cap. 34.—De Dieta Acut. Lib. IV. cap. 104.—'Cantharidum succos dante parente bibas.' Ovid.—Celsus, Lib. V. cap. 8 et 27.—Plin. XIV. cap. 7; XXIX. cap. 4.—Aretæus de Curat. Morb. Diuturn. Lib. I. cap. 4, *in epilepsia.*—De Morb. Acut. II. cap. 10.—Dioscor. II. cap. 65 et 66.—Galen, Simp. Med. XI. 44, *as a diuretic and emmenagogue.*—Oribas. Med. Coll. Lib. XIV. cap. 58, Vol. II. p. 659.—Paul. Æginet. VII. cap. 10.—Aëtius, III. cap. 174.—Serapion, Hist. Simp. Med. Lib. VII. cap. 19.—Mesuæ de Antidotis, p. 315. Paris, ed. 1542.—Herman. Cynos. Mat. Med. Vol. I. Pars secunda, p. 55.

Grœnevelt, a licentiate of the College of Physicians, was imprisoned by the President and Censors for prescribing this medicine, although the practice of antiquity, and of the most eminent physicians on the Continent, at that

given us a Manual of Pharmacy, has, in the present instance, and in numerous others, left the pharmaceutical part of his subject entirely unnoticed. He says nothing of M. Robiquet's, or of any other person's, analysis of this substance, although a knowledge of the composition of the articles of the materia medica is an essential part of their pharmaceutical history.

The following cases, recorded by M. Barbier, will convey some idea of the influence and mode of action of cantharides, when used internally: —

A medical student took in the morning a large pinch of cantharides coarsely powdered. His stomach and bowels were not disordered by it during the day; but he had frequent calls to evacuate his urine, which was voided with pain, was extremely red, and was followed by the escape of a small quantity of blood. He complained of pain in the urethra and perinæum; but he preserved his appetite, and his digestion was good. It was not until the day following that on which he took the cantharides that diarrhœa and griping supervened, which continued for several days. In this case, a portion of the active principle of this substance was absorbed before inflammation was induced in the mucous surface of the alimentary canal.

A man, aged thirty, took, on the 28th December, at ten o'clock at night, a drachm (72 grains) of powdered cantharides in a glass of beer. At half-past eleven he was seized with violent pains in the bowels, and with painful retchings, which were repeated every fifteen minutes until the morning. He was received into the *Hôtel-Dieu* of Amiens, at eight o'clock of the morning of the 29th. He was pale, agitated, complained of constant colicky pains, and of tenesmus: the vomiting had ceased. The interior of the mouth was covered with small vesicles, whose base was inflamed and painful. An active phlogosis seemed to extend from this cavity to the anus: there were also epigastralgia, difficulty of swallowing, and deep-seated pain at the inferior third of the sternum.

time, was in his favour. He usually gave it in combination with camphor, whose influence in preventing and allaying its irritating effects upon the urinary organs is well known. Grœnevelt published his defence, with a detail of his cases. The second edition of it, now before us, contains a satirical Latin poem, which is remarkable neither for elegance nor acerbity, by Mandeville, the author of the amusing 'Treatise of the Hysterick and Hypochondriack Diseases.' Of the ten physicians whose names Grœnevelt has recorded in his preface as those of his oppressors, viz. two presidents and eight censors — for he was twice prosecuted by the College — there is not one who has left behind him an honourable monument, by which his name may be discerned from amongst the crowd who 'fret their hour upon the stage,' and sink in oblivion. But what could be expected from the actors in a scene of mean and illiberal oppression?

The urinary organs were severely affected: pains in the hypogastrium; frequent evacuations of small quantities of bloody urine, with great pain; no erections; pulse small and somewhat slow. The nervous system as yet was unaffected. Forty leeches were applied on the abdomen; the tepid bath; gum-arabic emulsion.

Three o'clock, P.M.—Pulse strong and slow; trembling; difficult deglutition; diminished pain of the bowels; had vomited a sanguineous and serous fluid. At night the influence of the cantharides seemed to be exerted more evidently on the nervous system: he complained of cephalalgia, with tightness at the temples; of impaired vision; of noise in the ears; and of agitation of the limbs, alternating with numbness.—30th. He had a little sleep; but was much agitated: temperature of the body much increased: great pain in the temples; numbness of the limbs; thirst: pulse strong, slow, and oppressed: pain under the sternum upon swallowing, and at the corresponding part of the back. The pains of the bowels are diminished, those of the urinary organs remain: no erection. He was blooded from the arm; used the warm bath; and had two emollient enemas: demulcent drink.—31st. Cephalalgia; erections; better in other respects. After an accession of the nervous symptoms on the 3d of January, accompanied with pain in the back, and frequent erections, he quickly recovered.

These cases shew satisfactorily the action of this substance upon the digestive mucous surface, as well as upon the urinary organs and the system generally, when it is present in the circulating fluid. Our readers will find in the seventeenth volume of this Journal (p. 347), the particulars of four cases of poisoning by cantharides. In all these, camphor proved very beneficial, particularly as respected its influence in allaying the irritation produced in the urinary organs. We are surprised to find that this effect of camphor is not alluded to either by Mr. Brande, Dr. Paris, or by M. Barbier, the author of the best work on the materia medica which has yet appeared. The most eminent practitioners of the seventeenth and eighteenth centuries, who were much in the habit of prescribing cantharides internally, and in more disorders than those of the urinary organs, always combined it with camphor; and this circumstance constituted the plea which Grœnevelt adduced in favour of his intentions, when persecuted by the College of Physicians in 1693.

The only disorders in which we have had much experience of the internal exhibition of cantharides, are, the latter stage of hooping-cough, the comatose stage of nervous fevers, certain chronic affections of the urinary organs, and a few

cases of paralysis. In all these we have observed much benefit accrue from its use; but there are few medicines that require greater discrimination than it does. When it is considered that much of the good effects which follow the external employment of cantharides arise from the absorption of its active constituents into the circulation, sufficient proofs of which are furnished us in the irritation occasioned in the urinary organs by this application of it, we are quite prepared to admit the correctness of the views of the older writers on medicine respecting its beneficial influence in more diseases than those now mentioned. In cases of adynamia, or where there exists great deficiency of nervous and vascular power and action, the internal use of the tincture of cantharides is generally productive of energetic effects; but in the majority of such cases, it is most beneficially exhibited in conjunction with camphor, or with other antispasmodics, and with demulcents, as the occasion requires.

With respect to the external use of this substance, we shall forbear to speak at present, but reserve what we may have to say on this part of the subject until we have occasion to discuss the effects of external irritation upon disease.

Capsici Baccæ. *Berries of the Capsicum Annuum.*—This is an excellent condiment; and, in warm and unhealthy climates, a most valuable prophylactic and medicine. It grows abundantly in all the low swampy countries between the tropics, thus holding out, not only to man, but to the lower animals also, an excellent preservative and curative mean for the diseases of which such districts are abundantly productive; and it is one which they instinctively adopt. The savage African, in the low and swampy parts of the country more particularly, consumes large quantities of it with every meal he takes, and resorts to it in almost every disease to which he is liable: in the former case he employs it to promote digestion, to prevent the generation of worms in the intestinal canal, to which he is particularly liable, and to support the energy of the nervous and circulating systems under the depressing influence of the moist and impure air which he respires; in the latter case, he employs it in order to produce a laxative effect in obstipation, or combines it with other substances possessing cathartic properties—he also resorts to it in an apposite state of the alimentary canal; for, in the negro constitution, it is one of the best remedies in diarrhœa and dysentery. Besides using it in larger quantities as a condiment in these and several other states of disease, he also takes it in the form of a draught, combined with diaphoretic and purgative substances, and administers it frequently as an enema. In rheumatic, and other painful affections, cataplasms of the bruised recent berries are his

favourite remedies, and it enters, as a corrigent, into the composition of all his medicines.

We have frequently prescribed considerable doses of Cayenne pepper as a prophylactic during the unhealthy season in warm climates, and have generally ordered it to be taken when reposing for the night, and immediately upon wakening in the morning. In the cure of agues it is a most excellent adjuvant to the cinchona; inasmuch as it is itself a very efficient remedy in the cure of this disease, and as, in combination with it, the cinchona offends much less the stomach, and larger doses can be taken, than when otherwise exhibited. In the last stage of continued and typhoid fevers, and of dysentery and cholera, when the powers of life are sinking, it is a most valuable medicine, more particularly when combined with camphor, or with arnica, serpentaria, cinchona, or with any other remedy appropriate to the circumstances of the case. Cataplasms or liniments prepared with it, and applied to the abdomen and lower extremities, are also serviceable in this depressed state of the vital energy. We have prescribed it in scrofula, in the form of pill, combined with conium and bitter tonics, and we have observed benefit accrue from it in almost every case. A weak infusion of capsicum is an excellent wash also in scrofulous ulcerations, in some forms of tinea capitis, and in several other chronic eruptions.

Cayenne pepper is a good adjunct and corrigent to tonic, purgative, antispasmodic, and carminative mixtures; but it must not be employed when there exists acute inflammatory action in the stomach, liver, or bowels. In cases of poisoning by any of the sedative and narcotic poisons, it ought always to be prescribed, in order to rouse the sensibility of the stomach and of the system generally. In certain forms of ulcerated sore throat, and particularly in the cynanche maligna, an infusion of it with myrrh, extract of catechu, or other medicines of a similar description, generally proves an excellent medicine. The following is the formula which we have most frequently employed: —

℞ Capsici Baccarum contus. gr. xv.
Aquæ ferventis ℥ix.
Infunde per horas, tres et cola.

℞ Liquoris Colati ℥viiss.
Acidi Muriatici ♏xxv. ad ♏xxxv.
Tinct. Myrrhæ ʒiijss.
Mellis Rosæ ℥ss. M.
Fiat gargarisma.

The borax sodæ, extractum catechu, or any other astringent, may be substituted, according to circumstances, in the place of the muriatic acid.

Carbo Ligni. *Charcoal* has been employed, in the dose of one or two tablespoonsful given every hour, or every half hour, as a medicine in obstinate constipation; and it has proved both safe and pleasant in its operation.* It has been also recommended in dysentery, in somewhat smaller doses.

Cardamines Flores.† The flowers and leaves of the *Cardamine pratensis* have been extolled in chronic coughs and chronic disorders of the respiratory organs, as well as in several spasmodic diseases, as spasmodic asthma, chorea, &c. As their virtues chiefly consist in the æthereal oil which they contain, they ought to be exhibited in the recent state, or the expressed juice should be used. The processes of decoction, infusion, and even of drying, greatly impair their virtues. It is chiefly to this circumstance that we impute the contradictory opinions which have been given respecting their efficacy; some writers, who have recommended them in a recent state, praising their virtues, and others, who, more ignorant of their pharmaceutical history, have therefore exhibited them either in the form of infusion, or in that of the dried powder, denying them any efficacy.

'Succus autem expressus, quem saccharo in conservam mutare commodum est, ventriculum ac viscera abdominalia incitat, stases resolvit, ideoque tum adversus scorbutum, tum in diuturnis malis, quæ stasibus abdominalibus tribuenda sunt, proficuus est.'‡

Cardamomi Semina.‖ The properties and medical uses of the seeds of the *Matonia Cardamomum* are so well known, that we shall make no allusion to them in this place. There are very few medicines of the same class more generally employed than they are: and we have reason to believe that they or their preparations are too frequently prescribed in cases of dyspepsia and flatulency, arising from, or accom-

* London Medical Repository, Vol. XX. p. 92, *Old Series.*

† *Class. Ref.* — Καρδάμινη, from its resemblance to the χαρδάμον of the Greeks. Σισύμβριον ἕτερον, Diosc. II. cap. 117, p. 263. Edit. Marcel. Vergil. Paris, 1529.—Plin. XX. cap. 22. 'Sisymbrium, quod in riguis nascitur.'

'Cumque suâ dominæ date grata Sisymbria myrto,
Textaque compositâ juncea vincla rosâ.'

Ovid. *Fast.* IV. 869.

Apulei, 62 et 105. Ed. Paris, 1528. — Galen. de Simp. Med. Lib. VIII.—Oribas. Med. Col. XII.—Æt. Tetrab. I. Serm. III. 184.—Paul. Æginet. VII. cap. 3.—Parkinson. Theat. Bot. p. 826.—Νεροκάρδαμον of the modern Greeks. See Sibthorpe.

‡ Sprengel, Institut. Pharmacol. p. 153.

‖ *Class. Ref.* — Καρδάμωμον, from καρδάμον and ἀμῶμον, because it partakes of the nature of the *cardamum* and the *ammomum*. Cels. Lib. V. cap. 2.—Aretæus de Curat. Morb. Acut. I. cap. 5. Edit. Boerh. p. 84.—Plin. XII. c. 13.—Dioscor. I. 5.—Galen. de Simp. Lib. VII.—Oribas. Col. XV. p. 693, Vol. II. Edit. Basil. 1557.—Serap. de Simp. III. cap. 93.—Parkinson, Theat. Bot. 1576.

panied with, a state of inflammatory irritation in the mucous surface of the digestive canal, when medicines of a less stimulating and less acrid description are required. There are a number of dyspeptic symptoms arising from serious disease of the digestive and assistant digestive organs, which are relieved for a short time by the exhibition of warm carminatives, but which, nevertheless, actually are perpetuated by them. It often, however, requires as much resolution on the part of the patient to submit to a more efficacious method of cure, as attention and skill of the practitioner to ascertain the real nature of the derangement, and to adapt the treatment to all its relations. Stimulating cordials and carminatives are generally in such cases sufficiently relished by the patient, and are seldom prejudicial to the prescriber; whereas a treatment which is directed to the cause of derangement, instead of to one or two of its consequences, is often not submitted to, or if it be for a while, is relinquished before sufficient time has elapsed to experience that benefit which it is calculated to afford.

Caricæ Fructus.* The fruit of the *Ficus Carica* is amongst the oldest articles of the materia medica. Green figs were often recommended by Celsus, Aretæus, Dioscorides, and Galen, as an aperient medicine, and a decoction of the dried fruit with hyssop has been prescribed in all anginous and pulmonary disorders from the time of Hippocrates down to the present day. A weak decoction of figs is frequently exhibited alone by continental physicians as a grateful demulcent drink, and as a vehicle for other remedies in the eruptive fevers and the derangements of the urinary organs. We need not allude at this place to its external employment in several disorders. For this part of the subject, as well as for an interesting account of its internal uses in disease, we refer the reader to Celsus and Dioscorides, where they are more satisfactorily treated of than in any subsequent works.

Passing by the Carui Semina and the Caryophilli,

* *Class. Ref.*—Καρυκη, from Caria, the country whence they were brought. Συκῆ vel συκία, *ficus arbor*; σῦκον, *ficus*.—Lib. II. Regorum, cap. xx. v. 7.—Theoph. plur. locis.—Varro de R. R. I. 41.—Suet. Aug. cap. 76.—Martial, X. ep. 2.—Juven. Sat. X. 244.—Horat. Epod. 5, 17.—Terent. Adelph. IV. 2, 38.—Cels. IV. cap. 12, pp. 50, 2, 21. J. Ruel. Paris, 1529.—Plin. XVI. 27, 31.—Aretæus de Curat. Morb. Acut. I. cap. 7. *Internally and externally in angina.*—Diosc. I. cap. 149. Edit. Marcel. Vergil. 1529. The reader will find here a full account of its uses.—Galen de Aliment. Facul. II. 35.—Oribas. Synop. IV. cap. 1, 13; et Collect. VI. cap. 31.—Serap. de Simp. III. cap. 75.—Parkinson, Theat. Bót. p. 1495, where the reader will find a very full account of the medical uses to which the fig has been applied.—See also Hermann's Cynosura Mat. Med. Vol. I. p. 350.

until we notice the *Essential Oils*, we arrive at an article more employed in modern medicine than almost any other belonging to the same class, namely, the CASCARILLÆ CORTEX, or *Bark* of the *Croton Cascarilla*. This is an aromatic bitter which acts with considerable energy upon the sanguiferous system. It is apt to excite hæmorrhoids when employed in powder, owing to the slowness with which its active constituents are imparted to the intestinal juices, and to the stimulating effects resulting from its lodgment in the colon and rectum along with the fæcal contents of these viscera. The cascarilla is best suited to persons of a cold, lax, or lymphatic habit of body; and when there is deficient energy of the nervous system, and torpor of the vascular organs and glandular viscera. It should not be given to those of a sanguineous or plethoric habit, or where the general appearance of the body is dry and bilious. When there is a disposition to inflammatory action in the digestive mucous surface, or in any of the digestive viscera, it ought also to be avoided.

Cascarilla has been recommended in the last stage of dysentery, but it is in no respect suited to this disease, unless when it assumes an epidemic and contagious form, and is marked, as it then usually is, with great depression of the vital energies of the system. It is better suited to the cure of intermittents, and may be beneficially combined with other tonics and aromatics in the cure of these diseases. The infusion of this bark is the best and most useful form of exhibiting it, and is an excellent vehicle for other remedies of an antispasmodic, tonic, or aperient nature. The addition of a mineral acid to the infusion is generally advantageous, and tends much to promote its tonic and astringent effect, and to diminish its heating and irritating influence on the mucous surface of the alimentary canal. To this latter circumstance, and the frequency with which an acid is combined with this medicine, is to be imputed the little inconvenience often observed to follow its injudicious prescription, in several dyspeptic and other cases, connected with inflammatory irritation in some one of the digestive and assimilating organs.*

CASIÆ PULPA.† The pulp contained in the pods of the *Cassia fistula* is briskly aperient when taken in large quan-

* The cascarilla bark, it may be mentioned, gives an agreeable flavour to tobacco when burnt with it.

† *Class. Ref.*—Κασσία μέλαινα, Græc. *Cassia nigra*, Lat. It is often difficult to ascertain the exact species of cassia to which the ancients refer; but there can be no doubt that the species under consideration was that named by them as above. Theophrast. Hist. Plant. IX. c. 5.—Celsus, V. cap. 23.—Scrib. Larg. cap. 269.—Plin. XII. cap. 19.—Aretæus de Curat. Diut.

tities, but in small doses it generally produces but little effect upon the bowels. In this case it seems to be digested, and, consequently, to lose its cathartic properties. Notwithstanding the colicky pains and gripings which frequently attend the cathartic operation of this medicine, it exerts a soothing and cooling influence, which is chiefly remarkable when the system is labouring under febrile or inflammatory diseases. It does not irritate the mucous surface of the digestive organs, or excite locally the vascular system, but seems rather to occasion an entirely different effect. When given in large doses, it occasions a sickly sensation and a sense of depression, accompanied, for a while, with a total relaxation of the tonicity or vital energy of the parts in which it is lodged; but this state is soon followed by a re-action or contraction of the muscular tunics of the alimentary canal, occasioning its expulsion with the rest of the intestinal contents. It is this contraction of the muscular tunics of the canal, upon an offending and depressing agent, which gives rise to the colicky pains which often characterise its operation. It will appear from this, as, indeed, has been fully proved by careful observation, that it is not a suitable purgative for those in whom the vital energies of the stomach and intestines are depressed, or who are habitually costive from defective action of the large intestines; whilst, on the other hand, it is calculated to lower inflammatory action, and more particularly, by the depression and sickly sensation occasioned by it, to prove serviceable in pulmonic and pleuritic inflammations. When combined with other purgatives of an irritating nature, as camboge, colocynth, scammony, jalap, &c., it renders their operation much more mild. The colouring matter of the cassia is frequently absorbed during its operation, and thus gives rise to a dark-coloured state of the urine. The motions which follow its exhibition are generally very dark.

CASTOREUM.* *Contained in pouches or follicles near the Anus of the Castor fiber.*—Mr. Brande has not favoured us

Morb. I. cap. 4?—Dioscor. I. 12.—Galen de Antidot.—Oribas. Collect. XV. Vol. II. p. 517. Edit. 1557.—Serapion de Simp. II. cap. 23.—Mesuai, in plurimis locis,—'Obstructiones aperit, præsertim hepatis; menses potenter movet.'—Actuarius de Method. Med. V. cap. 2.—Parkinson, Theat. Bot. 235.—Willis de Oper. Med. p. 41.

* *Class. Ref.*—Καστόρος ὄρχις, καστόριον, Græc. *Castoreum*, Lat.—Celsus, Lib. III. cap. 20, (*in lethargic disorders, with the cold affusion,*)—IV. cap. 3, (*with assafœtida.*)—Scrib. Larg. cap. 121, (*with emmenagogues, antispasmodics, and cardiacs, in amenorrhœa, colic, tormina, &c.*)—Pliny, XXXII. cap. 3, (*in all nervous diseases, and against flatulencies.*)—Aretæus de Curat. Acut. Morb. Lib. I. cap. 6, et in aliis locis, (*in tetanus, syncope, lethargy, hysteria, uterine and nervous disorders, &c.*)—Dioscor. II. cap. 23, (*as a carminative with vinegar; and in all nervous diseases. He gives the best directions for*

with the analysis which Bonn and Langier gave of this substance. As to its medicinal virtues he is very sceptical; but in this he may not be singular. Mr. Brande, however, is somewhat prone to this sort of scepticism. We know not whether it is the fashion; but whether it be or no, we like it as little as too great a proneness to extol the qualities, and to believe in all the imputed virtues, of the numerous articles to which medical attention is daily directed.

According to the experiments of Thouvenel and our own observation, castor excites the nervous and sanguiferous systems,— 1st, in consequence of the impression made by it upon the mucous surface of the stomach and the nerves of this viscus, and thence propagated to the centres of the nervous systems; 2d, from its partial absorption into the circulating fluid. Along with the excitement it occasions, it seems also to modify the existing state of nervous function; this may be the effect of its presence in the circulation, as also may be whatever emmenagogue virtues it possesses. Its carminative properties, which are considerable, proceed from its immediate effects as a stimulant of the digestive mucous surface. It is generally, in modern practice, prescribed in too small doses to obtain its effects, even were it genuine, which it seldom is.

Castor is beneficially combined with camphor, assafœtida, galbanum, ammonia, opium, and other antispasmodics, in hysteria, hypochondriasis, flatulent colic, and numerous nervous disorders;—with tonics, antispasmodics, and emmenagogues, in the same derangements, and in dyspepsia, chlorosis, &c.;—and with aperients, cathartics, carminatives, and antispasmodics, in amenorrhœa, colic, chorea, hysteria, epilepsy, &c.

Catechu Extractum.* From the *Acacia Catechu.* — This medicine excites the appetite, and constringes the capil-

ascertaining its purity.)—Galen de Simp. Med. XI.—Oribas. Med. Collect. XV.—Æt. Tetrab. I. sec. 1.—Trall. I. cap. 13.—Serap. de Simp. Med. VII. cap. 26.—Pharmacop. Schrœderi, p. 803.—Herm. Cynos. Mat. Med. Par. II. Vol. I. p. 45.

℞ Castorei ℈ij.
Aloës Socot.
Assafœtidæ, āā ʒss.
Olei Folior. Sabinæ q. s.
Misce, et divide in pilulas xxiv.—J. C.

(*In amenorrhœa, hysteria, chlorosis, and nervous disorders.*)

* Is catechu the λύκιον of the Greeks, and *lycium* of the Romans? See Celsus, Lib. V. cap. 5, et in aliis locis; and Pliny, Lib. XXIV. cap. 14. —Aretæus, Morb. Diutur. Curat. II. cap. 13.—Dioscor. I. cap. 134.—Galen, Simp. Med. VII.—Hermann gives a good account of catechu in his Cynosura Materiæ Medicæ, Vol. I. p. 74.

laries distributed to the mucous surfaces. Its effects in diarrhœa and dysentery are well known; but it is not suited to these disorders when they are the result of acute inflammation. Catechu is also beneficial in the humid form of catarrh and chronic bronchitis, when the discharge of mucus from the bronchial membrane is very great, owing to relaxation of its capillaries. In the last stage of catarrhus vesicæ, and in chronic derangements of the urinary organs, it is also frequently prescribed with advantage. It has likewise been administered in uterine hæmorrhages, both by the mouth and in the form of injections, either up the rectum or vagina. The exhibition of it in enemata, for obstinate chronic fluxes, ought seldom to be neglected.

In the majority of cases wherein the use of catechu is indicated, and in those more particularly in which we wish to make an impression by its means upon parts far removed from the viscus to which it is directly applied, large doses of the medicine should be exhibited. We have prescribed as much as two drachms of it in the twenty-four hours, with much benefit, after smaller quantities had been given with no effect; but in every case wherein large doses have proved altogether inefficient after a short trial, the use of the medicine should be abandoned, as but little advantage results from its protracted exhibition.

Catechu is advantageously combined with the cretaceous powder or mixture, with cinnamon, capsicum, mastich, and other cardiacs, in chronic diarrhœa, lientery, &c.; — with pulv. tragacanth. com., pulv. ipecac. comp., or opium, musk, ipecacuanha, &c. in chronic dysentery; — with myrrh, castor, camphor, assafœtida, galbanum, Peruvian balsam, ammoniacum, squills, balsam of tolu, &c. in chronic bronchial disorders, accompanied with a too abundant effusion of mucus into the bronchi; — and with uva ursi, Venice or Canadian turpentine, camphor, balsam of copaiba, &c. in chronic urinary discharges.*

* ℞ Catechu,
Myrrhæ, āā ℥ss.
Pulv. Cinchonæ ℥ij.
Balsami Peruvian. ℥jss.
Spirit. Armoraciæ,
—— Vini Rectificati, āā ℥jss. Misce et digere.
(*For sponginess of the gums.*)

℞ Catechu ℥ij.
Moschi ℈ij.
Sacchar. albi ℥iijss.
Mucilag. G. Tragacanth. q. s. Misce. Fiant trochisci parvuli.
(*For relaxation of the uvula, hoarseness, &c.*)

CENTAURII CACUMINA.* Tops of the *Chironia Centaureum.*—Whilst this plant is so much praised by continental physicians, Mr. Brande says that it is an useless encumbrance to the materia medica. Its bitterness is, perhaps, the cause that it is but seldom prescribed with us; but its virtues do not consist alone in its bitterness, as Mr. Brande seems to think; its stimulant properties are considerable, as respects its influence both on the digestive mucous surface and upon the vascular system. Hence it ought not to be prescribed for those disorders of the digestive organs depending upon inflammatory action.

The common centaury was formerly much used in agues, and bilious derangements, more particularly those resulting from deficient action of the biliary organs; and it is still very generally prescribed for these latter disorders in continental practice. It has also been, and, we believe, still is, much employed for expelling lumbrici from the alimentary canal, and for preventing the generation of worms. It certainly is so far beneficial in these cases, that it prevents the accumulation of the sordes and viscid, slimy mucus in which these parasitic animals reside, and even detaches them from the villous coat of the intestines on which they form. Its anthelmintic properties may doubtless also result, in part, if not altogether, from its effect as an intense bitter upon the worms themselves. We have seen it given in large doses, as an anthelmintic, when it proved also, as was long since remarked by Hoffmann, an active cathartic. Its influence in deferring the gouty paroxysm is well known, although it has been frequently

* *Class. Ref.*—Κενταύριον, Græc. (from Chiron, the Centaur, according to Pliny.) *Centaureum, Lepton, fel Terræ* (*propter Amaritudinem*), Latinor.—Κενταύριον τὸ μικρὸν καὶ λεπτόν, Diosc. III. cap. 8, 9.—Theophrast. Hist. Plant. IX. cap. 4.—Celsus, Lib. VI. cap. 7.—Pliny, XXV. cap. 6.—Galen, de Simp. VII.—Oribas, Vol. II. p. 695. Edit. Basil. 1557.—Serapion de Simp. IV. cap. 92.—Mesuai, in plurimis locis.—'Spleneticum est et hepaticum: biliosos humores quàm lenissimè per alvum educit; serum per poros discutit. Hinc utile in febribus, ictero, mensibus suppressis, scorbuto, arthritide, lumbricis.' Schrœder, Pharm. p. 559.—'Abstergit et resolvit quasvis sordes in primis viis stagnantes, simulque intestina ad excretionem stimulat. Omnibus vitiis à bile oriundis dicata est.'.... 'Convenit in cachexia et malo hypochondriaco. Vix vinum medicatum stomachicum et anticachæticum paratur, quod non ingrediatur centaurium minus. *Succus centaurii minoris cum gossypio pudendis intrusus menses prolicit.*† Decoctum laudatur contra pediculos, furfures, et tineam.' Hermann, Cynos. Mat. Med. Vol. I. p. 525.—For a full account of its properties, see also Parkinson's Theat. Botan. p. 275.

† This mode of treating amenorrhœa and emansio mensium was frequently prescribed by the older physicians; and in this way they often recommended more stimulating medicines than the common centaury.

disputed. There is, however, no doubt that it is beneficial in this respect, inasmuch as it tends to strengthen the digestive functions, and to promote the discharge of the secretions poured into the alimentary canal. With these views it is, at the present day, although not in this country, frequently prescribed, the patient being generally directed to take a glassful of the infusion, with three or four grains of the extract, or two tea-spoonsful of its tincture, shortly before each meal. Quassia and gentian have now usurped the place of centaury: but we agree with Cullen in considering the extract of the centaury preferable to that of gentian. Common centaury is a cheap medicine, and equally beneficial, when judiciously prescribed, with much more expensive tonics. After what we have observed of its effects, and after what has been written respecting it by the most eminent authorities in the profession, and knowing the opinions of several eminent living physicians respecting it, we were not a little surprised to find the Professor of Materia Medica to the Society of Apothecaries, whose opinion may be considered as influential in the profession, stating that the common centaury 'is an unnecessary incumbrance to the list of materia medica.'

Cerevisæ Fermentum. *Yeast* is much and beneficially employed as a poultice to ill-conditioned sores. In the low stage of fevers, when the powers of life are fast sinking, yeast has been frequently given with considerable benefit. But in these cases we have obtained greater advantages from the use of bottled porter, or 'stout,' in which the fermenting ingredient was present, in a state of activity. In the stage of collapse in fevers of tropical countries, very brisk bottled porter and brisk spruce beer are very excellent remedies; and they are equally applicable to the low stage of some forms of fever in this country. They are remedies, however, which ought not to be incautiously used in these latter, for, in various pathological conditions which frequently supervene in their progress, they are calculated to be detrimental. It is chiefly when the powers of life are, in a great measure, exhausted, either owing to the previous state of disease or the operation of medicines, and when the vital organs are free from inflammatory action, that these prove most serviceable. We have remarked, that they have generally been essentially beneficial when blood-letting and free evacuations from the bowels had been prescribed during the early stages of the disease.

(*To be continued.*)

PART II.

ORIGINAL COMMUNICATIONS.

I. *Case of Chronic Hydrocephalus treated by Puncture.* By James Holbrook, Esq., Member of the Royal College of Surgeons, London.

June 26th, 1825.—I was requested to visit J. K., aged eight months, the child of a farmer residing a short distance from this town. I found him labouring under chronic hydrocephalus, and his head distended to an enormous size. On inquiry, I was informed he had been afflicted with it from his birth; but they had now sent for me, in consequence of the skin of the scalp on the left side appearing prominent in one part, and nearly ready to burst. The child looked in a most pitiable state, pale, and a good deal emaciated, with his eyes turned down, shewing only the white part, and was constantly moaning. His appetite was good, notwithstanding these appearances, and his bowels regular.

Under these circumstances, I represented to the parents that the child's life might probably be prolonged by discharging a portion of the fluid, by making a small opening, and healing it again; but if this was not done, it appeared almost certain that the skin would soon give way in the prominent part, and that death must shortly follow. In reply to this opinion, they said it was desirable to prolong the child's life, as much as possible, in the hope that something more favourable might turn out. In accordance with these feelings, I made an opening with a common lancet on the opposite side to the part likely to give way, and discharged about a quart of clear serous fluid, and which appeared to produce but little effect on the child; but the scalp and membranes being flaccid from the discharge of the fluid, left the head a most unpleasant body to handle, from the circumstance of the bones being so widely separated at the sutures, and giving way to pressure in every direction. I closed the wound with a bit of lint and sticking-plaster, and applied a handkerchief, so as to give as much support as possible to the whole head. I did not consider it necessary to prescribe any medicine, but left directions, if any alteration should occur, to inform me immediately. No unpleasant symptoms have, however, occurred; and the same operation has been repeated twice since, discharging each time about a quart, and making in all three quarts. How long life may be prolonged in this way, or what the ultimate result of repeatedly discharging the fluid may be, time only can shew; but this case proves that the operation may be repeatedly performed without any ill effect.*

* We beg leave to express our thanks to Mr. Holbrook for this interesting case, and to request that he will favour the profession with the sequel of it.—Editors.

II. *Case of Compound Dislocation of the Knee.* By Messrs. MILLER and HOFFMAN, Surgeons, &c.

ROBERT NUNN, aged twenty-eight years, groom, in the act of mounting his master's carriage in this town, got his right leg suddenly entangled between the spokes of one of the hinder wheels, which being in motion prevented the possibility of quickly extricating himself from it; the consequence was, a compound dislocation of the knee-joint. This happened in the afternoon of the 28th May last. Some persons in the street witnessing the accident, immediately apprised the coachman, who instantly stopped, and the man was rescued from his perilous situation.

We saw him within five minutes of the time of the accident, and found him nearly in a state of syncope, arising from pain and mental agitation: he could, of course, give little or no account of his feelings; but it was evident the right leg and thigh had sustained the principal part of the injury. On stripping off the boot and breeches, we found that the os femoris was thrown completely from its bearing on the tibia, obliquely downward and outward, its external head protruding through the integuments, and causing a lacerated wound of about three inches, and exposing the joint and the poplitæal artery; the latter, however, received no injury whatever. So short an interval having elapsed between the accident and our arrival, we were enabled immediately to reduce the luxation, so that we had nothing like obstinate spasm to encounter. When the accident happened, the patient was some distance from home; he was therefore placed in the carriage, and conveyed home to his bed, placing the limb in as favourable a position for its general relaxation as possible. After again examining the parts, and finding no considerable degree of hæmorrhage, two sutures were inserted, and strips of adhesive plaster applied, to exclude, in some measure, external air from the cavity of the joint; and linen, saturated with a lotion composed of liq. ammon. acet., liq. plumb. acet., et aq. distill., was put over the whole. By this time re-action of the system had taken place. Venesection was then had recourse to, ad ℥xx., a purging draught administered, and an opiate given at bed-time. We left him for this day, with orders to keep the dressings constantly wet with the lotion.

May 29th. — Had a restless night; found it necessary to slacken the bandage, in consequence of much pain and tension; the pulse becoming full and hard, we took away more blood, and prescribed a febrifuge with potass. nitrat., &c.; repeated the anodyne at night, and continued the lotion.

30th. — Somewhat less tension in the parts than yesterday; removed the stitches, and applied a bread poultice made with the lotion a little warm; venesection and the aperient draught were repeated, and the anodyne at bed-time continued. Pulse 95 in the evening.

31st. — Passed a tolerably good night, tension subsiding, and

general febrile symptoms abating; pulse 90. Repeat the mixture and anodyne at bed-time.

June 1st. — Found to-day much synovia and ill-digested pus in the poultice, but nothing remarkable as to the appearance of the wound; the pain, however, was considerable on the slightest movement. Medicines as before.

2d. — Had a good night, with less fever than before; discharge from the wound fœtid and thin; a fermenting poultice was applied.

3d and 4th. — The febrile symptoms having now subsided, the discharge still assuming an ichorous character, and portions of the capsular ligament sloughing away, we had recourse to cordial and tonic medicines, which were persevered in the ensuing five weeks; the suppurating parts daily improving as his general strength increased. During this period we found it necessary to dilate the original wound, which had become sinuous, the integuments having been somewhat detached from the parts beneath at the time of the accident by the protruding bone, and thus affording a lodgment for the discharge.

By the middle of July the wound had nearly healed, and the joint, though incapable of complete extension, was, nevertheless, gradually brought to entire flexion; our apprehensions of a permanent stiff knee were therefore removed. At the end of six weeks his general health and strength were so far restored, as to enable him to sit up several hours every day, and to try his ability with crutches, and use every means to aid him in the full extension of the limb, the principal of which were the daily use of warm sea-water, affusions, and friction, with camphorated oil and unguent. hydrarg.

The wound has been now healed more than a month, and the crutches are laid aside: the patient is able to walk with a tolerably firm step, and to engage in the lighter parts of his usual occupation.

The favourable termination of this case appears to be mainly attributable to the early reduction of the luxation. Very little effort was required for this purpose, the general muscular prostration favouring the operation; and the evils generally experienced by the resistance of spasm were therefore avoided.

Margate, August 23d, 1825.

III. *Case of unexpected Recovery from Severe Sabre Wounds.* By Matthew Mendes, Esq., Member of the Royal College of Surgeons, and formerly an Assistant-Surgeon on the Bengal Establishment.

When I was doing duty with the second corps of Rohilla cavalry at Saugor, in the centre of India, two of the troopers quarrelled (on February 4th, 1819,) while regaling themselves with their comrades. The individual who received the violent and extensive wounds

which I am about to describe, greatly exasperated one of the party by his frequent ejaculations on a certain subject, which is deemed a great insult by Musselmen. His companion, roused with anger, immediately drew his sabre, and inflicted a wound on the shoulder, which extended across, and completely divided, the spine of the scapula; it measured six inches and a half; — a *second*, behind the ear, which divided the greater portion of the cranium, without piercing the cerebrum; it measured four inches and a half; — a *third* wound on the anterior portion of the cranium, which extended from the left eye upwards inclining to the right, or, in other words, from above the left orbit obliquely upwards across the os frontis to near the right temporal bone; — a *fourth* wound above the temples, which extended from the os frontis across the parietal bone to the os occipitis: this penetrated the cerebrum, and a large quantity was evacuated. When I saw him, I removed nearly a handful. It measured five inches and a half. — Lastly, a *fifth* wound across the ligamentum nuchæ, which was rather small.

The larger arteries were secured, and sutures applied. The only application which was made to the wounds till suppuration commenced, was vinegar and water, with laudanum. He had lost so great a quantity of blood, that farther depletion was rendered unnecessary. He was kept for the first month on the strictest antiphlogistic regimen, particular attention was paid to the state of his bowels, and he was cautioned against the indulgence of the hookah (smoking pipe). On the 2d of March the army took the field, and I proceeded with my regiment to the siege of Asseer Ghur, in the south of India, leaving him in a state of convalescence, under the care of Mr. John Allan, of the 14th Bengal native infantry. On the 20th of the same month, he was discharged perfectly cured.

Islington Terrace, September 13th, 1825.

IV. *Formulæ Medicamentorum in Usum Nosocomii Regalis Puerorum.**

Misturæ.

No. 1. *Mistura Alkalina Anodyna.*

℞ Tincturæ Opii ʒij.
Liquoris Potassæ ʒijss.
Spiritûs Myristici ℥ss.
Aquæ puræ ℥xjss. Misce.
Dosis, à ʒj. ad ʒij. bis terve in die.

* As we may take occasion, from time to time, to report the Diseases of this Institution, we here insert the formulæ for the medicines generally kept in readiness for dispensing.

No. 2. *Mistura Sedativa.*

℞ Magnesiæ Subcarbonatis,
Cretæ Præparatæ,
Pulv. Acaciæ, āā ʒij.
Spiritûs Ammoniæ Aromat. ʒjss.
Tinct. Assafœtidæ ʒiij.
Syrup. Papaveris ℥ss.
Aquæ distillatæ 0j. Misce.
Dosis, à ʒj. ad ℥ss. 3tiis, vel 4tis, vel 6tis horis.
Interdum adde
Tinct. Catechu, &c. &c.

No. 3. *Mistura Aperiens.*

℞ Magnesiæ Sulphatis ℥v.
——— Subcarbonatis ʒiijss.
Aquæ distillatæ 0ij.
Spiritûs Cinnamomi,
——— Anisi, āā ʒij.
Fiat mistura. Dosis, à ʒj. ad ℥ij.

No. 4. *Mistura Bechica.*

℞ Pulveris Tragacanthæ compos. ʒij.
Aquæ distillatæ ℥xij.
Syrupi simplicis ʒvj. Misce.
Interdum adde,
vel Nitratis Potassæ ℈iv.
— Tincturæ Opii ♏xl.
— ——— Hyoscyami ʒj.
— ——— Camphoræ comp. ℥ss.
— Oxymellis Scillæ ʒvj. vel alium medicamentum idoneum.

No. 5. *Mistura Carminativa.*

℞ Magnesiæ Sulphatis ℥jss.
——— Carbonatis ʒijss.
Tincturæ Cardamomi comp. ʒjss.
——— Castorei ♏xl.
Olei Anisi ♏x.
Aquæ Anethi ℥xij.
—— puræ ℥viij. Misce.
Dosis, à ʒij. ad ℥ss. 4tis vel 6tis horis.

No. 6. *Mistura Diaphoretica.*

℞ Liquoris Ammoniæ Acetatis ℥iv.
Vini Antimonii Tartarizati ℥ss.
—— Ipecacuanhæ ʒij.
Syrupi Papaveris ℥ss.
Aquæ distillatæ ℥xx. Misce.
Dosis, à ʒj. ad ℥j. 3tis, 4tis, vel 6tis horis.
Interdum adde
vel Spiritum Ætheris Nitrici.
— Tincturam Opii.

No. 7. *Mistura Diaphoretica Anodyna.*

℞ Liquoris Ammoniæ Acetatis ℥iv.
Vini Antimonii Tartarizati,
—— Ipecacuanhæ, āā ʒij.
Spiritûs Ætheris Nitrici ℥ss.
Syrupi Papaveris ℥j.
Extracti Conii gr. xiv.
Aquæ distillatæ ℥xij. Misce.
Dosis, à ʒj. ad ℥ss. 4tis vel 6tis horis.

No. 8. *Mistura Febrifuga.*

℞ Misturæ Camphoræ ℥xxiij.
Antimonii Tartarizati gr. iij.
Potassæ Nitratis ʒvj.
Spiritûs Ætheris Nitrici ℥ss.
Syrupi Limonum ℥ss. Misce.
Dosis, à ʒj. ad ℥ss.
Interdum adde,
vel Vinum Ipecacuanhæ,
— Tincturam Digitalis,
— ——— Opii,
— Syrupum Papaveris.

No. 9. *Mistura Tonica.*

℞ Infusi Cascarillæ ℔ij.
Acidi Sulphurici Aromat. ʒij. Misce.
Dosis, à cochlear. ij. parv. ad cochl. iij. magna bis die.

No. 10. *Gargarisma commune.*

℞ Aquæ puræ ℥xxij.
Sub-boracis Sodæ ʒx.
Tinct. Catechu ℥j.
—— Capsici Annui ʒij.
Mellis Rosæ ℥jss. Misce.
Interdum adde, loco Boracis Sodæ et Tinct. Catechu, Acidum Muriaticum, vel Acidum Sulphuricum.

PULVERES.

No. 11. *Pulvis Aperiens.*

℞ Pulveris Jalapæ,
Submuriatis Hydrargyri, āā ℥j.
Pulveris Zingiberis ʒij. Misce.
Dosis, à gr. iv. ad gr. xvj.

No. 12. *Pulvis Catharticus.*

℞ Submuriatis Hydrargyri,
Pulveris Cambogiæ,
——— Jalapæ,
——— Rhei,
——— Cinnamomi, āā ʒij. Misce.
Dosis, à gr. v. ad ℈j.

No. 13. *Pulvis Calumbæ Compositus.*

℞ Pulveris Calumbæ ʒj.
——— Rhei ʒss.
Sodæ Subcarbonatis ziijss. Misce.
Dosis, à gr. vj. ad ʒss. bis de die.

No. 14. *Pulvis Calomelanos cum Digitale.*

℞ Hydrargyri Submuriatis,
Sacchari albi, āā ʒj.
Pulveris Digitalis ʒss. Misce.
Dosis, à gr. j. ad gr. v.

No. 15. *Pulvis Cinchonæ cum Soda.*

℞ Pulveris Cinchonæ,
Sodæ Subcarbonatis, āā partes æquales.
Dosis, à gr. v. ad ℈ss. bis terve in die.

No. 16. *Pulvis Ipecacuanhæ cum Calomelane.*

℞ Hydrargyri Submuriatis ʒj.
Pulveris Ipecacuanhæ ziij.
——— Cinnamomi ʒss.
Sacchari albi ʒjss. M.
Dosis, à gr. ij. ad gr. v.

No. 17. *Pulvis Lientericus.*

℞ Pulveris Tragacanth. comp.
——— Rhei, āā ziij.
——— Ipecacuanhæ comp. ʒj.
Hydrargyri cum Creta ʒj. Misce.
Dosis, à gr. v. ad ʒss. 3tis, 4tis, vel 6tis horis.
Interdum adde
Extract. Catechu, &c.

No. 18. *Pulvis Rhei Compositus.*

℞ Pulveris Rhei ziijss.
Hydrargyri cum Creta ʒj.
Potassæ Subcarbon. ʒjss.
Pulv. Cinnamomi ʒss. Misce.
Dosis, à gr. v. ad ℈j. bis vel ter die.

No. 19. *Pulvis Sodæ Compositus.*

℞ Sodæ Subcarbon. exsiccat. ʒvj.
Hydrargyri Submuriatis ʒj.
Pulv. Cretæ comp. ʒj. Misce.
Dosis, à gr. v. ad ℈j.

No. 20. *Pulvis Tonicus.*

℞ Ferri Sulphatis exsiccati ziij.
Potassæ Sulphatis ʒij.
Pulveris Cascarillæ ʒiijss. Misce.
Dosis, à gr. iij. ad gr. x. bis terve in die.

COLLYRIA.

No. 21. *Collyrium Astringens.*

℞ Vini Opii ʒij.
Zinci Sulphatis ϑss.
Aquæ Rosarum,
—— puræ, āā ℥vj. Misce.

No. 22. *Collyrium Antiphlogisticum.*

℞ Liquoris Plumbi Subacetatis ℥ss.
Aquæ Rosarum ℥ij.
—— distillatæ ℔ss.
Misce aqua tepida, partibus æqualibus, tempore utendo.

LOTIONES.

No. 23. *Lotio Antiphlogistica.*

℞ Liquoris Plumbi Subacetatis ʒvj.
——— Ammoniæ Acetatis ℥iv.
Aquæ puræ ℔ij. Misce.

No. 24. *Lotio Evaporans Astringens.*

℞ Ammoniæ Muriatis ʒij.
Liquoris Ammoniæ Acet. ℥iij.
Aquæ puræ ℥xij. Misce.

No. 25. *Lotio Flava.*

℞ Hydrargyri Oxymuriatis gr. xv.
Liquoris Calcis ℔j. Misce.

No. 26. *Lotio Oleosa.*

℞ Liquoris Calcis,
Olei Olivæ, āā partes æquales.

No. 27. *Lotio Nitrico-Muriatica.*

℞ Acidi Nitrici ʒss.
Aquæ puræ ℥iv. vel ℥vj. Misce.
Deinde adde
Acidi Muriatici ʒss.

UNGUENTA.

No. 28. *Unguentum Opiatum.*

℞ Pulveris Opii ʒj.
Unguenti Cetacei ℥iij. Contunde gradatim.

No. 29. *Unguentum pro Porrigine.*

℞ Unguentum Picis,
———— Hydrarg. Nitrici mitioris,
———— Cetacei, āā partibus æqualibus. Misce.

PART III.

COLLECTION OF MEDICAL FACTS AND OBSERVATIONS.

Section I. — British.

Asthma, singular Variety of.

In some parts of Hindostan a singular affection, which may be denominated a paroxysm of spasmodic asthma, is very common among certain classes of the native inhabitants, when subjected to the sudden deprivation of an habitual portion of *opium*, as when confined in jails, &c.

Under these circumstances, the patient is seized with extreme breathlessness, and all the other symptoms of an asthmatic paroxysm, and to such a degree, that if not relieved by the timely exhibition of a sufficient quantity of *opium*, the disease proves fatal in the course of a few hours. — Henderson, *in Edin. Med. Journ., July, p.* 51.

*On the Croton Oil.** By Mr. Insp. Tegart.

Early in 1821, which was soon after the croton oil became known in England as an active purgative, Mr. Tegart, Inspector of Military Hospitals, took with him to the West Indies, whither he was proceeding as principal medical officer, a considerable supply of that article.

It was the first taken to that part of the world, and being immediately distributed by Mr. Tegart amongst the medical officers of the army under his superintendence, was soon exhausted, so that a fresh supply became necessary. This was speedily obtained from England, and being distributed in the same manner, the valuable properties of this oil soon became known throughout the greater part of our West India settlements; and even reached the ears of Dr. Lefort, chief of the French medical staff in that quarter, who, in consequence, applied for and received from Mr. Tegart a small quantity of that in his possession.†

From the medical officers of the army, four practitioners in private life, and from Dr. Lefort, Mr. Tegart, in due time, received communications; confirming fully, as he states, the favourable opinion he had himself been led to form of the efficacy of this medicine in tropical complaints.

* Extracted from a communication addressed by Mr. Tegart to Mr. Short, of Ratcliff Highway, by whom the croton oil was introduced into this country. This communication (dated London, May 22, 1825,) is given at length in the London Medical Journal for August, p. 105.

† Dr. Lefort, it appears, was so well satisfied with the result of his first trials, that he immediately sent to England for a large supply of the oil.

As a purgative, he says, ' it has never disappointed my views, when exhibited in proper time ;' * and I have known it act powerfully in many cases, when calomel, scammony, gamboge, and other drastic purges, had been employed in vain.

But it is not as a purgative alone that this oil has been found useful; for it has been successfully employed, both in military hospitals and in private life, in all cases of acute disease requiring depletion, either by the alimentary canal, the kidneys, or the skin.

Thus, dissolved in spirits of wine, and properly diluted, so as to be given to the extent of about half a drop every three or four hours, it keeps the bowels open, increases the urinary discharge, and relaxes the skin.

In apoplexy, and in coup de soleil, its good effects are stated to be very marked — in the former disease, says Mr. T., I have known a patient, who was insensible and incapable of swallowing, purged and relieved in one hour, by merely putting one drop of the oil upon his tongue.

In yellow fever, he says, I know of no remedy which has done, or is likely to do, so much good; for two or three drops applied to the tongue will soon find their way to the stomach, and at once relieve the incessant vomiting and obstinate constipation which so generally attend this disease — and this, too, at a time when no other remedy can be usefully exhibited.

In chronic affections of the viscera, also, it has been advantageously employed, and has acted powerfully as a hydrogogue in dropsical affections of the chest and abdomen. In a case of tic doloureux, also, Mr. T. adds, I witnessed a cure affected by it, when given with the intention of removing the torpor of the bowels which usually attends that disease.

In fine, the smallness of the dose, the facility with which it may be administered, and the certainty, energy, and rapidity of its action, all combine to render it a medicine of inestimable value in those climates, where disease is so frequent, and where delay is death.

The dose generally employed by Mr. Tegart was *two drops*, laid upon the tongue. Exhibited in this manner, however, it excites great heat and irritation in the fauces, which he thinks of comparatively little importance.

To prevent this effect, Dr. Lefort proposed that the oil should be exhibited in the form of pills; but the constant and unvaried success which Mr. T. had met with in dropping it on the tongue, rendered him, he says, unwilling to adopt this method. As, however, it sometimes creates nausea and sickness when applied to the tongue, he recommends it to be rubbed down with mucilage, and given in a little peppermint-water, when the stomach is in an irritable state.

In conclusion, Mr. Tegart recommends that *glass-stoppers* should

* *In proper time*, ' for I have known some cases, and heard of many, in which it failed to operate,' says Mr. Tegart, in consequence, as he is inclined to think, of gangrene having taken place from too long delay.

always be made use of with the phials containing this oil, instead of *corks*, as the latter, he states, are frequently found to be in a decayed state, probably from the action of the oil upon them.

On the Healing of extensive Sores.—Cases, &c.

The healing of extensive sores, such as frequently occur from scalds and burns, is generally a subject of much embarassment to the surgeon, and of much distress and inconvenience to the patient. This is particularly the case when such injuries are inflicted upon the trunk of the body, for there *pressure* cannot be applied with the same ease or advantage that it can on the extremities. Any facts or observations, therefore, calculated to assist us in the treatment of sores such as those alluded to, are deserving of attention, and as such we give insertion to the following *cases:* *

Case 1. — A child, aged about seven, had a sore on its back as large as a man's hand. This sore, which had arisen from a burn, was situated just below the right scapula, and had remained nearly stationary for about two years — the surface was uneven, with soft morbid granulations, throwing out much pus, and bleeding at the slightest touch.

During these two years various *unctuous* applications had been unsuccessfully employed; a different method of treatment was therefore now determined upon. The edges of the sore were accordingly touched with the *liquor plumbi acetatis*, by means of a camel-hair brush; and the whole surface of the sore was then covered over with *wheaten flour*, so as to form an artificial scab. The application of the liquor plumbi to the edges was daily renewed; and some portions of the scab were daily broken down, so as to permit the discharge of matter, and fresh flour applied where necessary — by these means a complete cure was obtained in the space of a month.

Case 2. — A girl, aged about twelve, was so severely burned on the neck and back, from her clothes catching fire, that her death was at first expected. She rallied, however, and at length an extensive slough was thrown off from the parts — but in a little time the discharge from the sore became so considerable, the granulations so redundant, and the constitutional disorder so great, that fears again were entertained for her life.

Under these circumstances, the *liquor plumbi acetatis* and the *flour* (employed precisely as in the former case) were had recourse to, and were found equally effectual in promoting the recovery of the patient.

Case 3. — A boy, aged about fourteen, had his side severely burned, from a squib taking fire in his pocket, and the consequence was the separation, in due time, of a considerable slough.

After this had taken place, the *liquor plumbi* and the *flour* were applied to the sore, in the same manner as in the preceding cases; and with effects so marked, as to furnish, we are assured, the most

* By Mr. Bush, of Frome, in Lon. Med. Journal, Sept. p. 195.

satisfactory evidence of the superior efficacy of this mode of treatment.

We have only to add, that *chalk* appears to have been sometimes employed by Mr. Bush instead of *flour;* and there are, no doubt, many other dry powders calculated to produce a similar effect.

Diseased Kidney, with Symptoms only of Hepatic Disease.— Case, &c.

There is no viscus in the body, perhaps, to which disease is erroneously attributed in the present day, so frequently as it is to the *liver.* This is often done on very slight grounds, from ignorance, indolence, or fashion; but sometimes, it must be confessed, upon grounds sufficiently strong to excuse, if not to justify, the mistake. But it sometimes happens that some adjacent viscus is the organ chiefly affected; whilst all the symptoms, *negative* as well as *positive,* point to the liver as the seat of disease. Of such cases, the following may be esteemed a very interesting example; for the subject of it seems during life not to have exhibited any symptom of disease in the *urinary* organs, one of which, however, was extensively diseased — whilst he did exhibit the strongest symptoms of extensive disease in the *liver,* which comparatively was but little affected, and that, too, probably only in consequence of its connexion with the *kidney,* the other organ alluded to.*

Case. † — A tumefaction in the right hypochondrium, and a sudden depression of strength and activity, were the first indications of disease in a healthy boy, three years and nine months old.

These symptoms gradually increased, until the body was perfectly extenuated, and the abdomen enlarged to a great size, as in a case of ascites. No material pain, however, or irritation was felt throughout, but what arose from the bulk of the tumour; the boundaries of which could be plainly traced (from the right hypochondrium into the opposite side of the abdomen), of a thickened and indurated feel, while the centre was elevated and elastic, as if it contained a fluid. This boy died in twenty-two weeks from the commencement of his illness; during which the *thoracic, abdominal,* and *urinary* functions were all regularly discharged; the excretions of the bowels only appearing occasionally deficient in bile.

The appearances on dissection were as follows: —

Abdomen. — A large oval body, extending from the diaphragm into the pelvis; filling the whole of the right, and encroaching into the left side, where it had pressed the whole of the small intestines into a very narrow space; the omentum being, at the same time, nearly obliterated by absorption. This large body was the *right* KIDNEY; converted into a light-coloured pulpy substance;

* The absence, also, of pulmonic symptoms in this case, with extensive pulmonic disease existing at the same time, must not entirely escape notice; though it would not be proper to dwell upon it at present for reasons sufficiently obvious.

† From the Lon. Med. Journ., September, p. 179; communicated by Mr. Tripe, surgeon, Devonport.

weighing nine pounds troy; and measuring, in its greatest circumference, twenty-five inches, and in its smallest twenty inches, and a quarter. Its proper coat was in every part perfect, but increased in density.

The *liver* was flaccid, reduced in size, and had a flattened tumour, in substance like the diseased kidney, upon its anterior surface. The gall-bladder was nearly empty. The other abdominal viscera were of a healthy character.

Thorax. — The *right* lung was covered by many dark-coloured spongy masses inequally shaped, and attached to the pleura (*costalis?*) by slender connexions — of these the three largest were in size and figure like the heart. In the parenchyma of the lung three flattened tubercles were also found, containing a substance like that in the diseased kidney.

In the *left* lung some appearances of the same kind (as the tubercles) were met with, and two large and perfect hydatids.

Intestinal Calculi — fatal Case of.

(From Edin. Med. Journ., July 1825.)

We are indebted to Mr. Torbet, surgeon, Paisley, for the present case, the particulars of which, and of the examination after death, were transmitted by him to Dr. Andrew Duncan, the well-known Editor of the Edinburgh Medical Journal.

The great weight assigned to the calculi by Mr. Torbet (12½ oz.) at once led Dr. Duncan to suspect that there was something peculiar in their constitution. At his request, therefore, they were forwarded to him at Edinburgh, for the purpose of being examined and compared with other specimens there;* and to him we owe the description of their appearance, structure, &c.

As the original article extends to upwards of eight pages, we have been obliged to condense it a good deal, which has, however, been done without sacrificing any fact or observation of importance, we trust.

Case. — Peter Wawson, aged about twelve years, died near Paisley, March 2d, 1825.

From his earliest years he had been of a delicate habit, and from about the time he could speak was said to have complained of pains in the abdomen, and to have been afflicted with a constant purging. About the age of eight or nine these pains became more severe, the purging still continuing; but no medical advice seems to have been resorted to until he had passed his eleventh year, when we have the following account of his situation: —

He was stunted in growth, and much emaciated — the appetite was bad, thirst great, and purging frequent, by night as well as by day — the stools thin, watery, yellowish or whitish — no general swelling or hardness of the abdomen, but in the right hypochon-

* In the Museum of the University of Edinburgh there is a large collection of intestinal calculi, of which Dr. Monro has given a particular account in his Morbid Anatomy of the Gullet, &c.

drium a perceptible fulness and hardness existed, and this part was described as being at times acutely painful.

The case was treated as an obscure affection of the liver or mesenteric glands, but not regularly, it would appear, for the parents were poor, and lived rather remote from medical aid. The patient, therefore, gradually grew worse; the swelling and hardness in the right hypochondrium increased; he became much distressed by flatulence; frequent vomiting and a burning pain at the pit of the stomach succeeded; and death in a little time after closed the scene.

Examination of the Body. — No general hardness or enlargement of the abdomen; but in the *right* hypochondriac and epigastric regions (exactly in the site of an enlarged liver) a hard unyielding tumour was felt. This tumour, on opening the abdomen, was found to be formed by the ascending and transverse portions of the COLON, filled apparently by one vast *concretion*, about seven inches in length. On further examination, this mass was found to consist of three pieces, articulated, as it were, to each other — the first, $3\frac{6}{8}$ inches long, occupied the ascending part of the gut; the third, $2\frac{2}{8}$ inches in length, lay in the transverse portion; and between these, the second piece, one inch in length, was interposed. Of this middle piece, one of the articulating surfaces (that next the ascending piece) was convex, the other concave; and the contiguous surfaces of the other pieces were moulded in a corresponding manner, concave and convex, so as to form at the bend of the gut a kind of double ball-and-socket joint. At one end, the lower, this mass was $7\frac{5}{8}$ inches in circumference, at the other $5\frac{7}{8}$; and the whole, when removed from the body, weighed $12\frac{1}{2}$ ounces (*avoird. we presume*).

No adhesions existed between the colon and the concretions, which do not appear to have completely filled the cavity of the gut, as a quantity of muco-fœculent fluid found between them, and as the state of the bowels during life sufficiently indicate. Nor were the coats of the colon thickened, nor were any other marks of disease found in the cavity of the abdomen, except an adhesion — for about the space of an inch between the colon and the stomach, and a certain degree of displacement with respect to the liver and small intestines, caused by the presence of the mass we have described.

The omentum was large, and contained a considerable quantity of fat, although the rest of the body was in a very emaciated state.

Description of the Concretions. — 1*st*, *External Appearance.* — Instead of the soft brown surface like *amadou* (or the skin of the new horns of the deer), which the more common varieties present, these calculi resembled *bone* in appearance; so much so, indeed, that the middle piece was at first mistaken by many for an apophysis. On more minute examination, however, the surface was found not to be uniform like bone; and in several places portions of the *coverings of the seeds* of the oat (such as often remain in oatmeal) were found firmly embedded in it, and very little changed from their natural appearance.

2*d*, *Internal Structure.* — On dividing this, *the middle piece*, with a fine saw, the cut surfaces presented the same fibrous appearance as the more common varieties — the *fibres* also were evidently of the same kind,* and constituted a *soft spongy net-work*, filled or mixed with an *earthy* matter. The nucleus consisted (*or seemed to consist*) of these fibres; and the *earthy* matter, though it penetrated to the very centre, occupied chiefly the outer parts, and was arranged concentrically as in urinary calculi, alternating in some measure with the *fibrous*.

3*d*, *Chemical Analysis.* — The specific gravity of the middle piece, when first immersed in water, was 1105, when thoroughly wetted, 1290 — exposed to the fire, a portion of this piece lost by ignition 32 per cent; another portion, from a part apparently the *least* earthy, lost in a similar manner 56 per cent; and a third portion, from the *most* earthy part, lost, under similar circumstances, 24 per cent.

The averaged proportion, therefore, of the *fibrous* and *earthy* matter, was about 37 parts of the former to 63 of the latter.†

The *fibrous* part consisted undoubtedly of the vegetable spiculæ already alluded to, and the *earthy* was ascertained to be phosphate of lime, with a slight trace of ammonia and magnesia.

Obs. — We may now assume it as established, says Dr. Duncan, that the debris of certain articles of *vegetable* food form the basis of these concretions; and we may with almost equal certainty consider the *earthy* constituent as a kind of crystalline deposite from the intestinal fluids. It would appear, from the concentric layers of *vegetable* and *earthy* matter, that this deposite is not at all times equally copious; and it is not improbable that it increases in proportion to the irritation produced in the bowels by the mass itself, for it is comparatively less abundant in *small* concretions, which differ also from the *larger*, as has been observed by Dr. Monro, in not being encrusted with earthy matter.

The proposal of extracting these calculi, he adds, by laying open the abdominal cavity and the colon, receives support from this

* If the oat-seed be denuded of its husk, minute needles or beards, forming a small brush, are seen planted at one of its ends.

These are the *fibres* here alluded to, for the detection of which in calculi of this kind we are indebted to the acuteness of Dr. Wollaston. — *Vide Marcet on Calculous Disorders, p.* 139.

Dr. Duncan seems to us to confound these *needles* or *beards* with portions of the husk or *coverings of the seeds*, or else we must, from his expressions, understand that some of the latter were found embedded in the surface, while the soft spongy net-work of the mass was entirely composed of the former. Perhaps both intimately mingled together exist in every case, although the *beards* alone are specified by Dr. Marcet, to whom Dr. Duncan refers.—Ed.

† Dr. Thomson, of Glasgow, states, that the mean specific gravity of several specimens of calculi of this kind, examined by him at the request of Dr. Monro, was about 1400. This Dr. Duncan is very reasonably inclined to doubt, for Dr. Thomson admits that his specimens contained only about 50 per cent of *earthy* matter, whilst the present specimen contained at least 63, and yet had only a specific gravity of 1290.

circumstance, that the gut and other solids are almost always in a healthy state; and the success with which the operation of gastrotomy has lately been performed in other cases, lead to the conjecture that the excision of intestinal calculi will in no long time be attempted.

Nor should the consideration of *dissolving* these calculi *in situ* be, he thinks, entirely neglected; for the great solubility of the phosphate of lime, of which they are chiefly composed, renders it possible that some impression might be made upon them by a course of mineral acids, taken by the mouth, or injected by the anus.

*Larvæ of Insects in the Human Stomach. — Case, with Remarks.**

Case. — A strong athletic countryman, who had been employed in the hay-harvest towards the end of June, was in the following month attacked with an uneasiness in the stomach; which gradually increased to pain, occasionally severe, together with total loss of appetite, emaciation, and great debility.

For some time the remedies usually administered in cases of indigestion were employed, but without any permanent relief. At length, after several weeks, a large hairy *caterpillar* was ejected from the stomach during a fit of vomiting, and from this time the patient daily improved until he recovered his former health.

Remarks. — From the circumstances of the case, it was impossible to ascertain with precision the nature of the insect to which this *larva* belonged; but the bands of black and brown longitudinally extended, and the long hairs with which it was beset, would induce us to refer it to the numerous tribe of moths (*phalenæ*) or to certain *tipulæ*, termed dragon-flies in this country (Scotland) by the common people.

To whatever species of insect, however, it belonged, it must have lived for several weeks, and grown to its full size, in the stomach of the patient, as the symptoms under which he laboured during this period cannot reasonably be attributed to any other cause than its presence in that organ.

Cases of this kind are occasionally reported, and demand, perhaps, more attention than they have in general received of late years. The subject, however, is involved in much obscurity, from the difficulty of ascertaining the nature of the *larvæ* ejected in most instances; for naturalists have hitherto paid but little attention to the structure and appearance of insects while in this stage of their existence. Some facts, however, upon this point have been ascertained, which shew that *larvæ* of very different kinds may inhabit the human stomach. Thus, Dr. Reeve, of Norwich, in an early volume of the Edin. Med. Journal, mentions a case, in which the *larva* of the common *house-fly* (*musca domestica*) was voided by a girl, after it had been the cause of much distress; and an instance

* Extracted from a paper by Dr. Yule, of Edinburgh, in the Edin. Phil. Journ. for July, p. 72.

is given in the useful and popular work of Kirby and Spence, of several *beetles* (*tenebrio molitor*) having been vomited by a boy. The *larva* of this insect, we may remark, is the *meal-worm* of the country people, now little known from the general custom of using *wheaten* bread, instead of *oatmeal* cakes as formerly.

Prussic Acid—its Effects in Pertussis.—Case, &c.

The following case* may be considered as furnishing a very fair example of what may at times be expected from *prussic acid*, in controlling the distressing symptoms which so frequently attend hooping-cough; for the circumstances under which it was first exhibited, and those which followed its use, its suspension, and its re-employment, sufficiently indicate that it is to it, and to it alone, we ought to attribute the beneficial changes which took place in the state of the little patient.

The circumstances, also, which attended its exhibition in the three other cases, as mentioned in the concluding note, are worthy of consideration; and would justify, we think, its experimental employment, as a measure of precaution, in some public institution, or other favourable situation.

Case. — A girl, aged eight years, of a thin spare habit and very delicate constitution, became affected, about the beginning of last April, with a slight cough, and other symptoms resembling a common cold; which in a few days became much more severe, and were accompanied by fever and an extremely rapid pulse.

Towards the end of April the child had become much emaciated, and the fits of coughing were attended by *hooping*. These fits invariably followed the introduction of any thing into the stomach, and frequently, also, came on without any evident cause — they were most harassing to the patient, producing severe headach, and such languor and debility as almost to bring on fainting. The respiration was extremely difficult, and accompanied by the mucous rattle. A considerable discharge of *mucus* also took place from the lungs, where its temporary accumulation brought on frequent fits of coughing. The bowels were in general regular, and easily moved.

Under these circumstances (May 1st), a mixture containing ten grains of the extract of conium was prescribed;† and was continued (the quantity of the conium being at the same time gradually augmented) until the 12th of the month. From this cause, however, no apparent advantage was derived; on the contrary, the emaciation and debility increased to an alarming extent, the expec-

* Extracted from a communication by Dr. Venables, of Henley, in the last Number of the Lon. Med. Journal, p. 189.

† This mixture was composed of —

Mucilag. Acaciæ, Syrup. Limon. ana ℥j.
Extract. Conii gr. x.
Syrup. Papaver. 3j.

This quantity, given by tea-spoonsful, seems to have been intended for twenty-four hours.

toration became purulent, the febrile irritation greater than before, and every thing portended an unfavourable issue to the case.

Eight minims of *prussic acid* were now (May 12th) added to the mixture, which quantity on the 18th was increased to twenty minims, and so continued until the 21st, when the use of this medicine was suspended.*

At this time the state of the patient had improved, and the fits of coughing, in particular, had become less violent, and less frequent—but the store of prussic acid was expended, and some days elapsing before a fresh supply could be obtained, the symptoms during this interval again became more aggravated.

On the 25th, the use of the prussic acid was resumed — on the 1st June, the quantity in the mixture was increased to half a drachm, the child at the same time improving — on the 4th, the hooping had entirely ceased, and the little patient was able to get up—on the 8th, the expectoration had almost disappeared, and the fits of coughing had become rare and solitary — on the 15th, all symptoms of disease had so entirely subsided, that the use of the medicine was suspended; and on the 25th, the child was pronounced completely convalescent.

Note. — In the same house with this child, and in constant intercourse with it, were three other children; all younger than itself, and previously unaffected with the hooping-cough. It was expected, therefore, that these children would be attacked with the disease, and to each, in consequence, the prussic acid mixture appears to have been given as a measure of precaution — and it is worthy of remark, that though each of these children did, during the progress of the disease in the first, become affected with a cough, widely different in its character and duration from that attendant upon a common cold, yet that none of these coughs were ever accompanied by any *hooping*.

Dr. Venables adds, he is disposed to believe that these three children were affected with genuine hooping-cough of a mitigated form; but whether this mitigation arose from the exhibition of the prussic acid or from some other cause, he does not pretend to determine.

On the Semi-decussation of the Optic Nerves.

In the Medical Repository for January 1824 (p. 79), we noticed the observations of Vicq. D'Azyr and the Wenzels with respect to the *semi-decussation of the optic nerves in man;* and the

* At this time the following pills were prescribed, and directed to be taken three times a-day; but with what precise object, or with what effect, we are not well qualified to say, for these points are not very clearly laid down by Dr. Venables: —

℞ Extract. Gentian. ʒss.
Sulph. Zinci gr. x.
Ipecacuan. gr. vj.
Ext. Colocynth. comp. gr. xij.
Saponis gr. x. Fiat massa, in pil. xviij. divid.

strong corroboration which their statements on this subject had received, from the observations of Treviranus on the *simia aygula.* *

We have now to notice some speculations upon the same subject by Dr. Wollaston, who, without any knowledge, as it would appear, of the observations just alluded to, and by a different path, has arrived, in a manner, at the same conclusions.

'It is now,' says this distinguished philosopher,† 'more than twenty years since I was first affected with a peculiar state of vision, in consequence of violent exercise taken for two or three hours before. I suddenly found that I could see but *half* the face of a man whom I met, and it was the same with respect to every object I looked at — thus in attempting to read the name *Johnson* over a door, I saw only ——*son*, the commencement of the word being wholly obliterated from my view.'

On this occasion the loss of sight was towards the *left*, and was the same whether he looked with the right eye or the left.

The blindness was not so complete as to amount to absolute blackness, but was a shaded darkness without definite outline. The complaint was of short duration, and in about a quarter of an hour might be said to be wholly gone, having receded with a gradual motion from the centre of vision obliquely upwards towards the left. As it was supposed to have arisen from over-fatigue, a cause common to many nervous affections, no return of it was apprehended, and it was suffered to pass away without the use of any remedy, without further explanation, and without any useful inference being drawn from it.

'It is now,' continues Dr. W., 'about fifteen months since a similar affection again occurred in my own person, and without my being able to assign any cause for it, or to connect it with any previous or subsequent indisposition. The blindness, however, on this occasion, was the reverse of the former, being to the *right* of the spot to which the eyes were directed, and was first observed, as before, in looking in the face of a person whom he met, whose *left* eye was now to him invisible.'

The new *punctum cæcum* was situated alike in both eyes, and at an angle of about three degrees from the centre; for when any object was viewed at the distance of about five yards, the point *not seen* was about ten inches distant from the point actually looked at.

On this occasion, the affection, after having lasted with little alteration for about twenty minutes, was removed suddenly and entirely, by the excitement of agreeable news respecting the safe arrival of a friend from a very hazardous enterprise.

Reflecting upon these facts, Dr. Wollaston arrived at certain conclusions, which we shall give nearly in his own words: —

1. Since the corresponding points of the two eyes sympathise in

* From these observations it would appear, that in *man* and in the *simia aygula*, the medullary fibres occupying the exterior side of each optic nerve proceed directly to the eye of the same side; and that the place of union of both nerves presents either a homogeneous tissue, or an interlacing of the fibres from the interior side of each.

† Philosophical Transactions, 1824.

disease, their sympathy is evidently from structure; and not from mere habit of feeling together, as might be inferred if reference were had to the reception of ordinary impressions alone.

2. Any two corresponding points must be supplied with a pair of filaments from the same nerve; and the seat of a disease in which similar parts of both eyes are affected, (*simultaneously* affected?) must be considered as situated at a distance from both eyes, and at some place in the course of the nerves where these filaments are still united; probably in one or other *thalamus* nervorum opticorum.

3. It is plain that the cord which arrives finally at either eye, under the name of optic nerve, must be regarded as consisting of two portions; one from the *right*, the other from the *left* thalamus.

4. According to this supposition, *decussation* will take place only between the adjacent halves (*portions* rather) of the two nerves. Thus, that portion of nerve which proceeds from the *right* thalamus to the *right* side of the *right* eye, passes to its destination without interference; and, in a similar manner, the *left* thalamus will supply the *left* side of the *left* eye with a corresponding portion — while the remaining halves (*portions*) of both nerves, in passing over each to the eye of the opposite side, must intersect each other, and this either with or without intermixture of fibres.

Dr. Wollaston adds, that he has met with other instances of this *half-blindness*, and that he suspects the complaint to be much more frequent than the absence of printed documents on the subject would lead one to suppose.

Salivation from a Dose of Calomel.—Case, &c.

Cases of salivation from comparatively small quantities of mercury are not very rare. The possibility, however, of such an occurrence is, in general, very little attended to in practice, and calomel, in particular, is freely prescribed, without the proper inquiries being made as to peculiarities of constitution. Of this the following is a recent example:* —

A lady at Pembroke Dock took, on the 10th January last, at night, *four grains of calomel and six of jalap*, as prescribed for her by her medical attendant. This was followed in the morning by a purgative draught, and the whole operated, as was expected, on the bowels; nevertheless, complete *salivation* was established on the following day (the 12th); and, on inquiry, it was discovered that this was the *second* time *salivation* had been produced in this individual by a single dose of calomel!

Urinary Calculus — one very large extracted from the Female Bladder, by Dilatation of the Urethra. — Case.

Although women are not so liable as men to the formation of urinary calculi, yet the records of medicine prove that they are by no means exempt from this disease.

Fortunately, however, for them, their urethra is capable of con-

* From Lon. Med. Journ., Sept., p. 253.

siderable dilatation, and stones of some magnitude have, we are assured, been passed through it without any assistance from art. From this circumstance, Douglass was led, about a century ago, to propose the *dilatation* of the female urethra in cases of urinary calculi by means of sponge-tents, so as to render unnecessary the aid of cutting instruments. Of late years this proposal has been revived; but instead of *sponge-tents*, various *metallic dilators* have been invented, and successfully employed by men of character and eminence.

Nevertheless, a good deal of prejudice still exists in the profession against this operation, from an apprehension that incontinence of urine must follow its performance — an opinion which the following case may tend to remove, as the stone extracted is stated to have been of considerable size: —

Case. — Mrs. Watson, aged fifty-eight, had, as she stated, been afflicted with the ordinary symptoms of stone for fourteen years. Of late these symptoms became very severe; and upon examination with a *sound* the presence of a stone in the bladder was detected. This it was determined to attempt the removal of by *dilatation of the urethra*, and some sponge-tents, prepared with *wax*, were accordingly provided.

Two of these were introduced on two successive days, and although no increase of size took place in them, and consequently no dilatation in the urethra, yet considerable pain, and irritation, and swelling were produced in the external parts of generation, and the use of the left leg was lost.

Some tents, prepared with *tallow* instead of *wax*, were in consequence provided; and with these the dilatation of the urethra went on so well, that on the sixth day from commencing their use a pair of common curved lithotomy forceps were introduced through it into the bladder, and a stone, weighing one ounce and thirty-five grains, was extracted, with more ease and less pain than could have been anticipated, as we are told. No unpleasant symptom followed, and the next day even the parts had so far returned to a natural state, that the patient was enabled to retain her urine for several hours without inconvenience. Thrice only after this did it pass away involuntarily, and twenty days after the operation no symptom of disease remained; all pain in the region of the bladder having ceased, and the power of retaining and dicharging her urine at pleasure having been completely restored. — *Edin. Med. Journ., July, p.* 69.

Obs. — Dr. Mackintosh, of Edinburgh, to whom we are indebted for this case, states, that ' the calculus extracted is larger than that extracted by Mr. Green, which is of greater size than that in any well-authenticated case yet published.' It would have been more satisfactory, however, had Dr. M. given us the exact dimensions of his calculus *in inches or parts of an inch*, which he has not done.

The true sizes of the *tents* employed, also, and of the *forceps*, should have been given in the same manner, and the weight of the

calculus stated with reference to some particular standard, viz. *troy* or *avoirdupois*.

The operation appears to have been performed in the month of May last, although even this is not quite certain, from the careless manner in which the original article is drawn up.

Section II. — Foreign.

I. *Prurigo Formicans.*

In the Nouvelle Bibliothéque Médicale for May, there is a paper by M. Alibert upon this troublesome malady. He has described this malady with great vividness, and has instanced the expressions of those affected with it, in illustration of the sufferings it inflicts. We do not, however, find any thing materially different from Dr. Bateman's account of the same disease, so far as regards the description of the prurigo itself. We ought not, perhaps, to lay any serious charge against French authors for the manner in which they speak of cause and effect in disease, as much may be owing to the different manner in which the profession in England and France are accustomed to look upon the same phenomena. Yet it has certainly often appeared to us, that medical men of the latter country are very little tenacious of accuracy in this respect. We have been led to remark this on the present occasion, from M. Alibert speaking of the effects of prurigo formicans, when, from the cases which he quotes, he evidently intends the effect of their retrocession. This is far from being an unimportant distinction, because, in the one case, we should be justified in doing all in our power to overcome it; in the other, it is really essential that care be taken, that it be not (as it is termed by old nurses, who speak on such occasions more truly than perhaps themselves are aware,) driven inwards. The French practice is, indeed, correct, but this inaccuracy of expression has led M. Alibert, as it appears to us, to inaccurate reasoning in another part of his paper. For, speaking of the causes of the disease, and of those who are most liable to it, he states, that children who have 'not experienced those mucous exudations of the hairy scalp, which are certainly to be regarded as true depurations of nature, are particularly obnoxious to prurigo:' and he quotes a case in illustration of the assertion. Now we have here a dilemma: either the fact is as our author has stated it in France (for in England we are certain that it is not so), and then neither nurses nor parents are justified in recurring to curative or preventive means of the former maladies, and children should be encouraged in those filthy habits which most frequently produce, or at least encourage them, or M. Alibert has erred in his facts, and we may then suppose, not that children who have not had the tinea capitis, or any other of the mucous exudations, as M. Alibert terms them, are most liable to prurigo, but that children who have these diseases are not, at the same time, subjected to prurigo, which would be nothing more than an example of John

Hunter's doctrine, that two different diseased actions cannot proceed in the system at the same time; and this doctrine, although more exceptions exist than its author was acquainted with, is, and long has been, a principal foundation of medical practice. We have said that we know M. Alibert's assertion not to be true in England. No little experience among children, and especially in those cutaneous diseases by which they are affected, has taught us that ninety-nine times out of a hundred they are, as M. Alibert asserts, 'true depurations;' but they are so only because children are indulged in improper food, and encouraged in improper habits. Really healthy children—children who have been properly fed, who have for the first many months been supported at the breast, and to whom this has been permitted only at stated periods,—who have been kept in proper exercise, and when solid food has been allowed have yet been carefully watched, that neither so much nor of such a quality shall have been given, as in any way depresses their spirits, or deranges their bowels, stand in no need of these depurating eruptions. We have observed that some of the German physicians regard these cutaneous affections in a similar light with the French, and which we cannot but consider as erroneous. Our view of it, however, is far from favouring the employment of external applications, excepting in particular circumstances, since generally we believe, that if cleanliness be observed, and the healthy action of the primæ viæ, which are always faulty, be corrected, no other means need be recurred to. Under the advocacy of Dr. Bateman, the application of stimulating lotions has been much practised; and where the scalp has been affected, washing with soft soap is advised. It has, however, appeared to us, that this practice has not unfrequently produced the eruption, and when previously present has greatly aggravated it. Our present plan of treating porriginous diseases, when recent (and we have seldom found it to fail), is strict attention to the bowels of the child and to his diet; but instead of suffering the scalp to be washed with soap, this is entirely prohibited, and cleanliness maintained by washing four or five times a day with warm water alone. The eruption after every washing is rubbed with some bland oil, of which the principal use, perhaps, is the satisfaction of the friends. To return, however, to M. Alibert's paper. M. Alibert has divided it, and, as it seems to us, with considerable advantage, into two species only, prurigo formicans and prurigo pedicularis. His present paper is confined to the former, and notices its occurrence at different ages, its proneness to attack particular parts of the body, as the pudenda, &c., and the general symptoms of deranged health by which it is accompanied. Among some of the striking symptoms of prurigo, he mentions the swelling and hardening of the muscles, so that they become clearly delineated on the upper and lower limbs. 'We have seen the legs of these patients become stiffened by a kind of muscular contraction, so as not to be able to execute progression, and this affection ended in complete loss of power.' He has given an interesting case of retrocedent prurigo, followed by

general anasarca, which disappeared when the prurigo returned. This is one of the cases in which he refers to prurigo as its cause, and says that it shews itself principally in the lymphatic system. We know that there are physicians even in this country who would maintain that this is a correct mode of speaking, and would call it prurigo, as M. Alibert does, affecting the lymphatics, instead of naming the one prurigo, and the other simple dropsy. If, however, these gentlemen are right, we may easily prove that there is but one disease in the world, but that it takes different shapes, and is a very 'Proteus for advantages.' In one disease such an opinion was long held and acted upon, we mean in gout, and how fatally, the records of that malady attest; but we still hope that so unphilosophical a mode of considering disease will never become prevalent in Great Britain. M. Alibert has also related the result of examination in three cases after death. They do not, however, throw the least light upon the disease, nor was any other circumstance than serous effusion common to them all, and this must be considered rather as the consequence than the cause. Neither is M. Alibert able to give any information respecting its treatment. His propositions are all unproved; and his practice, so far as we can collect from the general terms in which he has expressed himself, are founded upon the same principles which govern the profession in England, viz. attention to the state of the digestive organs, and the application of external remedies, stimulating or the contrary, as circumstances may seem to demand or justify.

II. *Treatment of Cataract, with Cases.*

M. Louis Francis Gondret has published a paper in the 'Journal de Physiologie' upon the treatment of cataract, in which he advocates the employment of curative means, as equally called for as in amaurosis, or other diseases of local plethora, independent of the operation. We consider his remarks as well worthy the attention of the profession. M. Gondret states, that he was led to the consideration of the subject from having observed a remarkable improvement in some cases of amaurosis and cataract, existing simultaneously with epilepsy, the cure of which he had principally in view. It does not appear more difficult to modify the material cause of the one disease than that of the other. He found no difficulty in putting his opinions to the test in cases of amaurosis, as this disease is so frequently left to itself; cases of cataract, however, less frequently presented themselves.

That he might not commit any mistake, he had always the opinions of other professional men, well capable of distinguishing the nature of the cases. We proceed to give a brief analysis of them:—

First.—M. Pepin, aged fifty-nine. Suffering from violent pains in the head. Cataract of four years' duration in the left eye, and vision quite lost. The right eye presented a greyish point in the centre of the crystalline, a characteristic mark of an incipient cataract; the patient unable to read for any length of time without

fatigue; often his vision is totally lost; the lines (*filamens*) which he had perceived for nine years with the right eye are increased in number. The pupils are moderately dilated, and little moveable.

Curative means,—cauterisation in the fore part of the head, 4th April, 1822.

May 22d. — The cloud which appeared to cover the shade of the crystalline is less apparent; the vision is stronger; the lines remain. An electrical current, produced by a voltaic curve of three plates, and directed against the right superciliary nerve and the right eye, rendered the sight clearer for an instant, but the nerves received a shock that endured till the next day.

June 1st.—The right eye is quite clear; the sight becomes much stronger.

July 22d. — The cloud of the right crystalline has re-appeared; vision is slightly obscured. The issue made on the forehead is very superficial, and not more than three or four lines broad; it was enlarged and rendered deeper by the application of an ammoniacal paste.

August 1822. — No opacity in the crystalline of the right eye; sight strong; the white colour which the cataract of the left eye presented has taken a greyish tint.

June 1823. — The right eye perfectly recovered. The crystalline of the left eye becomes more and more of a dark grey; the vision of this eye confined to the perception of light.

April 1825. — The cure of the right eye has been permanent. The cataract in the left eye is scarcely visible, but the sight has not improved.

Case 2d. — Jean Jacques Henriet, aged seventy. Two cataracts. Vision for a long time lost in the left eye, where the disease is complete. The right eye, in which the cataract is perfectly evident, has been sensibly weakened for many months.

October 1822. — Actual cautery employed. The wound kept open four months. Electricity employed in the same way as in the last case. Attention paid to the bowels. The opacity of the right crystalline gradually disappeared. Vision entirely restored. There was some improvement in the left eye, but it did not continue.

April 1825. — The vision of the right eye has continued good for two years. He is now seventy-two.

There are seven other cases of the same kind, and all more or less corroborative of the propriety of M. Gondret's suggestions. We have, however, we conceive, extracted sufficient to make our readers acquainted with his curative method, which, indeed, varies nothing from the common treatment of local chronic maladies, excepting in the application of galvanism. In this country this fluid is seldom medicinally employed; nor, from our own experience and the information we have received from others, does it appear entitled to much confidence. The probability of curing cataract of course depends upon the greater or less progress that the disease may have made.

III. *Upon the Employment of Caustic to re-establish the Course of the Tears into the Nasal Canal.*

Towards the middle of 1823, a girl, thirteen years of age, was brought to M. Deslandes, who had a lachrymal tumour in the right eye, and an incipient affection of the same kind in the left. From five years of age, and in consequence of small-pox, she had been tormented with a perpetual flow of tears (*larmoiement*), and subject to frequent acute coryzas, accompanied with intumescence of the nose and of the neighbouring parts. The lachrymal tumour of the right eye had been visible for five years; its size, especially in the morning, was very considerable, and the flow of tears so much increased, that she was compelled to abandon her employment. Different means were used to remove this complaint unsuccessfully, and at length a canula was passed through the nasal canal; but this was succeeded by inflammation, &c., so great that the canula was obliged to be withdrawn. After watching a favourable opportunity, till the girl's health appeared perfectly established, M. Deslandes determined upon applying caustic for opening a passage into the nose. For this purpose, he employed an instrument, having a flat handle an inch and a half long, and a leg of platina an inch long, and united to the handle at a right angle. This leg was round, of the size of a crow-quill, and presented two opposite furrows to receive the caustic; these were furnished with asperities proper for retaining it, and it was only necessary to melt the caustic to place it in the grooves. Care was taken that the caustic should not pass beyond the surface of the instrument. To avoid cauterising the lachrymal sac, a passage was first made by an instrument precisely similar, but unarmed, and the caustic was only introduced into the two inferior thirds of the grooves of the other. This latter penetrated without difficulty into the nose, but was withdrawn almost immediately on account of a very abundant flow of moisture that passed through the superior orifice and filled the lachrymal sac, and which, holding the caustic probably in solution, made M. Deslandes fear for the safety of the sac itself. The instrument, when withdrawn, was replaced by a small bougie of wax. A slight erysipelatous inflammation succeeded the operation, but in five days the cicatrisation was complete, and the flow of tears had disappeared. There remained only, at the internal angle of the eye, a little swelling and hardness. For fifteen days it remained in the same state; but at this time inflammation supervened, an abscess formed, the cicatrix burst, and permitted a white slough to escape, which was evidently what had been formed during the operation by the caustic. Immediately after, the part was restored to the same state as before the formation of the abscess. When M. Deslandes wrote, the 'larmoiement' had entirely ceased in the side operated upon, while it continued very abundant on the other: in the latter the nostril is always dry, but in the former it is constantly moist. The lachrymal tumour has, by degrees, re-appeared, and in the morning is of the same size as before the operation. When the tumour is pressed, pus issues

from the lachrymal puncta. M. Deslandes is inclined to think that the cure would have been speedy and complete, if he had furnished the slough a ready means of escaping; as it is, the operation has, for the present, succeeded in re-establishing a passage for the tears into the nasal canal.

IV. *Case of Scirrhus of a Portion of the Intestinum Jejunum.* By M. Sorlin, M.D., &c.

A man, aged forty-nine, of a nervous temperament and soft habit of body, enfeebled by labour and anxiety, came under the care of M. Sorlin. He had been, from his youth, subject occasionally to indigestions and vomitings. These became more frequent in 1822, and were accompanied with great thirst, which the patient generally assuaged by beer. A bitter elixir, exhibited about this time, afforded some relief, but this was of short duration. About the beginning of January 1823, additional symptoms manifested themselves, and became more and more frequent. The vomitings were now almost constant; the motions infrequent, unless when procured by means of repeated lavements. The oleum ricini, which was given twice or thrice, increased the vomiting, without procuring stools. Purgative lavements succeeded in calming the retching only whilst they continued to operate upon the bowels. Leeches, emollient cataplasms, blistering of the epigastric region, &c. had no effect, and the patient died.

Dissection.—Upon opening the abdomen, the stomach was found of twice its usual size. It was full of gas, and of a brownish fluid matter. The upper part of the jejunum was dilated, as well as the stomach, and presented, about its middle, a scirrhous ring, of about half an inch in thickness in every direction, with several points of ulceration at its external surface. This scirrhous portion was perforated at its centre, and the calibre of the opening was not larger than that of a common quill. The portion of the small intestine beneath the scirrhus was as much contracted as the superior portion was dilated. — *Journ. Génér. de Méd., Mai* 1825.

PART IV.

INTELLIGENCE RELATING TO MEDICINE AND THE MEDICAL SCIENCES,

FOREIGN AND DOMESTIC.

I. *On Egyptian Mummies and the Art of Embalming.**

Having been favoured by Dr. Granville's curious and interesting paper upon Egyptian Mummies, we take occasion to place some account of it before our readers.

* An Essay on Egyptian Mummies; with Observations on the Art of Embalming among the ancient Egyptians. By A. B. Granville, M.D., F.R.S. (Read before the Royal Society, April 14th, 1825.)

Sir Archibald Edmonstone having presented Dr. G. with a mummy, which he had purchased at Gournou, on the 24th of March, 1819, from one of the inhabitants of the sepulchral excavations on the side of the mountain, at the back of which are the celebrated tombs of the kings of Thebes, Dr. Granville proceeded to a minute examination of it which we shall give in nearly his own words.

When the mummy came into his possession, it was ' covered with cerecloth and bandages most skilfully arranged, and applied with a neatness and precision, that would baffle even the imitative power of the most adroit surgeon of the present day. There is no species of bandage which ancient or modern surgery has devised, described, or employed, that did not appear to have been used in securing the surface of the mummy from external air; and these are repeated so many times, that on weighing the whole mass of them after their removal, they were found to weigh twenty-eight pounds avoirdupois.

' In unravelling these complicated envelopes in the presence of two or three medical friends, and Sir Archibald himself, we could not but be struck with the precision with which the circular, the spiral, the uniting, the retaining, the expellent, and the creeping roller, had been applied. The neatness of the turns, and the judicious selection of their size, length, and forms, in order to adapt them to the different parts intended to be protected, and calculated so as to give to the whole an air of smoothness without a wrinkle, or the least appearance of slackness from the varying form of the limbs, were really surprising. We here met with the *couvrechef*, the scapularium, the 18-tailed bandage, the T bandage, as well as the *linteum scissum*, and *capistrum*. Nor were we less pleased to find the many pieces of neatly folded linen, placed like compresses, in all those parts of the body, which, presenting natural depressions, or hollows, would, unless thus filled up, have proved as many obstacles to the firm and steady application of the bandages. Each limb, nay, each finger and toe, had a separate bandage next to the skin. These observations respecting the art of bandaging among the ancient inhabitants of Egypt, as displayed in their best class of mummies, have not, as far as I recollect, been made before to the extent here alluded to, and will throw a new light on the history of that branch of practical surgery.

' The principal rollers appeared to be made of a very compact, yet elastic linen, some of them from four to five yards in length, without any stitch or seam in any part of them.' Cotton cloth seemed also to have been used for some of the bandages.

Having removed the various envelopes of the mummy, Dr. G. directed his attention to its anatomical condition and state of preservation.

' It was at once ascertained that the subject was a female, and that no ventral incision, as described by Herodotus, had been practised to extract the viscera.

' The external parts of generation, on which not a vestige of hair was found, had been brought in close contact, and notwithstanding their shrivelled condition, were readily recognised. The mammæ

must have been large during life, for they were found to extend as low down as the seventh rib, against which they are closely pressed by the arms passing over them. But on lifting the latter, the breasts themselves were raised with little exertion. Of these organs there remain, of course, little more than the integuments, which are of considerable thickness, and exhibit the nipples with their surrounding areolæ in a perfectly distinct manner.

'The head is closely shaved; the short hair, which is of a brown colour, can be felt on passing the hand over it; and on close inspection, may be distinctly seen. Externally the cranium appears not to have been disturbed in any way.

'Numerous and deep wrinkles appeared on the integuments of the abdomen, denoting that, before death, this part of the body must have had very considerable dimensions; a conjecture, the correctness of which subsequent inquiries have completely demonstrated.'

The dimensions of the mummy were next ascertained by Dr. Granville; and he found, upon comparing them with those given of the Venus de Medicis by Winkelman and Camper, 'that the difference between them is so slight, as not to deserve notice.' This is an important fact with relation to recent speculations as to the particular race to which the ancient Egyptians belonged.

Dr. G. next shews, by means of comparative measurements, more particularly of the negro female pelvis and head, and of the same parts of his mummy, that the latter possesses not a single character of the Ethiopian race. With respect to the form of its pelvis, he remarks, 'that it comes nearer the *beau idéal* of the Caucassian structure, than does that of women of Europe in general, and equals, in depth, amplitude, and rotundity of outlines, the Circassian form.'—'What has just been observed,' he proceeds to state, 'of the skeleton generally, and of the pelvis in particular, applies with equal force to the form and dimensions of the head. So far from having any trait of Ethiopian character in it, this part of the mummy exhibits a formation in no way different from the European.' Comparing it with the skull of the Georgian female represented in the '*Decas tertia Craniorum*' of Blumenbach, the likeness is said by Dr. G. to be exact. 'In both, the facial angle approaches nearly to a right angle; and the configuration of the vertex and occiput in each is such, as must attract attention for its elegance, and the indication of a something more important than beauty.'

These facts confirm, as Dr. G. observes, the opinion of Cuvier respecting the Caucassian origin of the Egyptians. 'It is a curious fact, which has been noticed by more than one traveller, that whole families are to be found in Upper Egypt, in whom the general character of the head and face strongly resembles that of the best mummies discovered in the hypogei of Thebes; and not less so, the human figures represented in the ancient monuments of that country.'

Dr. G. next proceeds to detail his observations made upon a

careful dissection of his mummy, and prefaces them with the history of former researches of a similar description. Respecting these, it is unnecessary for us to say more than that they seem all to have been unsatisfactory. This appears to have arisen from various causes, but chiefly from the imperfect state of the mummies which were the subjects of inspection.

The objects which presented themselves, in the course of this dissection ' were a portion of the stomach adhering to the diaphragm, the spleen much reduced in size and flattened, attached to the super-renal capsule of the left kidney, and the left kidney itself, imbedded in, but not adhering to the latter, and retaining its ureter, which descended into the bladder. This, as well as the uterus and its appendages, were observed *in situ*, exhibiting strong marks of having been in a diseased state for some time previously to the death of the individual. Fragments only of the intestinal tube could be found, some of them of considerable dimensions, and among them part of the cæcum, with its vermiform appendix, and portions of the ilium. Several large pieces of the peritoneal membrane were likewise observed.

' There were also several lumps of a particular species of brittle resin, two or three small pieces of myrrh in their simplest and natural state, and a few larger lumps, of an irregular shape, of some compound of a bituminous and resinous nature, mixed up with an argillaceous earth. These seemed to have been forced up to fill the cavity of the abdomen, after the removal of the largest portions of the intestines, and of as much more of the contents of that cavity as the embalmers could get at, by the very clumsy process which appears to have been employed in this case, for the extraction of those parts through the anus. This orifice was cut in various directions, probably with the intention of enlarging it; but, more likely, in consequence of the forcible introduction of the instrument employed in extracting some of the viscera. No traces of the right kidney could be found, nor of the liver or minor glands of the abdomen; although, among the many fragments of membranes and other soft parts which lay in confusion, and were removed for better inspection, the late Dr. Baillie, who was present at one of the demonstrations, detected the gall-bladder slightly lacerated, but in other respects perfect, retaining a small portion of the peritoneal covering of the liver attached to it, as well as considerable remains of its own ducts.

' The cavity of the abdomen being emptied of all its contents, I continued the circular incision back to the spine, which I divided at the first lumbar vertebra. I next sawed off the thighs a few inches from the hip, and dissected carefully all the soft parts from the pelvis, so as to ascertain the condition and dimensions of this important part of the female skeleton. In performing this last operation, which occupied me two hours a day for nearly a week (some medical or scientific friends being present at each sitting), we could not help being struck with the remarkable degree of preservation of the muscles, such as had never before been noticed in

Egyptian mummies, and such as to admit of their being separated from one another, as readily as in the dissection of a recent subject. Nor was the perfect condition of the articulatory membranes and ligaments less surprising, which allowed us to impart to the great articulation of the thigh with the ilium, its various movements, a circumstance seldom observed, even in modern preparations of the pelvis.'

Some of the dissected muscles, as well as the denuded pelvis itself, were submitted to the inspection of the Fellows after the Meeting of the Society.

'The cavity of the thorax was next examined; and it was found that the pericardium, which adhered partially to the diaphragm, came away with it, and that a laceration had taken place at the same time in that sac. This circumstance denoting that the heart was present, I introduced my hand to remove it, when it was found suspended, *in situ*, by its large blood-vessels, in a very contracted state, attached to the lungs by its natural connexions with them. The latter organs adhered throughout their posterior surface to the ribs.

'The last cavity examined was that of the cranium; for this purpose it was sawed in two, horizontally, and when thus opened, it was ascertained that the brain had been removed through the nostrils; the plates of the inner nasal bones having been destroyed in the operation by the instrument employed, as evidenced by the state of those parts. It is a matter of no little surprise how, under circumstances of so much difficulty, the operators could have contrived to remove every vestige of the membranes investing the brain, one of which is known to adhere firmly in most subjects to the inner surface of the superior cranial bones. There can scarcely be a doubt but that some injection had been thrown into the cavity in question, to clear it out in so perfect a manner; for no instrument could have effected such a purpose. A black resinous substance, but in a small quantity, was found adhering to the inner surface of the occipital bone, which must have been thrown in quite hot, as it had penetrated through, and burnt partially, the superior part of the lambdoidal suture through which the liquid escaped, so as to be now seen extravasated under the scalp. But how this liquid resin was thrown in, and for what purpose, it is not easy to conjecture. It could only have been made to penetrate through the opening which had previously been made in the ethmoid bone, to extract the brain; and if so, it is difficult to conceive in what manner it was made to reach the spot it now occupies without having adhered to any other intermediate portion of the cranium. It was remarked, at the time of opening the head, that its inner surface was studded with small crystals of what appeared to be an animal substance, resembling *steatine*.'

The tongue was preserved, and neither above or below it was there found any coin or metal, as recorded of other mummies, but a lump of rags dipped in pitch.

We shall defer the analysis of the remainder of Dr. Granville's paper till our next number.

II. *Dr. Barry's Memoir on the Motion of the Blood in the Veins.*

We mentioned in our last Number (p. 289) that Dr. Barry, an English army surgeon, had lately read before the Academy of Sciences at Paris, a Memoir on the *Motion of the Blood in the Veins;* and that Messrs. Cuvier and Dumeril had been appointed by the Academy to see Dr. Barry repeat his experiments, and to report upon the subject.

We have now to state that these gentlemen presented their *Report* to the Academy on the 29th August; and have the satisfaction to add, that it is highly creditable to our countryman, as will appear from the following details, which we extract from the Paris Journals of this month.

The Report commences by alluding to the various opinions which have hitherto been entertained by physiologists with respect to the *causes* of the motion of the blood in the veins. Thus, some have attributed this motion to the action of the heart, others to the pressure of the muscles, &c., and a few, with Bichat, to an absorbing power in the veins themselves.*

Amidst this diversity of opinion, however, with respect to the *cause* of this motion, authors have in general agreed in recognising a certain relation or connexion between the *motion* itself and the act of *respiration.*

Haller in particular observed that the veins become pale and empty during a strong *inspiration*, and that they are again filled and become dark during the act of *expiration;* and Morgagni made many experiments to illustrate the connexion thus pointed out.

Since their times many other physiologists, and particularly Mons. Magendie, have directed their attention to this subject; and have proved by many new and ingenious experiments, the uniformity and constancy of this connexion between the act of *inspiration*, and the *motion* of the venous blood. By all these persons, however, this connexion was looked upon merely as a coincidence; or at most the act of inspiration has been esteemed nothing more than an *accessory* cause of the motion alluded to.

In the Memoir presented to the Academy by Dr. Barry a very different view is taken of these facts, which in the opinion of this gentleman are much more intimately connected as *cause* and *effect*, than has been hitherto supposed. And in truth, it proceeds, he has shewn, (*by means of experiments entirely new, very ingenious, and perfectly conclusive,*†) 1st, that the blood in the veins is *never* moved towards the heart but during the act of *inspiration;* and, 2dly, that all the facts known with respect to this motion, (in man and the animals which resemble him) may be explained by considering it as the effect of *atmospheric pressure.*

* Bichat, however, was by no means satisfied upon this point, and admitted that much still remained to be done upon the subject when he wrote.

† "Au moyen d'experiences très ingenieuses, entierement nouvelles, et tout-à-fait concluantes."—*Report.*

With respect to the claim of priority, the Report continues, which has been advanced by Dr. Zugenbuhler,* it is only necessary to observe, that this gentleman, in recognising the influence of atmospheric pressure upon the blood in the veins, regards the *heart* as the immediate *cause* of the vacuum which he supposes to take place in the system, and supports this opinion merely by argument; whilst Dr. Barry attributes the dilatation of the heart itself, and of its auricles, to the *effort at a vacuum*, which takes place, as he alleges, in the thorax at the moment of *inspiration*, and demonstrates the truth of this opinion by direct experiment.

In conclusion, the Report recommends to the Academy, 1st, that the Memoir of Dr. Barry should be inserted amongst those of distinguished foreign literati; and 2dly, that he (Dr. B.) should be invited to prosecute his *researches with respect to the absorption of poisonous matters applied to the surface;* researches, it is added, which flow as a corollary from his theory, which possess so much interest, and which admit of so many useful applications to the animal economy.†

III. *Mr. Donovan's Apparatus for Filtering Fluids liable to be injured by exposure to the Atmosphere.*

When *alkaline* solutions in their *caustic* state are to be filtered, and when it is required that the solution after filtration should still be in a caustic state, it becomes a matter of some difficulty to exclude the atmosphere in such a way as to prevent the absorption of *carbonic acid* from it by the alkali.

In like manner it is often extremely difficult to secure *corrosive acids* while filtering from exposure to the atmosphere, from which they so readily imbibe moisture, and are thereby injured. And the some difficulty exists with respect to *volatile fluids*, such as alcohol, æthers, ammoniacal liquors, &c., the more valuable parts of which are often dissipated from undue exposure to the atmosphere, while undergoing the process of filtration.

A frequent recurrence of these inconveniences led Mr. Donovan, an ingenious practical chemist in Dublin, to turn his attention to the subject; and the result has been the contrivance on his part of a very simple apparatus, by means of which all such fluids as we have just alluded to may in future be subjected to filtration, without injurious exposure to the atmosphere.

As it would perhaps be impossible for us to convey a precise and accurate idea of this apparatus merely by words, we shall not attempt it; but content ourselves with stating, that it consists simply of two glass vessels, so constructed and connected together, (one in an inverted position over the other) that whilst the *fluid* under filtration drops from the upper into the lower, the *air* contained in

* Dr. Zugenbuhler, it appears, alleged that the influence of atmospheric pressure upon the motion of the blood in the veins, had been established by him in a dissertation on this very subject in 1815.

† We hope to have it in our power to give some account of these Researches in our next Number.—Editors.

the latter passes by a collateral communication into the former. Thus, every drop of *fluid* which falls from the upper chamber displaces an equal volume of *air* from the lower; which air (or an equal quantity from below) immediately rushes into the upper chamber, to fill the vacant space, and maintain there the pressure upon which the descent of the next drop depends.

For a more particular description of this apparatus (with a *figure*) we may refer to the Dublin Philosoph. Journal, No. I. (for April,) in which it originally appeared; and to the Phil. Mag. for July, or the Annals of Phil. for August.

IV. *Epilepsy; often-feigned, mode of detecting, &c.*

Epilepsy is a disease very frequently simulated by seamen and soldiers, and sometimes even by persons in private life. As in the true epileptic fit the *pupil* of the eye is perfectly insensible to light, the application of a candle to this organ is always recommended as a certain criterion.

The experienced practitioner knows, however, that this method is not always satisfactory, and that it is sometimes inconvenient. In such cases, therefore, the introduction of some dry pungent *snuff* into the nostrils will be found very useful. In true epileptic fits it has been found to produce no effect, while in the *feigned* violent sneezing has been immediately produced. It may be best employed by being blown through a quill.—*Lon. Med. Journ. August*, p. 90.

V. *Opium.—Solubility of English Opium in various menstrua.*

The following statement is given as the result of actual experiment. It is worthy of notice, therefore, although in some measure defective, the exact strength and quantities of the spirits, vinegar, and sulphuric acid employed not being mentioned.

One ounce of English Opium, equal to 480 grains,
yielded to, Water (rain water, 2 pints) .....347 grains.
——— Rectified Spirit.....384
——— Proof Spirit 388
——— Distilled Vinegar 388
——— Very Dilute Sulphuric Acid 392

Jeston, Lon. Med. Journ., Aug., p. 111.

VI. *On Œdema of the Extremities.*

It sometimes happens that arms and legs in an *œdematous* state are presented to the notice of medical officers, not only in the army and navy, but in prisons and prison-ships also.

It is well to know, therefore, that this state may be and often is artificially produced, by the application of a tight ligature higher up on the limb than the part exhibited to view. With the arm, also, a different method, and one less liable to detection, is sometimes employed, which consists in making pressure on the axillary vessels for a certain length of time, by hanging the limb over the back of a chair.

These facts, which have been ascertained by actual observation, possess, independent of their particular application, a certain degree of interest, as throwing light on the formation of dropsical swellings in general.—*Lon. Med. Journ., Aug.*, p. 91.

VII. *The Living Skeleton.*

The miserable object, who has for some time been exhibited in London under the above title, has been made the subject of so much misrepresentation, for the purpose of exciting public curiosity, as to render any authenticated particulars with respect to him in some measure interesting even to professional men. We are induced for this reason to give insertion to the following detail,* the accuracy of which may, we are inclined to believe, be relied upon.

In person this wretched being appears to be about five feet seven inches in height, and is reported to be about twenty-eight years of age.† His general appearance is that of a man in the last stage of some chronic disease: his extreme emaciation, the expression of his countenance, the languor and want of energy in his movements, all contribute to produce this impression.

The upper extremities are much more reduced in proportion than the lower. This is particularly the case with respect to the upper-arm, which scarcely exhibits a trace of any thing but bone covered with integument; while the fore-arm presents some appearance of muscle, though certainly only in a very faint degree: nevertheless the limb can be raised in almost every direction, to a position nearly horizontal.

The lower extremities, and particularly the legs, are less reduced in size than in many persons wasted by disease; the legs indeed, and more especially the right, are by no means deficient in muscle, the *gastrocnemii* being sufficiently well marked.

The trunk of the body presents several deviations from the natural structure. Thus, the *sternum*, instead of being convex or flat externally, is bent inwards, or pressed towards the vertebral column, so as to diminish very much the capacity of the thoracic cavity, and more especially at its upper part. Lower down, the ribs form a longer curve than usual, and the spine being somewhat inclined to the right, the left side appears much more full than the other. The pulsations of the heart are felt between the seventh and eighth ribs.

The position of the *scapula* is likewise peculiar; for the superior *costa* is drawn much more forward than usual, and the inferior *costa* in consequence is thrown considerably outwards, (instead of lying flat upon the posterior surfaces of the ribs) and the bone is raised upwards, so as to cause the individual to appear short-necked and high-shouldered. This circumstance, with the colour of the skin, and more especially of the countenance, which is peculiarly pale

* Extracted from an article in the last Number of the Lon. Med. Journ., p. 256.

† It has been stated elsewhere that his *weight* is rather less than eighty pounds.

or rather livid, would induce the belief that respiration and the functions connected with it, are laboriously and imperfectly performed.

The abdomen occupies a very small space, and sinks inwards towards the spine; the distance between the edges of the lower ribs and the *cristæ* of the *ilia* is at the same time very small.

The skin felt cold and dry, and seemed to be quite destitute of hair — the pulse was small, and about sixty — the voice not very deficient in strength. In addition it was stated, that he eats and drinks very sparingly; that he digests and sleeps well; that his excretions are natural and regular; that his mental faculties are sufficiently developed; and finally, that the sexual passion exists, but has never been indulged.

VIII. *The Stomach Syphon, by Mr. Bryce.*

One of the most valuable applications of the *Syphon* with which we are acquainted, has been recently made by Mr. Bryce, surgeon in Edinburgh.

The object of this invention is to throw fluids into the stomach, and to extract fluids from it, in cases where poison has been swallowed. In order to apply the syphon to this purpose, in place of syringes and pumps, Mr. Bryce conceived the idea of making the longer leg of the syphon movable, so that when the shorter leg was in the stomach the other could be raised *above* the mouth, or placed in the usual position *below* it. The following is a description of this instrument, &c.

To a common œsophagus tube, about twenty-six inches long, a tin tube of the same calibre is accurately fitted, by making the one pass about an inch into the other. This tin tube is about three feet long; or, to be more portable, it may consist of two pieces each eighteen inches long, accurately fitted to each other as above mentioned, and the joinings made air-tight, by being neatly and firmly wrapped round with slips of wetted bladder. A bladder capable of holding about a quart of liquid is then to be firmly fixed to the other end of the tin tube; and this bladder at the part opposite the end of the tube, is to be provided with a ring and stopper, for the purpose of emptying it, or pouring fluids into it.

In using this instrument, the œsophagus tube (which forms one leg of the syphon) is to be introduced through the nose or mouth into the stomach, so as nearly to reach the bottom. The open end of the tin tube is then to be joined to the œsaphagus tube, and the joining made air-tight. The bladder being then filled with water or any other fluid, the tin tube with its attached bladder is to be raised towards a perpendicular, when the fluid will instantly descend into the stomach.

In order to extract this fluid again, and with it the other contents of the stomach, it will only be necessary to depress the tin tube so as to bring the bladder *below* the level of the stomach, and thus form as it were a common syphon. And this process of filling and emptying

the stomach alternately, may of course be repeated as often as it may be deemed necessary.—*Edin. Journ. of Science, July*, p. 149.

Note.—In the Edin. Med. Journ. for April, and in the REPOSITORY for July, (p. 66) a case of poisoning by opium is given, in which this simple instrument was successfully employed by Dr. Alison of Edinburgh.

IX. *Zoology — New Institution for the promotion of Zoological Pursuits.*

ON the 22d June last, a meeting was held at the house of the Horticultural Society in Regent Street, for the purpose of forming a new Society or Institution, having for its object the cultivation and encouragement of Zoological pursuits.

The meeting was attended by a number of distinguished characters, and the Earl of Darnley having been placed in the chair, Sir Humphrey Davy, with whom the design is understood to have originated, explained at some length the object of the projected Institution; and the business of the day concluded by the appointment of a Committee to take the necessary steps for its organisation.

From a Prospectus circulated among the friends of science, it would appear, that the original object was to establish a Society which should bear to *Zoology* the same relation that the Horticultural Society does to *Botany*; but the encouragement which the design has already met with from eminent persons in every department of society, will probably lead to an extension of this plan.

We may observe, that gentlemen desirous of becoming members, are invited to signify their wishes to Mr. T. Griffiths, 21 Albemarle Street.

X. *Sponges — Silica detected in their Composition.* By Mr. J. E. GRAY, of the British Museum.

MR. GRAY states, that all sponges appear to be essentially formed in the same manner, that is to say, of fusiform transparent *spiculæ*, placed longitudinally, and united by a cartilaginous substance.

These spiculæ were considered by him as consisting chiefly of the phosphate or carbonate of lime, until he accidentally discovered that they scratched glass, when rubbed hard against it. On mentioning this circumstance to Mr. Children, he was informed by that gentleman that he had observed a fact somewhat similar, namely, that a sponge-like body which he had lately met with, (a *Tithya*, a genus formed almost entirely of spiculæ,) consisted wholly of pure *silica*, with a little animal matter. On subjecting some sponges to experiment, considerable quantities of *silica* were found in the ashes of the spongilla fluviatilis, the spongia tomentosa, and two or three allied species—a small quantity in the spongia officinalis, and a distinct trace in a piece of the axis of the gorgonia flabellum. Mr. Ellis, also, it appears, in his description of the gorgonia briareus (*Zoophites*, p. 178), states, that its hard part, axis, or bone, is composed of purple *glassy spiculæ*, lying lengthways, and almost parallel to each other.

These facts, Mr. Gray observes, are exceedingly interesting in several points of view — first, because *silica* is very rarely found as a product (*constituent?*) of the *animal* kingdom, and has never hitherto (to his knowledge) been found in Zoophytes: secondly, as proving a considerable affinity or resemblance in chemical composition (as well as in external structure) between the *sea* and *fresh* water sponges, a fact which several naturalists have lately appeared to doubt; and lastly, as proving that a close affinity exists between the sponges (*marine* and *fluviatile*) and the gorgoniæ. Now, as these latter are known to be the habitation and production of individuals belonging to the *animal* kingdom, this affinity greatly strengthens the idea of Ray, Lamarck, and others, that sponges are true corals, nearly allied to the antipathes and gorgoniæ, and not vegetables, nor *anomalous* animals like the infusoria. — *Ann. of Phil., June* 1825, p. 431.

XI. *Urine, Instrument for ascertaining the Specific Gravity of.*

As the specific gravity of urine is a point of considerable importance in many diseases of that secretion, particularly in *diabetic* affections, — and as the common method of determining this by weighing, &c. is troublesome and tedious,—Dr. Prout was induced, some time ago, to have a small portable hydrometer constructed for this purpose, of which he has given a description and sketch in a recent Number of the Annals of Philosophy.

This instrument, which is about four inches in length, is constructed upon the same principles as the common spirit hydrometers, and consists, like them, of a hollow *globe*, with a loaded *radicle*, and a graduated *stem*. In *pure water*, it sinks until this stem is nearly covered, and rises, of course, as the *specific gravity* of the fluid increases: and by means of it, Dr. Prout says that every thing connected with the *specific gravity* of the urine can be easily determined in a few seconds, to a degree sufficiently accurate for all practical purposes. — Vid. *Ann. of Phil. May* 1825.

XII. *Use and Abuse of Calomel.*

French practitioners have always been more timorous, we ought perhaps to say more cautious, in the use of this valuable medicine, than the practitioners of this country. It is instructive to observe the light in which our modes of practice are viewed by those with whom such modes have not become habitual. Thus, although we may laugh at the French for their childish fears of calomel in the minutest doses, and justly find fault with their neglect of it in some of the acute disorders of children, in which they trust to *tisanes*, and the most trifling and inefficient means; they have in general avoided the error of giving such immense doses of it as have been recommended by some of our physicians: we say *have been*, for the practice seems latterly to have been given up. The French, however, go farther. M. Guérin de Mamers, remarking on Dr. Armstrong's directions concerning attention to the state of the skin, as

a guide to the administration of calomel to children and women, says, ' English medicine has at least made *a step*, since it is admitted that the *abuse of calomel* now and then causes patients to sink under acute inflammations: if these ideas are spread among our neighbours, *chronic gastritis will have fewer victims among them.*'—*Bulletin des Sciences Médicales, Avril* 1825.

XIII. *On the ordinary Duration of Intermittent Fever.*

From a considerable number of observations made in different climates, as Rome, Montpellier, Lyons, and Canada, M. Bailly considers the mean duration of intermittent fevers to be fourteen days, or two septenary periods. It is worthy of remark, that this period, which is not altered by climate, or by any mode of treatment, is precisely that of the greater number of acute disorders. The following are M. Bailly's observations on the physiological cause, according to him, of this definite prolongation of diseases. It is to be premised that he thinks intermittents are connected with the class of acute disorders by the link of inflammation.

' Inflammations,' he says, ' are not the simple result of an accumulation of blood in such or such an organ: they consist of a fixed and permanent alteration of the diseased tissue, and this alteration can only be effaced by changes dependent on nutrition: and as the acts of nutrition are necessarily slow and successive, it follows that every inflammation requires a certain time to arrive at its maximum and to disappear. Experience alone can teach us how many organic revolutions are necessary to destroy such alterations in a tissue as constitute inflammation; and if intermittent fevers require two septenary periods for their cure, we may conclude, that internal organs in a state of inflammation require this space of time to perform the period requisite for a return to a state of health.' This explanation does not seem very lucid. The practical deductions which M. Bailly thinks are to be drawn from it, are, that in the commencement of intermittents our treatment should be directed against inflammations; and that we should reserve febrifuge medicines for the period when, the affection of the internal organs having disappeared, the fever consists solely in a periodical nervous affection, the result of a morbid habit contracted by the organisation.—*Ib.*

XIV. *Moxa.*

We understand Dr. Burne has lately employed moxa formed of wood in a state of dry rot touchwood, which is said to be used for the same purpose by the Laplanders. He finds this may be applied with greater facility than any other material hitherto in use, and it requires no other preparation than the cutting into cones or cylinders of convenient size. The combustion supports itself without the aid of bellows, produces almost no smoke, and is so gentle and equal as not to excite horror or alarm in the patient. The cones are readily affixed to any part of the body, by touching the opposite sides of the base with the least possible quantity of adhesive plaster, which renders the use of forceps unnecessary. Our readers are

aware that the moxa in general use consists of a cylinder of cotton, or mugwort, or lint or cotton, which have been steeped in a solution of nitrate of potash. But all these materials are objectionable; the cotton and mugwort requiring bellows to keep up the combustion, and giving out a great quantity of smoke; and the nitrate of potash making it necessary to defend the surrounding parts from the sparks. The combustion, too, is sometimes violent, sometimes difficult, and at others incomplete. The cylinders of touchwood answer remarkably well, where it is desirable to apply moxa in the manner recommended by M. Bayle.

We have to thank a correspondent for the above information, to which we think it only just towards Dr. Burne to add, that we have since had opportunities of learning that he first employed the touchwood, in the manner above described, *before* he was aware that it had ever been employed with the same intention. Hearing, however, that it had in reality been so employed by the Laplanders, he very judiciously resigned all claim he might have to the honour of being the original discoverer of this method. Moxa, like many other parts of foreign practice, makes slow way in this country against our sturdy national prejudices; but the above substitution of a convenient for an inconvenient substance, by rendering the operation easier and safer, will probably cause it to be more frequently resorted to. We find it difficult to gather from the records of foreign practitioners, the indications with which they resort to the application of moxa, and are disposed to think their use of it somewhat indiscriminate. We should be glad to receive from Dr. Burne, or any other practitioner who has had much experience of this remedy *in this country*, a communication of the general results. — EDITORS.

XV. *Leeches.*

THE Academical Society of Marseilles has proposed the following prize-questions: — 1st, To determine, by clinical observations, in what diseases the application of leeches is preferable to general bleeding. 2d, In what diseases general bleeding is preferable to local bleeding, and also in what diseases both should be employed simultaneously. The prize is a gold medal, value 300 francs, or about £12 sterling, and is to be awarded on the 1st of November. The essays are to be written *legibly*, in French or Latin, and addressed (post-paid) to Dr. Ricard, Rue de Bausset, No. 2, at Marseilles. — *Bulletin des Sciences Méd.*

XVI. *Eruption of Variola checked by Caustic.*

M. VELPEAU states, in a paper read before the Royal Academy of Medicine of Paris, that if the small-pox eruption is touched with caustic on the first or second day, the eruption does not proceed. He employs a solution of nitrate of silver. The same method has long been employed by M. Dumeril at the *Maison de Santé.* — *Arch. Gén. de Méd.*

XVII. *On the Employment of Graduated Measures for the Exhibition of divided Doses of Medicines.*

The article, in the August Number of your Journal, on the propriety of employing graduated measures for the exhibition of divided doses of medicine, rests upon a general truth of much importance, yet a truth which, though acknowledged, has had but too little practical influence. It is not what is prescribed, but what is taken, works the cure. The mode of exhibition is of considerable importance—'Modus utendi ex veneno facit medicamentum ex medicamento venenum.' The plan proposed in the Number of your Journal referred to, is very well, and, if adopted, would not fail to fulfil a very desirable object, as respects the precise dose ordered. But it is not probable that every family will provide itself with a graduated glass. Now I would recommend, in preference to the glass alluded to, that the phials be all graduated. That many practitioners do use such is well known, and their price is the same as in the non-graduated. If this suggestion were adopted, the ounce phial might be divided into tea-spoonsful, the two ounce into dessert-spoonsful, the three ounce into table-spoonsful, the four ounce into portions of two table-spoonsful, and the six and eight as they are at present manufactured at Dorman's, Rathbone Place, divided into four and six portions. Thus would every advantage be obtained, and the several inconveniencies be avoided, for the phial and measure would always be at hand together. A single and separate measure may be lost, or, what is not impossible, broken; then, if in the night, what woful consternation might ensue! and in some places such omens might so haunt the nervous and superstitious as to produce an agitation of mind that would overbalance the benefits of the medicine.

An Apothecary.

XVIII. *Clinical Remarks on the Diseases most prevalent during the preceding Month.*

The weather in September has been warm, but, with the exception of a few days in the commencement of the month, damp and showery.

We mentioned in our last report, that cholera appeared rather on the increase. This opinion has proved to be correct; it became immediately after both more frequent and severe. Cramp, which had till that time been rather rare, was a frequent accompaniment, and the sickness was often obstinate and difficult of removal. The fatal cases have, however, been rare. In some instances of this complaint fever succeeded, for the most part of not more than two or three days' duration, but in one or two cases a regular typhoid type was assumed, and the patient sunk. In other instances, a low inflammatory state of the mucous membrane of the intestine succeeded, with profuse watery evacuations, and very slight pain on pressure. The most useful treatment in the latter cases, was the application of leeches and blisters, and demulcents, rather than any thing immediately to stop the diarrhœa. The most valuable medicine for the latter purpose we found to be the compound ipecacuanha

powder, the effect of which in restoring the natural state of the alvine secretions was often very remarkable.

Among children bowel complaints have been exceedingly rife, and very fatal. Most of the cases we have seen have been in children under eighteen months old. They were frequently connected with dentition, but lancing the gums seldom afforded any relief.

Rheumatism also has been troublesome during this month, and both acute cases have occurred, and chronic cases have undergone much aggravation. Our plan of treatment has been usually to give the cinchona bark in large doses, when no important organ was affected, and we have often beneficially combined it with the tincture of colchicum. Our experience has rendered us rather adverse to depleting measures in this disease. In local affections, particularly in lumbago, and when the rheumatic pains were confined to the deltoid muscles, we have again had remarkable confirmation of the utility of acupuncturation. We have never seen any ill effects arising from it.

The affections of the head have been rarer, but in some instances very severe. After active depletion, where this was called for, and without it, in those cases in which the weakness of the pulse and the coldness of the extremities seemed to forbid, we have found the application of cold to the head eminently serviceable. We have applied it constantly, a cloth being tied over the head like a night-cap, and kept constantly wet with cold water. This has appeared to us one of the most efficacious remedies we are in possession of, in these affections of the head.

Puerperal fever continues still to be rather prevalent in and about London. Four cases of the disease, somewhat diversified in its type, have been treated by us since our last Report (which see at p. 291). The means of cure which are there specified, were generally adopted in all of them, with the addition of very large doses of camphor and calomel; blood-letting, however, was but sparingly employed, in two of these cases, and was never carried to a great extent in any of them. Two of these have perfectly recovered, the third is convalescent, and the fourth is still under treatment.

Small-pox has again appeared, though as yet we have not heard that it is prevalent: some instances have occurred after cow-pox — not fatal, but severe. These have been the principal medical characteristics of the last month; but still we cannot consider the season unhealthy, most of the affections, with the exception of the puerperal cases above alluded to, having been slight and of short duration.

XIX. Officinal Parts of Plants which may be gathered in October and November.

Root of the *Calamus Aromaticus*.
Seed of the *Anethum Graveolens*, and *A. Fœniculum*.
Root of the *Angelica Archangelica*.
Root of *Arnica Montana*.
Root of the *Arum Maculatum*.
Root of the *Aspidium Filix mas*.
Root of the *Cochlearia Armoracia*.

Root of the *Colchicum Autumnale.*
Bark of the Root of the *Daphne Mezereum.*
Root of the *Eryngium Maritimum.*
Root of the *Inula Campana.*
Root of the *Leontodon Taraxacum.*
Root of the *Polygonum Bistorta.*
Berries of the *Rhamnus Catharticus.*
Root of the *Rumex Acetosa.*
Twigs of the *Solanum Dulcamara.*
Root of the *Tormentilla Erecta.*
Root of the *Valeriana Officinalis.*
Root of the *Veratrum Album.*

OBITUARY.

Biographical Notice of Baron PERCY.

BARON PIERRE-FRANÇOIS PERCY, whose death was not long ago announced in the Parisian journals, was attached, during the greatest part of a long and active life, to the medical department of the French army, in what may be justly considered as the most active and brilliant part of the military history of France. He filled the office of Inspector-General of the Service of Health of the Army, and was a Commander of the Legion of Honour, and a Member of the Institute. He was born in 1754, at Montagney, in the department of the Haute-Saône. He very early conceived a predilection for surgery so strong, as to overcome the great dislike of his father to a profession which he had himself followed, in the capacity also of a military surgeon, but from which he had retired in disgust. Young Percy studied at the College of Besançon; and although he made an attempt to devote himself to mathematics, with a view of qualifying himself for the engineer service, he soon became passionately fond of anatomy, and made so much progress in that science, as very early to be appointed a teacher of it, holding the office which used at that time to be called 'prévot de salle.' In 1775, he obtained the degree of Doctor, which, in consequence of his having gained some previous prizes, was conferred upon him almost gratuitously. He entered the French *gendarmerie* at the age of twenty-one, as assistant-surgeon, and remained attached to that service five years and a half; it was in some part of this period that he gained much praise from many, and as much blame from others, on account of two able critical pamphlets published by him, the one levelled against a country practitioner, who made and retailed pills denominated 'grains of life,' (which, however, appear to have been merely a common dinner pill,) and the other directed against an indifferent work on the subject of midwifery, the author of which had been, nevertheless, rewarded with a lucrative staff appointment. About this time he was the author of a memoir, which was very extensively circulated, on the use of a mixture of sulphate of potash, muriate of soda, and other salts employed in the process of vitrification, and hence called *fiel de verre*, in some diseases of domestic animals; having paid much attention to the veterinary art, under the direction of the celebrated Lafosse. In 1782, M. Percy joined the cavalry regiment *de Berry*, as prin-

cipal surgeon; and two years afterwards he gained a prize at the Academy of Surgery for some improvements in surgical instruments, and particularly in scissors: he was again distinguished in the following year on account of some suggestions for limiting the number of instruments employed in the extraction of foreign bodies; and also the third year for some improvements in cutting instruments, particularly in the bistoury. In 1790, he obtained the first prize for his remarks on the actual cautery. He was then named an Associate of the Academy; and we are not surprised to hear that he was requested not to try for any more prizes, in order that the arena might be left more open to his numerous and much-discouraged rivals.

He was equally advancing, in the mean time, in his military career. Whilst encamped at St. Omer, he was appointed surgeon-in-chief for Flanders and Artois, his emoluments were augmented, and he was commissioned by the war council to attempt the establishment of regimental hospitals. When war was actually declared, he was named consulting surgeon for the army of the North, in the place of Sabatier, whose age had incapacitated him for the various and important duties of an office which called for the utmost activity of body and mind. During several campaigns, under Luckner and Kellerman, he received very honourable testimonials of his zeal and courage; but becoming, for some unknown reason, obnoxious to the Council of Health, that body required from him certain proofs of his capacity, which seem to have excited his indignation: knowing himself, at the same time, to be surrounded by spies, and not wishing to set an example of disobedience, he replied to the questions proposed by the Council, but, to the confusion and ridicule of them, instead of transmitting his replies privately, printed them at Metz; conscious not only of being superior to his inquisitors, but of being generally esteemed so by the public. Although these replies are said to have been composed in the short space of twenty-eight hours, it is supposed that they have furnished both facts and opinions to some other writers who have affected originality.

It is one of the distinguishing advantages of the art of healing, that it tends to lessen the sufferings and miseries of mankind: even the horrors of war admit some mitigation in proportion as nations become wise and humane enough to provide for proper attendance on the sick and wounded. In this department of duty, M. Percy promoted improvements highly serviceable to the country which he served, and which were long admired, and at last happily imitated by others: to the remembrance of these exertions he must have looked back with satisfaction and complacency, when, as age approached, and the fortunes of France underwent a memorable change, he shared in the disgraces and reverses of his former patrons. Under the auspices of Pichegru and Moreau, M. Percy instituted the movable corps of surgery; and such was the effect of his individual energy, that the military surgeons under him became remarkable for the care they took of the sick in the field of battle, and under the most murderous fire. When in the Peninsula,

also, he formed the first battalion of soldiers of ambulance, almost at his own expense, with a special company of *brancardiers*, a kind of orderly, whose office it was to assist the wounded, and to carry a particular sort of litter of which he was the inventor: but the French government does not appear to have seconded these meritorious efforts as they deserved, or others, the tendency of which was to improve the medical department in many important particulars.

In the dreadful scenes of the revolution, when a difference of banner was sufficient to convert fellow-countrymen into the deadliest foes, M. Percy frequently exposed himself to the chance of losing his liberty or his life in his endeavours to save such of the royalists as had fallen into the hands of his own party: and he is said to have secreted many of these unfortunate persons at different times, affording them not only professional aid, but the assistance of his purse. On several occasions, in the course of the numerous engagements at which he was present, he received wounds, incurred by his determination to support the confidence of the soldiers by the certainty of surgical care. He was conspicuously distinguished when the French were driven from Manheim by the Archduke Charles. M. Percy resolutely refused to quit the city until all the wounded were removed; and Lacroix, an officer of the *corps du génie*,* being dangerously wounded, and in hazard of his life, he carried him, at the great risk of his own, on his back, across the Rhine, although the bridge was furiously cannonaded by the enemy, and was literally falling to pieces under his feet: this gallant and humane action was performed within view of the French soldiers, who animated the heroic physician by the most enthusiastic cheers.

Under the consular government, Percy was named one of the six inspectors-general of the service of health of the army; and he enjoyed a great share of the confidence and esteem of Napoleon. In 1814, when twelve thousand wounded soldiers were under the walls of Paris, without shelter, provisions, or any kind of comfort, they were promptly provided for by the judicious regulations suggested and most ably carried into effect by him; for which critical service he received many marks of recompense from the foreign potentates, being invested with the order of St. Ann of Russia, the order of Civil Merit of Bavaria, and of the Red Eagle of Prussia, &c. In the following year we find him a member of the Chamber of Deputies, as the representative of his native department, la Haute-Saône; but he only appeared in the senate two or three times, and never spoke, excepting once in favour of wounded soldiers. On the return of Bonaparte from Elba, he was again called to act as chief surgeon to the army, and his public life may be said to have terminated at the memorable battle of Waterloo. He was soon afterwards removed from an office he had so ably filled, and in which his health and time of life promised that he

* At present one of the first mathematicians in Europe.

might have long been useful, and removed, without receiving any title or any reward to soften the rigours of a forced retreat. After this, he very wisely betook himself to rural arts and the quiet duties of a country life, continuing, however, to prescribe for and assist the poor in his neighbourhood, and particularly during 1816, which was to them a year of great want and privation. He was happy enough to have an amiable wife, the mildness of whose temper, and the resources of whose mind, made his years pass away tranquilly and happily, and prevented any feeling of regret for the active life he had quitted, and the power of which he had been deprived.

His death is attributed to a chronic gastritis, complicated with a disease of the heart, and was preceded by very severe sufferings, although his intellectual faculties remained unimpaired. He neither desired nor feared the approach of death, of which he spoke with his family frequently and calmly. He was buried in the cemetery of Père La Chaise, and many funeral honours were paid to him by eminent professional persons, and particularly by his distinguished colleague, Baron Larrey, who seems to have entertained the greatest affection for him.

The principal works of Baron Percy are: — 1st, *Manuel de Chirurgien d'Armée;* 2d, *Pyrotechnie Chirurgicale Pratique, ou l'Art d'appliquer le Feu;* 3d, *Eloge d'Anuce Foës;* 4th, *Eloge Historique de Sabatier;* 5th, *Traité des Instrumens de Chirurgie, et spécialement des Ciseaux;* besides many papers on points of civil and military surgery, and numerous articles in the *Dictionnaire des Sciences Médicales.*

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

1. Sketches of the most prevalent Diseases of India; comprising, a Treatise on the Epidemic Cholera of the East; Statistical and Topographical Reports of the Diseases in the Divisions of the Army under the Madras Presidency; embracing also the Annual Rate of Mortality, &c. of the European Troops; and Practical Observations on the Effects of Calomel on the Alimentary Canal, and on the Diseases most prevalent in India. Illustrated by Tables and Plates. By James Annesley, Esq., Madras Medical Establishment; lately in charge of the General Hospital, Madras, and Garrison Surgeon of Fort St. George. London. Underwoods. 1825.

*** This appears to be the work of an experienced practitioner in the diseases of India. The 'Treatise on Epidemic Cholera' is very complete, and the treatment which is recommended, decided, rational, and successful. The 'Topographical Reports' are calculated to be a model to the medical officers of the East India Company, and of the public services in general. The Author's 'Practical Observations on the effects of Calomel,' &c., will be read by all classes of Practitioners in every climate, with great interest and advantage.

2. Elements of Operative Midwifery; comprising a Description of certain New and Improved Powers for assisting Difficult and Dangerous Labours: illustrated by Plates; with cautionary Strictures on the improper use of Instruments. By David D. Davis, M.D., Member of the Royal Colleges of Physicians of London and Edinburgh; formerly a Physician to the Sheffield General Infirmary; late Obstetric Physician to her Royal Highness the

Duchess of Kent; one of the Physicians to the Royal Maternity Charity, &c.; Lecturer on Midwifery, &c. 4to. Pp. 345. Hurst, Robinson, &c.

*** This is an important and ably executed work. It will receive a more particular notice from us on an early occasion.

3. An Inquiry into the Seat and Nature of Fever; as deducible from the Phenomena, Causes, and Consequences of the Disease, the effects of Remedies, and the Appearances on Dissection. By Henry Clutterbuck, M.D., Member of the Royal College of Physicians of London, Senior Physician to the General Dispensary, Lecturer on the Theory and Practice of Medicine, &c. &c. Second edition. 8vo. Pp. xxxvi. 496. Anderson. 1825.

*** Dr. Clutterbuck has displayed in this edition much learning, ingenuity, and pathological research, in illustrating his views of fever. We have several times had occasion to reply to his acute disquisitions on the pathology and treatment of fever, and we have always found him a candid opponent. We may take up the subject before long.

4. Collections from the unpublished Medical Writings of the late Caleb Hillier Parry, M.D. F.R.S. &c. &c. &c. Vol. II. 8vo. Pp. 590. Underwoods. 1825.

*** We are sincerely glad to perceive the unpublished medical writings of the late Dr. Parry coming so fully before us. It is desirable that the Editor would inform the Profession how far they are likely to extend. We are anxious to see all that are to appear, in order that we may enter upon a full examination of them, which cannot be satisfactorily done until the whole are before us at once.

5. Medical Researches on the Effects of Iodine, in Bronchocele, Paralysis, Chorea, Scrofula, Fistula, Lachrymalis, Deafness, Dysphagia, White Swellings, and Distortions of the Spine. By Alexander Manson, M.D., Physician to the General Hospital, and St. Mary's Hospital and Dispensary, Nottingham. 8vo. Pp. xii. 452. 8vo. Longman's. 1825.

6. A Short Inquiry into the Capillary Circulation of the Blood; with a Comparative View of the more intimate Nature of Inflammation: and an Introductory Essay. By James Black, M.D., Member of the Royal College of Physicians, London. 8vo. Pp. viii. 176. Longman's. 1825.

7. Sur les Fonctions du Cerveau et sur celles de chacune de sesp arties, avec des Observations sur la possibilité de reconnaître les Instincts, les Penchans, les Talens, ou les Dispositions Morales et Intellectuelles, des Hommes et des Animaux, par la Configuration de leur Cerveau et de leur Tête. Par F. J. Gall. 6 vols. 8vo. de 400 à 500 pages chacun. Paris. 1822—4.

8. A Short Illustration of the Advantages derived by the Use of Sulphurous-fumigating, Hot Air, and Vapour Baths, in a variety of Obstinate Diseases. By Jonathan Green, late Surgeon in his Majesty's Navy. 8vo. Pp. 40. Lond. 1825.

9. A List of Drugs and Chemicals, including the New Medicines, Horse and Cattle Medicines, Perfumery, and other Articles generally sold by Chemists and Druggists; arranged alphabetically under their English Names, with the Latin Synonymes, and the Names in the New Pharmacopœia; to which are added the Doses. Intended as a Price Book. By the Author of the Apothecaries' Chart, &c. 8vo. Pp. 69. Anderson. 1825.

NOTICE OF LECTURES.

Dr. Copland commences his Winter Courses of Lectures, in his Medical Theatre, Great Pulteney Street, at eight o'clock on Monday morning.

Dr. Gordon Smith will begin his Lectures on Medical Jurisprudence, in Dr. Copland's Theatre, early in November.

THE METEOROLOGICAL JOURNAL,

From the 19th of AUGUST to the 20th of SEPTEMBER, 1825.

By Messrs. HARRIS and Co.

Mathematical Instrument Makers, 50 High Holborn.

August.	Moon.	Rain Guage.	Therm. 9 A. M.	Therm. Max.	Therm. Min.	Barom. 9 A. M.	Barom. 10 P. M.	De Luc's Hygrom. 9 A. M.	De Luc's Hygrom. 10 P. M.	Winds. 9 A. M.	Winds. 10 P. M.	Atmo. Variation. 9 A. M.	Atmo. Variation. 2 P. M.	Atmo. Variation. 10 P. M.
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18			68	70	62	29 71	29 71	79	80	SW	SW	Fine	Fine	——
19	☽	,35	67	71	60	29 65	29 71	80	80	SW	SW	——	——	Fine

The quantity of rain fallen in August was 2 inch. 14-100ths.

ERRATA IN THE REPOSITORY FOR LAST MONTH.

Page 265, line 27, for *rye-bean*, read *rye-bran*.
— 269, — 9, — *tendinous*, — *tedious*.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the EDITORS, to the care of Messrs. T. and G. UNDERWOOD, 32 Fleet Street.

THE LONDON MEDICAL

REPOSITORY AND REVIEW.

No. 143. NOVEMBER 1, 1825. Vol. XXIV.

No. V.——NEW SERIES.——Vol. I.

PART I.

REVIEW.

I.

PATHOLOGY OF THE DIGESTIVE MUCOUS MEMBRANE.

[Second Article.]

De la Membrane Muqueuse Gastro-Intestine, dans l'Etat Sain et dans l'Etat Inflammatoire, ou Recherches d'Anatomie Pathologique, &c. Par C. Billard. Paris, 1825. Pp. 565.

Practical Remarks upon Indigestion, &c. By John Howship, Assistant-Surgeon to St. George's Infirmary, &c. London, 1825. Pp. 204.

In our former paper upon these volumes we slightly hinted at the subject of intestinal hæmorrhage, and at the changes which the discharge from the mucous membrane undergoes at different times. There is, however, an affection, if not of this tunic exclusively, in which, at least, it bears a very considerable part, that appears to us to deserve a more particular consideration — we mean that to which the name of melæna has been assigned. Of the nature and origin of this disease, or whether, indeed, several different diseases have not been comprehended under one name, some question still remains. M. Tacheron has dismissed it very cursorily as a peculiar intestinal hæmorrhage; Mr. Howship has told us only that the discharge of dark-coloured matter per anum is melæna; and Dr. Brooke, after the relation of three cases, has written a short commentary upon the morbus niger of Hippocrates, in which he adopts the division of the disease into sanguineous and bilious, first proposed by the Father of Physic. It must, however, be confessed, that so far as the symptoms merely are concerned, Dr. Brooke is perfectly justified in the course he has chosen, since, though in modern times rather more minuteness, perhaps, is observed in the enumeration of

symptoms, the principal features of the disease have been most accurately described by that ancient writer. He has related its distinguishing characteristics, the pain in the stomach, the wandering pains, the speedy debility, the fever, the frequent fatality of the disease, and has noticed the different appearances of the rejected matter, varying in its colour from a pale-green bile to a deep and pitchy black. As the view, however, which we are disposed to take of it has, in part, for its object the distinction between this disease when apparently a simple affection of the mucous membrane, and when dependent upon some important disease of the neighbouring viscera, it will be necessary to consider rather more particularly its different symptoms. It must be allowed that such a distinction as this is of very high practical importance, since in the one case removing the melænous discharge will be curing the disease, and in the other only palliating it, and the curability, also, in the one case will probably be much greater than in the other.

This disease, as very many others, is capable of division into chronic and acute; and a better illustration of the manner in which these two forms attack the individual could scarcely be procured than those related by Dr. Brooke. In the one, a fatal case, and which it is very much to be regretted that permission could not be obtained to examine, dyspeptic symptoms long preceded the attack of the melæna.

'He had occasional fulness of the abdomen, with dull pain increased by pressure, particularly about the pit of the stomach; and regularly towards evening the pulse was quickened; and in the morning his tongue was white and furred, with thirst and bad taste in the mouth.'

The discharge of black matter was first noticed after the employment of purgatives, nor did the fæces become natural till salivation had been induced. During this time his strength very greatly declined, and he was troubled with excessive flatulence. The melæna, however, returned again rather suddenly, and he exhibited the appearance of a person who had suffered from much loss of blood. 'He was much sunk; the lips, tongue, and gums were quite white, and the countenance singularly pallid.' In this state the oil of turpentine was given, but in so small a dose (only twenty drops three times a day), that we scarcely can believe it had much effect; from some cause, however, the black discharge ceased, and he slightly recovered his strength; but the other symptoms continued without alleviation, and he finally died dropsical. Now, in this case, it is very evident that the melæna was sympathetic, and the consequence of some important affection of the neighbouring viscera. From the great de-

bility, likewise, and the exanguine state of the countenance which followed the discharge, there is great reason to believe that it consisted, for the most part, of blood. The proper view, therefore, as it seems to us, that we ought to take of such a case is this — that is, as an intestinal hæmorrhage dependent upon and excited by some visceral disease, and in which the mucous membrane no farther participates than as an emunctory. To look, accordingly, upon the black inodorous stools as the disease, must be an inaccurate mode of regarding it, and productive of imperfect practice.

In the second case related by Dr. Brooke, we have, as it appears to us, a simple, or, at least, a primary affection, of the mucous membrane. The patient had pain occasionally occurring in the stomach and bowels, frequently succeeded by vomiting, and the pain always began at the navel. 'What he threw up, in general, amounted to three or four pints of a watery, mawkish, sour, and somewhat bitter, dark-coloured fluid.' Purgatives did not much relieve him; but at length, after the administration of an enema, which produced 'two large motions, chiefly composed of black hard lumps, the passing of which gave him severe pain,' perfectly black and inodorous stools came away, among which was a somewhat solid matter, resembling boiled liver, without any smell. The patient was now become very weak, and cinnamon water and oil of turpentine were given: after having taken two draughts, he passed 'a large motion, chiefly composed of natural looking fæces, floating in a watery fluid, of a deep olive colour.' From this time he gradually recovered. Now, we conceive it scarcely possible to look upon this case in any other light than an affection of the mucous membrane, excited by retention of scybala. A greater portion of bile probably was discharged from the gall-bladder, and, of course, secreted by the liver, through the continuous irritation of the villous tunic; and, finally, blood was poured out by this tunic itself. This view of the subject is also rendered considerably more probable by a case related in the Ephemerides Naturæ Curiosorum, where, after death, the only diseased appearance in the abdomen was the loaded state of the colon, filled, as it is said, with 'scybalis induratis atque exsiccatis.'

In the third case related by Dr. Brooke, the attack was sudden, was only hæmorrhage, and appeared connected with an affection of the head. The subject of the sympathies of the mucous membrane has been lately opened by Mr. Fosbroke, and it is certainly very worthy of attention. As that author has stated, however, it is by no means a novel doctrine in medicine, although too little considered in practice.

That this kind of melæna is a sympathetic disease, appears to have been well understood by Hoffman, who attributes it, for the most part, to affection of the liver and spleen; and our experience would lead us to believe it equally so with many other organs, regarding it as generally only an intestinal hæmorrhage, but sometimes attended with a greater secretion of bile. In the case just referred to, from the Ephemerides Naturæ Curiosorum, there were tubercles in the lungs. In an instance of fatal hæmatemesis, which we had once an opportunity of examining ourselves, the only appearances were miliary tubercles. In some of the cases of miliary or granular consumption related by M. Bayle, there was fatal hæmoptysis, as he has termed it, though, from the great quantity of blood found in the stomach, which, however, he considers to have been swallowed, we should be rather inclined to consider it hæmatemesis. This, nevertheless, we are aware must be very much matter of opinion, since very large discharges of blood may be made from the mucous membrane without any manifest organic lesion.

After what we have stated with regard to the nature of melæna, it will be readily conceived that the investigations of morbid anatomy have not much contributed to inform us as to the manner in which it takes place. In general, there is no diseased appearance of importance about the mucous membrane. M. Billard, however, observes, that there is a peculiarity not to be confounded with the state of health. The large vessels are gorged, varicose, and filled with blood more or less dark coloured, or, in other words, there is much congestion. In an instance which Dr. Brooke has quoted from Portal, 'the spleen was found much enlarged, soft, and full of black blood; the veins, also, of the spleen, with the vasa brevia and the veins of the adjacent viscera, were enlarged and turgid with blood, while *the membranes of the stomach and intestines were of a singular whiteness!*' In a case of typhus fever, of which an account is given by M. Tacheron, where the digestions had been few, black, and little bloody, 'the mucous membrane of the intestines was, for the most part, of a remarkable whiteness. A peculiar black secretion, which was neither blood nor bile, filled a part of the small intestine and the whole of the colon and rectum. This matter washed off easily, and left the mucous membrane sound and untouched. The mucous membrane was red and moderately injected in some parts, but in others was covered with a mucous layer readily detached. In one place only was there an ecchymosis, which did not, however, exceed six lines in diameter.' Such is nearly the whole information we possess as to the morbid anatomy of melæna.

Perhaps we ought to except some information which Mr. Howship tells us is contained in a work he has published, entitled 'Practical Observations on the Diseases of the Bowels.' We are not acquainted with this work; and we cannot say that we feel perfectly satisfied with Mr. Howship's recommendation of it, instead of giving a short statement of the discoveries it contains with regard to melæna. We are not willing to say much upon the subject, but it does too strongly savour of a bookseller's trick.

We now proceed to notice some of the other morbid alterations of the mucous tunic. M. Billard has devoted a considerable portion of his work to the review of the different arrangement of the vessels in the various kinds of redness of which this structure is the seat; and he has, in most instances, accompanied them with notes, for distinguishing between their origin when proceeding or when free from inflammation. As in our last Number we gave the general distinguishing marks of inflammation, we shall not on the present occasion do more than enumerate these varieties of erubescence. These are named, in the true style of French verbal manufactories—ramiform injections, capilliform injections; pointed redness, striated redness, redness in patches, diffuse redness; and, frequently accompanying these, ecchymoses and petechiæ.

Besides these variations of redness of the intestines, the mucous membrane assumes a brown or violet colour, a marbled-brown colour, a slate colour, and a black colour. These varieties we shall notice very cursorily, for the most part, with the exception, perhaps, of the black colour.

There is an appearance of precision and exactness in the French pathological writings, which is, at first sight, very imposing, and particularly on British practitioners, who are little, perhaps too little, accustomed to very minute details. We have an illustration of this remark in the observations of M. Billard respecting the three first varieties of colour just enumerated. Dr. Baillie, in describing the morbid anatomy of inflammation of the bowels, has noticed the change of colour; and though not minutely characterising the different shades, has intimated that considerable varieties exist. Now, all that M. Billard has done more than this is to specify some of the intermediate tints between perfect health and mortification; and perhaps we ought to add, that he has called the attention to the remains of former gastric affections. That this is really the fact, the cases in which these different appearances were observed sufficiently prove; being nearly, without exception, instances of more or less acute inflammation of the mucous membrane of the stomach and

bowels. We are very far from intending to undervalue this minute accuracy of the French writers, though we think it ought to serve as a caution against undervaluing the pathologists of our own country. So far as our observation has extended, there is a disposition in England to be satisfied with general authentic descriptions, and comparatively with some of our continental neighbours, a disinclination to impose upon ourselves or upon those around us, by merely dressing up old facts in new apparel. We were most particularly struck with the proneness of the pathologists of France to this practice, in the great discussion that was excited respecting the softening of the brain — an affection which we had noticed and mentioned long before any of the French papers were published upon it, though certainly neither then nor now believing the observations not to have been made before. M. Billard, however, though entitled to claim nothing from the novelty of his notices, is entitled to commendation for the greater details into which he has entered, and for the general correctness of his deductions. He has well stated the difficulty of a perfectly accurate description of the colour which the mucous membrane sometimes assumes, and concludes with saying, that 'the violet shade, the clear brown, the reddish brown, the dark brown, indicate, to a certain point, the degrees of intensity, and sometimes the duration of the inflammation.' The marbled-brown colour is also a product of inflammation, but, perhaps, rather chronic than acute. The slate colour, M. Billard has not been able to trace from its origin, but appears disposed to consider it as the remains of some former inflammation or, at least, congestion.

When speaking of melæna, we mentioned the doubt which existed how far different diseases had been comprehended under that one head. This doubt seems to receive confirmation from the phenomena attending sometimes upon that alteration, which M. Billard calls 'the black colour,' and which Dupuytren, Bayle, and Laennec, have treated of under the title of melanosis. There is also a paper upon this subject, by Messrs. Cullen and Carswell, in the Edinburgh Medico-Chirurgical Transactions. The cases are worth reading, though the commentary is rather more pretending than profound. For our knowledge, however, of the nature of the matter of melanosis, we are most indebted to M. Breschet. The melanosis exists in two forms, the one encysted, occurring in every structure of the body, and varying from the size of a pea to that of a pigeon's egg. The cysts, which are the only organised parts of the tumour, contain a black, or sometimes rather a yellowish matter, sometimes liquid,

diffluent, or pultaceous, at others hard, concrete, and laminated, and this matter is free from odour or any decided taste. The other form of these melanic productions, and with which we are more immediately concerned, is that of the pseudo membrane, or membranaceous laminæ, composed of many layers, and deposited on the surface of the mucous or serous tissues. These kinds of false membranes are either consistent, or soft and almost fluid. M. Breschet acknowledges that every thing is yet to be learned as to the origin of this affection; yet he evidently considers that melæna is of the nature of melanosis. If, however, the dissections are correct which we have noticed above, in which, though black matter had been excreted, no marks of melanosis were found, it appears to us that the common form of melæna must be regarded as a different affection; and, so far as pathological investigation affords us any information, we should imagine infinitely more curable. The following deductions, also, of M. Billard seem to point out, supported as they are by several striking facts, that at least there is more than one species of melæna. 'A black matter is sometimes rejected by vomiting at the same time that there exists a black colour on the internal face of the stomach.' This, then, may be considered as true melanosis, the symptoms and the dissections corresponding with each other. 'The melanic colour is found ordinarily upon the intestinal tube of persons who have died from a much prolonged chronic enteritis, so that we are led to believe that it is the result of a morbid alteration which the blood, accumulated by the inflammatory process in the mucous tissue, has at length undergone.' And here, again, we see that the progress of the disease is different from those cases of melæna which we have quoted above; and to this it may be added, that while the black secretion and colour had very frequently been observed upon the villous tunics, where neither vomiting nor purging of black matter had been experienced, so likewise, where these symptoms have been present, the majority of examinations have exhibited no morbid alteration of the mucous membrane. We conceive, therefore, that we have been perfectly justified in considering this deposition separately from melæna. We pretend not, however, to reconcile or to explain the differences existing; we merely intimate, what appears to us the true and correct fact, that they do exist. The matter of melanosis, according to some analyses reported by M. Breschet, exhibits the same principles with the coagulum of blood, with the exception of the black colouring matter, which seems to have undergone some alteration, and to be partly combined with the fibrine.

The next division of M. Billard respecting the diseases of the mucous membrane, is entitled, ' Alterations of structure without loss of substance, and alterations of structure with loss of substance.' Some of these we shall necessarily pass over with very little comment; as, indeed, scarcely, so far as we are at present acquainted with their symptoms, admitting of more than a simple announcement. Under alterations of structure without loss of substance, are comprised, ' emphysema, œdema, fungoid appearance, hypertrophy, and polypous excresences, the thinning and the softening of the mucous tunic, and the development of the muciparous glands.'

Emphysema.—This is rather an affection of the submucous cellular texture than of the tunic itself. M. Billard has related the particulars of the only case in which it was observed. This was in a girl seventeen years of age, who had never menstruated. The abdomen was tympanitic and painful. She was subject to quotidian fever; and a few hours after being received into the hospital, she was attacked with a violent pain in the epigastrium, great agitation, with shiverings similar to those which precede the paroxysms of intermittent fever. The pulse was small and irregular. She died in an hour afterwards. There were many curious appearances about the body, particularly an ecchymosis in the cellular tissue surrounding the trunk and branches of the sciatic nerve. The intestines were filled with air, and the peritoneum, mesentery, and omentum, exhibited frequent ecchymoses. At the inferior third of the ileum, the mucous membrane, to the extent of two inches in length, and in the whole of its circumference, was raised by gas contained within the meshes of the subjacent cellular tissue. There is nothing in the symptoms or in the other morbid appearances to explain how this takes place. M. Billard concludes, and properly, that it is not a result of putrefaction; as he had once seen it in a soldier killed in a duel, and opened twelve hours after death. Upon the whole, this appearance seems rather curious than important, in a pathological point of view.

Œdema.—This, like the former, is an affection of the subjacent cellular tissue. It exists with and without inflammation, and appears generally, if not always, connected with dropsy in other parts. It does not appear to be connected with any peculiar known symptoms.

Fungoid Appearance.—This is divided into inflammatory and non-inflammatory. The former is precisely of the same nature with the too plentiful granulations of old ulcers, and is more or less evidenced during life by the common symp-

toms of intestinal disease, pain, diarrhœa, and tenesmus. The latter is a species of œdema, and not generally difficult to distinguish.

Passing over the other morbid appearances which occur without alteration of structure, we present to our readers the following extract from M. Billard respecting the inflammation of the muciparous glands: —

'1st, The muciparous glands of the stomach and intestines may be the seat of an inflammation more or less acute.

'2dly, Their inflammatory development presents three degrees: *first*, simple swelling, with redness of the gland, with inflammatory areola at its base, and the tumours distinct; *secondly*, the swelling increased, the base enlarged, a white point appears at their top, which is generally depressed, and marked merely with a greyish spot, that answers to the secretory office of the gland; *thirdly*, inflammation progressing, the bases of the tumours are enlarged, run into each other, and produce a very decided swelling of the mucous membrane. Their summits burst, matter escapes, and an ulceration is left, the edges of which are bloody, and the cavity filled with a coagulum. The disease is confluent.

'3dly, The glands being more numerous and larger in the ileo-cæcal region, their united bases cause a thickening of the membrane in this place, which also participates in the inflammation of the mucous follicles, but is not the principal seat of the inflammatory process.'—P. 436.

Of the patients upon whom these intestinal exanthemata were observed, the one died from small-pox, and the other from an acute enteritis, which terminated fatally with low fever in twelve days.*

These glands may also be the seat of a chronic inflammation, and may become hardened, scirrhous, and tuberculous. The most important observation, however, of M. Billard upon this subject is, that he has observed this kind of morbid development of the muciparous glands to coincide with the tubercular state of the lungs and the general enlargement of

* The existence of pustular eruptions in the mucous membrane has been described by very many authors; but M. Billard supposes them, in most cases, at least, to be inflammatory swellings of the glands. In small-pox they very constantly occur, and are most probably of the same nature with the external eruption. Nor is there any thing inconsistent with observation in the view M. Billard has taken of them, since the external eruption in small-pox is, perhaps, a peculiar inflammation of the sebaceous follicles of the skin, another species of which is exhibited in acne. Not unfrequently, also, pustules, so similar in appearance to the variolous pustule, occur in the skin, as scarcely to be distinguishable, excepting from concomitant circumstances; such as freedom from fever, and being contemporaneous with an eruption of a decidedly different character. Whatever differences exists however, in the pustules, these seem generally to be the primary seat of ulceration.

the lymphatic glands. He admits, however, of this, which he regards the general rule. They who recollect how frequently tubercular phthisis and disease of the bowels appear sometimes together, and sometimes supersede each other, will recognise the great importance of this observation in explaining the phenomena of different cases of consumption. We have frequently noticed instances where ulceration of the bowels, having preceded all affection of the chest, was so prominent as to have led the friends entirely to overlook the latter disorder, and in which its extension proved fatal long before the tubercular degeneracy of the lungs would have caused death. We have even seen it in this form sweep off a family of five girls at about seventeen years of age. The disease always commenced in the bowels, with slight pain about the navel preceding every dejection, which was never solid; then a short dry hacking cough, and hectic fever; and the individuals died suddenly before much emaciation had occurred. The only case that was examined shewed the mucous membrane of the alimentary canal in a state of ulceration from one end to the other, and the ulceration had proceeded into the larynx and bronchial tubes. The immediate cause of death appeared to have been ulceration of the chordæ vocales. The lungs themselves were studded with tubercles, some of which had already suppurated. A considerable portion of their substance, however, was still sound. The symptoms in the other individuals were so nearly similar, as scarcely to admit any rational doubt respecting the nature of the disease that carried them off; in all, it is probable the same morbid appearances would have been found. M. Andral has also remarked the coincidence of tubercular disease in the lungs and mucous membrane of the intestines.

We have somewhat anticipated, in the observations just made, the subject of ulcerations of the villous coat of the alimentary canal, to which we must now more particularly call the attention of our readers.

Every step we take in the investigation of the morbid anatomy of this membrane more forcibly reminds us of the analogy existing between it and the external cutis. In this latter, ulcerations are acute and chronic; they originate in pustular eruptions, in small or large tubercles, in inflamed centres in the same plane with the sound skin, and from slight excoriations. We find precisely the same course maintained in the different ulcerations to which the mucous membrane is liable.

The origin of ulcers from pustules has been already described. As they proceed they extend on every side, gradually comprising within their circumference the space that

the pustule occupied from which they originated. In size, in shape, and in depth, they necessarily very much vary, and their edges are sometimes smooth, white, and covered with mucus, at others, jagged and very red. Occasionally, the mucous membrane is detached for a considerable distance round the ulcerated part. These ulcerations are acute, and generally very rapid in their progress. The symptoms by which they are indicated we shall consider hereafter.

The chronic ulceration of the bowels, according to M. Billard, equally with the acute, has its primary seat in the muciparous glands. Here, however, the progress is slower, the edges are thicker, harder, and frequently even scirrhous, and the ulcerated surface covered with a greyish, inodorous substance, that is readily removed. These ulcers are not unfrequently also accompanied with dark brown, or sometimes orange-coloured patches, and are more commonly attendant upon the latter stages of phthisis pulmonalis. Small tuberculous granulations likewise occasionally give origin to ulceration; and though M. Billard states it as a simple conjecture, it seems very probable that the granulations are nothing more than the glands of Peyer in a state of disease. In the appearance of these ulcers when fully formed, there is nothing to distinguish them from those that have been described in the preceding paragraph.

M. Cloquet has described also a species of ulceration proceeding from a circumscribed softening of the mucous membrane, without any very evident surrounding inflammation. The first change of the membrane is into a soft, almost fluid state, surrounding a black spot. An escar is formed, which falls off, leaving an ulcer that very quickly extends in every direction. This state principally takes place in children. Another commencement of ulceration is in slight excoriation. These are only distinguishable from the former in their incipient stages.

Whatever may be the origin, however, of ulcers in the intestines, when they have been developed to a certain extent, their appearance is in every case almost the same, and it is as difficult to ascertain their source here as upon the external surface of the body. Some peculiarities will, of course, be readily discernible, while, in general, the character will be very nearly alike. Thus, ulcers which, though very extensive, have had a rapid progress, will be easily distinguished from those of a chronic nature. In the one, the edges will be considerably less raised and tenderer than in the other.

With regard to the seat of ulceration, they appear most frequently to be found in the lower part of the ileum, always

increasing in number and extent as they approach the ileo-cæcal valve. M. Andral has given a comparative table on this subject, so far as relates to ulceration in fever; and from our own observation, we should be inclined to consider it as equally accurate in other diseases.

Seat of Ulceration.		Number of Bodies.
Stomach		10
Duodenum		1
Jejunum		9
Ileum		38
Cæcum		15
Colon	Ascending	4
	Transverse	11
	Descending	3
Rectum		1

There are cases, also, though rare, in which all these intestines have been comprised within the sphere of ulceration, scarcely any part of the mucous membrane being in a sound state. Dr. Simpson, in the Edinburgh Medical Essays and Observations, has noticed an instance of this kind in a phthisical patient. His description is not very lucid, but little doubt, we think, can exist of its being a case of ulceration.

'The abdominal viscera,' he observes, 'shewed nothing observable till the stomach and intestines were laid open. Scarce in them were found one of the valves or rugæ. Nay, the pulpy villous coat was to be met with in few places, but plenty of abraded pieces of membrane scattered up and down in them, in an inflammatory state, looking as if they were injected; while the nervous coat appeared both in stomach and intestines neat, clean, in no way covered; only at the rectum and part of the colon next to it, there were several gangrenous stains.'

Dr. Baillie, certainly the greatest British authority, says, that the inner membrane sometimes 'hangs in tattered shreds, occasioned by the great ravage of the ulceration.' It seems somewhat curious that this celebrated pathologist differs from the table we have given respecting the seat of ulceration, appearing to think it *not* so common in the small as in the great intestines. He, however, agrees with M. Billard in the opinion, that 'in the follicular glands which are gathered together in little oval groups, ulceration occurs more frequently than in other parts of the intestine.'

Gangrene occasionally takes place in the mucous membrane; there seems, however, no certain distinction, excepting from the accompanying odour.

By far the most difficult part of our task still remains—we mean the connexion between the symptoms during life and

the appearances discoverable after death; and, unfortunately, on this subject we have few materials indeed.

The first object, of course, is to discover whether any organic lesion at all exists in the alimentary canal; and, in the next place, what is its seat and its nature.

M. Andral has remarked, that the state of the tongue is of very high value in indicating affections of the stomach in fever. If the tongue remain constantly pale, and does not become red, when very dry, or if, when crusted with thick black sordes, the intervals are pale between the different parts, the stomach is generally sound. But when, on the other hand, the tongue is very red and dry, there is more or less inflammation present in this organ.* The first symptoms in fever of lesion of the inferior portions of the alimentary are frequently very obscure. For, as M. Andral has very accurately noticed, though we may be certain that a more or less active inflammation is present, if the skin is burning, the pulse frequent, and the alvine dejections bloody or composed much of mucus, 'yet nothing is more common than the absence of every kind of pain in cases in which the internal surface of the ileum, cæcum, and colon, are covered with ulcerations.' We have already stated, that the bloody dejections, and even pus, are often expelled while the membrane is in a sound state. More frequently, however, the ulcerations may be recognised during life, though, perhaps, too late for any medical interference. The principal symptom by which these ulcerations are indicated is diarrhœa: yet it is very evident, that every species of diarrhœa is not dependent upon organic lesion. When, however, in fever, it continues very obstinate and profuse, accompanied with griping pain in the bowels every time the patient has an evacuation, or, instead of being profuse, giving rise to constant tenesmus, the discharge being small, and composed of little else than mucus, there is much ground for believing that ulceration has already taken place in some part of the canal. It is by no means, however, necessary that this lesion should be in the cæcum, colon, and rectum, to produce diarrhœa: oftener the ulcerations do not pass beyond the cæcal valve. Sometimes, however, there is obstinate costiveness in the first instance, succeeded by uncontrollable purging. This will happen when the lower bowels are sound,

* This symptom, however, can by no means be taken alone — like almost every other, in the present state of our knowledge, it is only valuable in conjunction with many others. Accordingly, pain in the scrobiculus cordis, with frequent nausea and vomiting, and, at the same time, the tongue being red and dry, afford us good reasons to believe that there is diseased action going on in the stomach.

and, perhaps, loaded with hardened fæces. In a case related by M. Andral, the costiveness remained; and, on examination after death, there was ulceration discovered in the ileum, but the large intestines were full of consistent yellow fæces. The ulcerations in fever, so far as pathological investigation has hitherto been carried, cannot be regarded as an essential cause of the fever, nor can the extent of ulceration be judged of by the intensity of the febrile symptoms. For though, in most of the cases which M. Andral has related, some affection existed, yet these were neither correspondent to the severity of the disease, nor in every case could it be affirmed that the mucous surface was unsound. The chronic ulcerations are in almost every case attendant upon other diseases, a simple disease of the mucous membrane of the bowels being very rare, even if it ever happens at all; and there are some diseases, as phthisis pulmonalis, in which this may be regarded as almost a constant termination of the disease. Where, however, these ulcerations are not manifestly accompanied by disorders of other parts, there is even more obscurity respecting their symptoms than in acute ulceration, especially when they occur in the upper part of the canal. Dr. Baillie says of the ulcers in the stomach, that he has some reason to believe that they are often slow in their progress. 'They are attended with pain or an uneasy feeling in the stomach, and what is swallowed is often rejected by vomiting.' The case of the lamented Béclard, however, as related by M. Billard, will serve particularly well to illustrate this disease, and, what is far more important, that it is even curable.

'Six years ago, after great labour and forced watchings, during which M. Béclard drank much coffee, to enable him to study during the night, he experienced the symptoms of gastritis, which very soon passed into a chronic state. He vomited the greatest part of his food, and was subject to very frequent internal pains. He confined himself to a very strict diet, had local subtractions of blood made, and rubbed the epigastrium frequently with tartarised antimonial ointments. For a very considerable time he experienced no relief. He persisted, however, in this severe regimen, and in eating and drinking nothing to excite the stomach. At length, the pains became less severe, and returned at very distant intervals. He died of a cerebral affection; and, upon examination, a cicatrised ulcer was found in the smaller curvature of the stomach, near the cardiac orifice, and of the size of a twenty sols piece, the surface of which was depressed; it was crossed by a strong cellular band, on each side of which were two laminæ, extending downwards to the peritoneal coat by which they were bound. The edges were neither red nor swelled. The rest of the stomach was perfectly sound.'

In the symptoms, after all, that have been enumerated,

there is nothing that could be maintained as an unerring characteristic of ulceration of the stomach — nothing which is not of almost daily occurrence, and far more easily curable than actual ulceration probably would be. Perhaps the distinction to be drawn from its duration, as hinted by Dr. Baillie, is the most certain, though even this cannot always be depended upon.

We have stated the manner in which the different kinds of ulceration originate in the bowels, in chronic diseases; we know, however, of no symptoms by which they can be distinguished during life. Pain, hectic fever, emaciation, and diarrhœa, are more or less common to them all; and their nature, whether curable or not, or whether capable of relief, is rather to be judged of by concomitant circumstances, than by the apparent state of the bowels themselves. In scrofulous diseases, or in the common forms of phthisis pulmonalis, it will seldom happen that much room is left for interference. Yet even here, occasionally, the attentive and intelligent physician will find opportunities, which will be almost as much valued by the sufferers as if their disease were entirely removed. It does, indeed, too often happen, that where much pain is present, or that perpetual tenesmus which not rarely renders the latter stages of consumption peculiarly wretched and distressing, the exhibition of opiates fails to bring relief, while very slight topical bleeding quickly proves of decided benefit. Yet, again, here also is care requisite, for active measures in debilitating chronic disease invariably accelerate a fatal event. When, however, a physician knows that real inflammation produces the pain, he will hardly hesitate at using the proper measures to procure alleviation, while he will, at the same time, be peculiarly careful not unnecessarily to increase the feebleness of his patient.

We have now given our readers most of the information contained in the work of M. Billard, with the exception of the cases, the number of which, and the minute description of the morbid appearances found in dissection, form the greater bulk of the volume. To these we have endeavoured to add some information from other sources. We can, however, most honestly recommend the work to the cultivators of pathology as a valuable, and, in most instances, an accurate compendium of our present knowledge of the subject. There is, however, one part upon which he has not touched at all— we mean the polypous and cancerous affections of the membranes. Mr. Howship, in a very slight degree, has noticed the occurrence of these disorders in the stomach, without, however, throwing any additional light upon them.

From the collection made by this author, we learn that the

stomach, and probably the mucous membrane, may become the seat of polypi, having 'a dense texture, resembling that of uterine polypi.' These tumours may sometimes be perceived externally, as was the case with one of which an account has been given by Dr. Monro.

'This was felt to the right of the navel, and was supposed to be situated in the colon. On examining the body, the stomach was found to have fallen as low as the navel. On opening it, a fleshy tumour was discovered, attached by a neck to its internal coat. The surface of the tumour was smooth, and its body so firm, solid, and tough, that it was cut through with difficulty.'

In another instance drawn from the same source, the tumour was of a fibrous texture, and resembled, in consistence, the substance of the brain.

Real scirrhus is also a disease of the stomach, and, at length, cancerous ulceration. The neighbourhood of the pylorus is the most frequent site of this affection. The extent to which they may proceed before death ensues, is truly astonishing. In an instance related by Dr. Pringle, 'there was a hard granular excrescence found in the cavity of the œsophagus, continued from the middle of this canal to the upper orifice of the stomach, filling the whole cavity so much, that a probe could scarce be thrust down into the stomach.'

The symptoms of these complaints are those of irritation of the stomach, pain, vomiting, and great emaciation. In the earlier stages, we know of no symptoms by which they can be certainly distinguished; in the latter, it is scarcely possible to mistake them. Occasionally, however, it would seem that the most constant indication, viz. vomiting, may be wanting. In an instance quoted by Mr. Howship from Mr. A. Burns, where the stomach, colon, and omentum were united and indurated, there was an ulcerous opening, by which the stomach communicated with the bowels. All the symptoms vary much in degree, and their progress is very different in different individuals.

Mr. Howship has related the dissection of a child who died from drinking boiling water. The stomach exhibited 'an effusion of coagulable matter, mediate in appearance, between lymph and mucus, and that so decidedly, as to give the idea of an additional membrane lining the cavity, and visibly terminating at the cardia.' From this, and another case that recovered, he is disposed to conclude, that in *all* such accidents the water is actually swallowed. A slightly attentive review might, however, have satisfied him that the injury is not in every case the same. In Dr. Hall's case, no injury of the œsophagus or stomach could be observed. In

Mr. Gillman's case, 'the whole interior of the mouth, the fauces, the pharynx, and the œsophagus, to within a short distance of the cardiac orifice of the stomach, presented the usual appearance of a scald, and the cuticle was easily peeled off from parts of the tongue and upper parts of the œsophagus;' and in Mr. Stanley's case, the trachea, œsophagus, and stomach, were of a healthy appearance, while, even in the mouth and pharynx, 'the morbid appearances were just sufficient to shew that irritation had existed in the parts.' These facts seem to us to make the subject very clear, and to render it incumbent upon the practitioner rationally to consider which are the parts that have been injured, and to apply his remedies accordingly. Dr. Hall's experience sufficiently testifies the occasional propriety of even opening the trachea; while Mr. Howship's shews that the stomach may sometimes be the principal seat of injury, and, of course, ought to be attended before other parts. We are, perhaps, a little disposed to undervalue the service which such facts as the cases of Mr. Howship render to medical practice, from having previously formed opinions of the same kind as these support. We have repeatedly seen cases where the strong sulphuric and nitric acids have been drank, and we have examined the bodies after death. Here the marks of the presence of the acid in the abdomen were always most manifest. The erosion of the walls of the stomach, the yellow stains of the nitric acid, and the odour, rendered it quite certain that the acid had been really swallowed. We saw, therefore, no reason why boiling water would not be as easily swallowed as these most corrosive fluids. Placed in a large manufacturing district, where these accidents frequently happen, we have been long familiar with their effects, and are, perhaps, as we have hinted above, scarcely fair judges of the real value of Mr. Howship's cases. If, however, the profession generally have been dependent for their information upon this subject to the few cases in the Medico-Chirurgical Transactions, then the accounts which we have just noticed can scarcely be valued too lightly.

In giving the opinion, that some attention has induced us to form, of Mr. Howship's work, we could have well wished that we had had a more agreeable task than that of stating the grounds of our disapprobation. This, however, is not because the work is either destitute of information, or because any thing actually incompatible with our present knowledge is stated, but because it is really nothing more than a book of extracts, placed in a kind of order, indeed, but with very little lucidness of arrangement, and no valuable inferences from the

facts he has collected. Books like these are, indeed, 'the plagues of students and the thieves of time' — much of every thing is given, but it is a repetition only of that which has been given before. With many persons we certainly should not have noticed such a work at all, but should have left it to its inevitable fate—the shelves of the bookseller, or the dusty library of some universal collector. With Mr. Howship, however, this is not allowable. Possessed, as he evidently is, of considerable information, and certainly not ignorant of previous works upon the subject, it was incumbent most particularly upon him, if he wrote at all, not to have produced such a volume as this. It is not a collection nor a comparison of all the facts yet known; it is not the embodying of a set of principles deduced from such facts; but it is a book of extracts, such as any studious individual might be inclined to make, with observations upon particular cases, or now and then upon two or three together. It is certainly very desirable that the scattered histories of cases should be brought together, and that some general deductions should be made, by which the body of the profession might be guided. We have yet another species of advice to offer this author; and totally unknown as he is to us, and as we believe we are to him, we trust he will give us credit for having no personal motives influencing us. It is, neither so frequently to recommend his former publications, nor to load Mr. Heaviside and Dr. Hooper so continually with adulation. They may, and we doubt not they do, deserve much of his commendation; but the full measure and flowing over which he bestows conciliates no respect for them, while it decidedly lowers him in the estimation of his readers.

II.

OF THE MEDICINAL VIRTUES OF IODINE.

Medical Researches on the Effects of Iodine, in Bronchocele, Paralysis, Chorea, Scrofula, Fistula Lachrymalis, Deafness, Dysphagia, White Swelling, and Distortions of the Spine. By Alexander Manson, M.D., Physician to the General Hospital, and St. Mary's Hospital and Dispensary, Nottingham. London, 1825. Pp. x. 452.

Of the number of medicines which have lately been introduced into practice, it is to be expected, at least it is to be hoped, that some will be found, when subjected to the test of a more general and unprejudiced experience, really to possess a share of the virtues attributed to them by those who were the first to write upon their effects in disease. Of these

medicines, iodine is certainly one of the most important, and one, also, which is likely to uphold its reputation. Its virtues in the cure of bronchocele were already proved by the numerous instances of its successful exhibition in this disease which are on record; but until the appearance of the present volume, we had no very satisfactory evidence that it had been found decidedly beneficial in some other maladies in which it was given. As respects some scrofulous disorders, in which we have ourselves prescribed this remedy, we are still at a loss to determine whether the beneficial changes which, in several instances, took place in the disease subsequently to its exhibition, actually proceeded from it, or from other remedies which were employed at the same time. And we are also unable to decide, whether the circumstance of this medicine proving altogether of no avail in some other cases in which we exhibited it, was not owing more to its faulty preparation, its deficient mode of exhibition, both as respects the dose and the period allowed to elapse between each, or to the inattention of some of those to whom it was prescribed. In the metropolis, perhaps, especially, and in private practice more particularly, the physician can never be sure that this substance will be supplied in its genuine state, or that it will even be supplied at all, by the chemists to whom the prescription may be taken. And if he direct his recipe to be prepared by any one in preference to another, he runs the risk of an imputation, which every physician ought carefully to avoid. It is chiefly, we may say, only in the large hospitals that a metropolitan physician has a proper opportunity of making himself satisfactorily acquainted with the real medicinal virtues of a new medicine; but comparatively few have such an opportunity, and those who have it seldom embrace it for the advantage of the profession. The consequences of all this to the greater number of town physicians are, that they can seldom observe or depend upon the operation of the new remedy which they prescribe, or, indeed, upon any remedy which at all admits of adulteration. In this particular the general practitioner has a decided advantage over the physician; for if his medicines are not all good and genuine, he is himself chiefly to blame. But to proceed with the work before us.

Dr. Manson begins with his 'researches on the effects of iodine in bronchocele.' After noticing the prevalence of this malady at Nottingham and the surrounding country, and the manner in which he became acquainted with the reports of iodine being found useful in it, he gives the history of a great number of cases, the majority of which were completely cured, and almost all improved, by this remedy, in conjunc-

tion with aperients. These cases are certainly very interesting, inasmuch as they clearly prove the medicine in question to have a decided influence over the disease. We shall lay some of them before our readers. It is unnecessary to remind them what an obstinate complaint bronchocele has always proved itself to be under every plan of treatment which was generally used before iodine was employed.

'Case I.—Hannah Wollatt, æt. sixteen, frame-work knitter, Hucknall, admitted as an out-patient of the Nottingham General Hospital, the 6th of March, 1821. Labours under bronchocele of considerable size, that presses on the trachea so much as to occasion shortness of breath and wheezing. It is three years since the gland first began to enlarge. Has not yet menstruated. Complexion florid. Lips thick. Her aunt labours under bronchocele, or, as she calls it, a thick neck.

'Capiat pil. aloës cum myrrha gr. x. h. s. si tarda est [sit] alvus.

'℞ Pulv. Sodæ Carbon.
—— Tragacæ. C. āā ʒss.
Misce et divide in pulv. xx. Capiat j. ter in die ex aqua.

'March 9th.—Is nearly in the same state. Pills move her once in twenty-four hours. Cont. remed.

'March 16th.—There is no change in the tumour, and her breathing is no better. Pills keep the body open; appetite good. Pulse 84, and soft. Skin cool. Tongue clean. Catamenia have not yet appeared. Omitt. pulveres.

'Cont. pil. aloës cum myrrha h. s. pro re nata. Sumat tæ. iodini gutt. x. ter in die ex aquæ cyatho vinario.

'March 23d.—The tumour is considerably smaller and softer. Breathing improved, and wheezes less. Has had three or four loose motions daily. Cont. pilæ. aper. si opus sit. Capt. tæ. iodini gutt. xv. ter in die.

'March 30th.—Breathing not affected unless she walks fast. No wheezing now. The tumour is about half the original size, and quite soft. Has three stools in twenty-four hours. Appetite very good. Drops occasion no sickness or inconvenience. Capiat tæ. iodini gutt. xx. ter in die. Cont. pil. aloës cum myrrha p. r. n.

'April 13th.—Much better. Cont. remed.

'April 27th.—The tumour is not quite dissipated. Drops agree. Cont. remed.

'June 15th.—Has been from home for the last fortnight, and has taken none of the medicines. Pergat in usu medicamentorum.

'July 27th.—The bronchocele is quite gone. Breathing free, no wheezing. Has not yet menstruated. Says she feels quite well. Discharged cured.'—Pp. 16—18.

Dr. M. mentions that, at the commencement of the treatment of this case, he was trying the carbonate of soda, with a view of ascertaining 'the efficient matter in burnt sponge, when Dr. Coindet's discovery of iodine being the active

ingredient in burnt sponge was announced to the medical world, to his great joy and satisfaction.'

We consider the following case interesting, owing to its collateral circumstances, and the inducement which it may give practitioners to try the effects of iodine more extensively in different diseases than has hitherto been done. We hope that we shall be excused for making the following remark; namely, that several valuable remedies have often been thrown aside when they have been found incapable of curing a particular disease, for the removal of which they had been extolled by those who brought them into notice, without ever having their properties tried in relation with other diseases. It should be considered, that every substance which is active in its relations with any parts of a living body must produce some change in the condition of those parts, and that change, when they undergo the process of disease, may be of such a nature as to modify them into a healthy state. But to the case.

'Case IV.—Miss N. æt. twenty. May 15, 1821. Born and brought up in Nottingham. Is of a florid complexion, brown hair, rather stout made. Has had a certain degree of bronchocele for seven years; it continues gradually to increase in size, and is hard to the touch. About seven years ago, had a scrofulous ulcer in the left instep, that continued open and discharged for about four years. After the catamenial discharge took place, the ulcer healed, but the foot generally, and particularly the instep, remains much larger and fuller than the other, so that she is obliged to have a shoe made on purpose to fit it, although the ulcer has been healed for three or four years. Has also laboured under a considerable degree of deafness for ten or twelve years, which occasions her to have a vacant look. Is in tolerable health for a person who is almost constantly in the house. Catamenia regular. Bowels only moved twice or thrice in a week.

'℞ Pil. Cambogiæ comp. ʒj. forma in pilulas xij. quarum sumat duas omni nocte h. s.

'℞ Tæ. Iodini ℥ss. capiat gutt. xv. ter in die ex aquæ cyatho vinario.

'May 16th. — The drops last evening made her sick, and she afterwards felt very cold. Bowels costive. Has not taken the pills. Pulse 84, and of moderate strength. Statim capiat pil. cambogiæ c. gr. x. et post alvi solutionem sumat tæ. iodini guttas x. ter in die ex aqua.

'May 19th. — Tumour softer, and thinks she can move her head more freely. Cont. pil. aper. et tæ. iodini.

'May 23d. — Goitre smaller and a great deal softer. Her foot smaller, and not so puffy. Drops agree. Bowels regular. Cont. pil. cambogiæ comp. p. r. n. Sumat tæ. iodini gutt. xv. ter in die.

'May 26th. — The bronchocele continues to diminish in size, and is much softer. The left foot also continues gradually to sub-

side, and she can move her toes much better. Cont. pilul. cambogiæ c. p. r. n. Sumat tæ. iodini gutt. xx. ter in die ex aqua.

'May 31st. — The foot measures one inch less at the footstep than it did previous to her taking the iodine. The skin is loose and in wrinkles, from the speedy reduction in size, and the parts are much softer. The bronchocele is also much smaller and softer, but, as the measure has been lost, I cannot ascertain the exact diminution. Cont. remed.

'June 5th. — Continues to improve. Cont. remed.

'June 7th. — Bronchocelè has diminished three quarters of an inch since the 31st of May. Foot no smaller since that time. Cont. remed.

'June 18th. — Her neck, including the tumour, measures one inch less than on the 31st of May, and the instep also measures a quarter of an inch less since that time. Cont. tæ. iodini et pilul. cambogiæ comp.

'July 7th. — I have seen the patient occasionally since the last report, without making any notes or alteration in the treatment. The thyroid gland is now very little larger than natural, and her foot is so much reduced that she can wear shoes that are fellows, which she has not been able to do for the last seven years.

'July 14th.—There is merely a perceptible fulness of the throat, but it is quite soft, and gives no inconvenience whatever. The feet are now nearly of a size, and she wears shoes of the same dimensions without inconvenience. A most important feature in this case has almost passed without notice — the patient's *hearing* has been restored in nearly a *perfect* degree. Discharged cured.'— Pp. 23—26.

The following case also decidedly proves the influence of the remedy over the disease, even when the complaint had been of very long standing, and where it existed in an aggravated state, by the formation of a bony tumour in the substance of the gland: —

'Case XV. — Elizabeth Norman, æt. forty-two years, married, and has four children. Out-patient of the hospital, February 10, 1824. Has resided all her life at Wilford, situated on the banks of the Trent, two miles from Nottingham. Says that she has laboured under thick neck *from a child.* The tumour and neck measure nineteen inches in circumference. The bronchocele is firm to the touch, and consists of many lobes. There is one portion that feels hard like bone, and I believe is bone. (This is the patient who was under my care about ten years ago, and is noticed at page 10, as having a bony mass embedded in the bronchocele. She was discharged without material relief, but having lately heard of my success in curing bronchocele, she has again applied to try if any relief can be afforded her.) Cannot walk fast from shortness of breath, owing to the pressure of the tumour. Suckles a child four months old. Her sister and a maternal aunt labour under goitre.

'Capiat liq. iodini gutt. x. ter in die ex aqua, et magnes. sulph. ℥ss. mane p. r. n. Rain-water only to be taken internally.

'February 20th. — Says that she has wheezed less this morning in coming to the hospital. Thinks she can move her head more forward than when admitted. Bowels open by the salts. Sumat liq. iodini gutt. xij. ter in die.

'March 12th. — Neck and tumour measure rather less than eighteen inches; and the different lobes of which the goitre is composed are more distinct, and have freer motion on each other. The hardness of the lobes is also sensibly diminished. The bony tumour is in the same state. Much less wheezing, and shortness of breath. Capiat liq. iodini gutt. xvj. ter in die per septimanam et posteà sumat gutt. xviij. liq. iodini ter in die. Fricetur tumor linimento iodini omni nocte.

'April 9th. — The neck and goitre measure nearly two inches less. The right side is subsiding faster than the left, and the whole tumour is considerably softer than it was at the last report. From the great diminution in size that has already taken place in this case, there is every reason to believe that this very voluminous goitre will be dissipated as completely as ever occurs in cases of such long standing. The bony tumour, as was to be expected, remains in the same state. If she takes more than fifteen or sixteen drops three times a day, her head aches, and she becomes very sleepy.

'Cap. liq. iodini gutt. xv. ter in die. Cont. linim. iodini. Sumat magnes. sulph. p. r. n.

'Recovering under treatment.' — Pp. 45—47.

Dr. M. gives a full history of fifteen cases of bronchocele, all of which were cured by the iodine, with the collateral aid of cathartics occasionally, with the exception of the last case which we have extracted, but which, as our readers will have seen, is in a fair way of being subdued. Independently of these fifteen cases, our author gives a tabular view of all those which have come under his care since his commencing to use the iodine. These are 120 in number altogether. We must refer the reader to the table itself, which shews, at one view, the age of each patient, the plan of treatment pursued, the result of that treatment, &c. The following is the general abstract of the cases: —

'General Abstract.

'Total number of cases	120
From these deduct four females twice admitted	4
Number of individual cases	116
Viz.—Males—cured	10
Ditto much relieved	1
Ditto discharged for non-attendance	1

Males improving under treatment ..... 3—Men, Total... 15
Females—cured 66
Ditto much relieved 9
Ditto without relief..... 2
Ditto discharged for non-attendance 10
Ditto improving under treatment .....14—Women, Total 101

Number of individual cases as stated above .....116.'

Palsy.—Dr. Manson proceeds to state, that the powerful effects of iodine, which he had witnessed in bronchocele, led him to think that, 'in cases of palsy arising from tumours or fluids pressing on the brain or spinal chord, or from morbid thickening of the investing membrane of the chord itself, iodine would prove a useful remedy, not only by stimulating the nervous system, and removing tumefaction and effusion, but also by correcting the strumous stage of the constitution that often gives rise to the disease.' Having thus explained his views as to the exhibition of this remedy in palsy, Dr. M. observes that, 'although he has been able to cure only a proportion of the cases of this disease, which have come under his care since April 1821, when he first began to employ iodine in it, he is, nevertheless, quite certain that he has been much more successful in his practice since that time, than he was previously with the use of all the ordinary means.'

Paraplegic Palsy.—The first case of this disease adduced by Dr. Manson is detailed very circumstantially and at considerable length. The patient, a young man, was treated in the Nottingham General Hospital. His habit was spare and slender: his countenance pale. He was completely palsied on both sides, from the neck downwards; his stools and urine passed involuntarily, and the sense of feeling was very much impaired, but not quite obliterated, in the paralytic parts. There was no distortion of the face, and he could articulate very well. At the end of three months from the time at which iodine was first employed, he was discharged from the hospital quite cured. We can afford room only for the following remarks, which Dr. M. has appended to this interesting case:—

'After taking thirty drops of tincture of iodine thrice a day, for five days, he was attacked with headach, and his pulse rose to 96 beats in a minute. The iodine was omitted—the headach went off, and in a few days he was ordered thirty drops of the tincture of

iodine, as before, to ascertain whether the headach and other febrile symptoms were occasioned by the iodine, or owing to some other cause. In three days, after resuming the use of the iodine, the headach was as severe as ever, and the pulse up at 100. I was now convinced that the dose of iodine was too large, and after omitting it for two days, I ordered fifteen drops three times a day, and gradually increased the number of drops, so that they did not afterwards disagree with the patient. From the history of the case, the purulent discharge from the ears, the swelling and stiffness in the neck, and the general appearance of the patient, I have no doubt that the palsy in this case was owing to scrofulous inflammation, tumefaction, and, perhaps, effusion, by which the spinal cord in the neck was so compressed as to render the parts below it paralytic. But, whatever pathological opinion may be formed of this case, the facts must still remain the same.'—P. 89.

The second case of this form of palsy adduced by Dr. Manson, was discharged from the hospital relieved; the third depended upon disease of the spine, which terminated fatally; the fourth also arose from a similar cause, but was benefited by the treatment; the fifth case originated in an injury of the lumbar vertebræ, occasioned by a fall, and was perfectly cured: this patient, a female, aged twenty-one, had also a bronchocele, which was likewise cured by the iodine. She commenced with ten drops of the tincture, three times a day; and increased the dose to fifteen drops.

Dr. M. next adduces the appearances, on dissection, in two cases of this form of the disease; but the iodine had not been exhibited in either of these. We perceive, at this place, that he recommends inspections of the vertebral canal to be made in the way now generally practised; but the manner in which it is done by Mr. Jowett, who appears to have performed the dissections for the author, deserves notice. 'He strikes each vertebra with a plumber's "hacking" knife and a hammer, about mid-way between the spinous process and transverse on each side. After the first portion of vertebra is got out, it is really surprising with what rapidity the whole canal may be brought into view.'

Hemiplegic Palsy.—The first case detailed under this head seems to prove very satisfactorily the remedial powers of iodine in palsy. In many recent cases of this disease there is at first a natural tendency towards improvement; and hence it is often difficult for the physician to determine how far the cure is the result of the treatment, or of the natural changes in the lesion on which the disease depends. But this case was of eighteen years' standing, and therefore those changes, if they had taken place, must have taken place long before.

'John Scothern, æt. fifty-six, a labourer, is a remarkably strong man, formerly a soldier in the 30th regiment. Admitted an out-patient of the General Hospital the 8th May, 1821. When in the army, about eighteen years ago, had one or two paralytic strokes, which deprived him of the use of the right half of the body. He informs me that he long remained in a helpless state; but after the lapse of several years, he recovered so much as to do a little work as a labourer ever since. He now complains of great weakness in the whole of the right side of the body, and particularly in the right arm and hand, and the right knee. The right hand shakes very much. The sense of feeling is also very imperfect in the right side. He is much troubled with pain in the occiput, and down the back. Swallows and articulates with difficulty, and says that his memory is very bad, and also his hearing. Bowels generally costive, and makes urine with difficulty. Pulse 84.

'Capiat pil. cambogiæ comp. gr. x. vel xv. hora somni, si tarda est alvus.

'Sumat tinct. iodini gutt. xx. ter in die ex aqua.

'May 18th.—Has less pain in the back part of the head; walks better, and says his hand does not shake half so much. Pulse 72, and of moderate strength. Bowels are kept open by two pills every night. Has taken no tincture of iodine for four days, the quantity he was supplied with having been all used.

'Cont. remed.

'May 25th.—Says he has more feeling in the paralytic parts, and less pain in the head, and all down the back. Makes water with less difficulty. Bowels generally open by two pills at bed-time, but is sometimes also obliged to take two in the morning. Pulse 72, and soft.

'Capiat tæ. iodini gutt. xxx. ter in die. Sumat pilulas p. r. n.

'June 1st.—Pain has quite left the head and back. Has more feeling in the paralytic side, and the right hand and arm shake much less; he improves in walking, and he says that his general health is much better.

'Cont. pilulæ. Capiat tæ. iodini gutt. xxx. ter in die.

'June 8th.—The case continues to proceed favourably. Pulse 64, and moderately full, but soft.

'Cont. remed.

'June 22d.—Continues to recover his health, and his hearing is very much improved. Pulse 62, and as at last report.

'August 3d.—Feels much better. Hand shakes less. Memory better, and he articulates with facility. Is subject to the night-mare when he lies on his back. His urine sometimes runs from him when asleep, but not so often as before he began to take the iodine.

'Cont. remed.

'August 24th.—He continues gradually to recover. He complains of pain at the upper part of the loins, and lower part of the back.

'Cont. remed. Appl. emplast. thuris comp. parti dolenti.

'September 14th. — Says that his right arm feels nearly as strong as the left, but still has a little shake in the right hand and arm. Walks very well. Articulates distinctly, and with facility, and hears nearly as well as ever. Plaster relieved the pain in the loins.

'Cont. remed.

'November 2d. — The medicines have been continued up to the present time. Except a little shake in the right hand and arm, he has as perfect use of the extremities of the right side of the body as he has of the left. His hearing and memory are both restored, and he can speak as well as ever.

'Discharged cured.'—Pp. 103—106.

This patient, the author informs us, remained well at the period when he wrote. The following case is also deserving notice: —

'Charles Newman, æt. fifty-two, butcher, July 16, 1821. This patient had a paralytic stroke the 20th of September, 1819, which nearly deprived him of the use of the left half of the body, so that he could not walk without a stick; after being two months under my care, he could walk without assistance, but the left arm and hand had made very little improvement when he left off the use of medicines. I met this man a few days ago, walking pretty well, but I found that he had not recovered the use of the left arm and hand, and that the whole of the left side, but particularly the arm, was very much affected by atmospherical changes, particularly during cold moist weather. I told him I had lately employed a medicine that was singularly efficacious in restoring the use of paralytic parts, and recommended him to make trial of it, to which he readily agreed. Pulse 84, and soft. Face rather pale; is giddy when he stoops.

'Capiat pilulæ cambogiæ c. gr. x. omni nocte, h. s. Sumat tæ. iodini gutt. xv. ter in die ex cyatho vinario aquæ.

'July 24th.—Is less dizzy when he stoops, and begins to recover the feeling of the paralytic parts, and can move them better.

'Cont. pilulæ. Capiat tæ. iodini gutt. xx. ter in die.

'September 4th. — Has been out of town, but has taken the iodine as directed. Says that his head is much better, and that he can use the left hand, and has more feeling in it.

'Cont. remed.

'November 29th. — Says he can walk, eat, and sleep a vast deal better. Can raise the left hand to the back part of the head, and hold a knife, and dress cattle with it now. Has taken no medicines for the last three weeks.

'Discharged cured.

'*Remarks.* — I have seen this man lately, and am happy to say that he has not relapsed. The whole left side is still a little weaker than the right. I may observe, that the reports in this case are at long intervals, owing to the patient not coming to me, which *he* thought unnecessary, as he was going on improving. I consider

this a very strong case in proof of the great remedial powers of iodine in palsy, as the patient had made no progress in the way of amendment for at least eighteen months previous to the exhibition of iodine.' — Pp. 114, 115.

Dr. Manson relates, in addition to those we have quoted, nine other cases, in which iodine either cured or relieved the patients. They are all interesting, and the reader will be well repaid for perusing them.

The next subject is '*Local Palsy*,' of which our author gives six examples, where the iodine proved successful. But the beneficial effects of that medicine are not so satisfactorily proved in any of these cases as in those of bronchocele, in consequence of purgatives and other assisting means being employed at the same time. The plan pursued, however, appears to us very judicious. We shall lay the following case before our readers: —

'CASE IV.—*Paralysis of the Right Arm and Hand.*

'John Boam, æt. seventy-eight, shoemaker, Warser Gate, Nottingham. Was admitted an out-patient of the General Hospital of this town, on Tuesday the 1st of April, 1823. He says, that on Sunday last, in the afternoon, when reading, he suddenly lost the power, in a great degree, of moving the right arm and hand; at present he cannot hold any thing in his hand so as to use it, which is a great loss to the poor man, as he has still to earn a living by mending shoes. The sense of feeling is also very much diminished in the right arm and hand since the paralytic attack. Has the perfect use and sense of feeling in the right lower extremity, and in all the other parts of the body. Has previously enjoyed very good health, and been a very regular, steady man. Tongue furred. Pulse 84, and of moderate strength. Appetite not amiss.

'Sumat misturæ purgantis ℥j. omni mane. Appl. hirudines vj. temporibus. Imponatur emp. lyttæ nuchæ, h. s.

'April 25th. — After having had leeches twice applied, and the nitric acid internally, very much diluted, and the daily use of the purging mixture, so as to keep the bowels open, it is stated in the hospital journal, that he had more use of his hand, and could hold a knife so as to cut a little meat and bread with it. On the 2d of May his arm felt heavier, and he had had less power in the hand for three days, although the weather had become warmer. The nitric acid was omitted, and he was ordered to take fifteen drops of the tincture of iodine, in water, three times a day, and to take the purging mixture, so as to keep the body freely open. In the course of seven days he experienced a marked improvement from the use of the iodine. On the 16th of May, he reported that he had more feeling and power of using the arm and hand.

'Cont. remed.

'May 23d. — Not so well — arm feels heavier, and cannot use

his hand so well. He ascribes his being worse to vicissitudes in the weather. Bowels open.

'Cont. remed.

'May 30th. — Much in the same state as at last report.

'Capiat tæ. iodini gutt. xx. ter in die.

'June 6th. — Is not able to take twenty drops, says they cause his stomach to burn, and produce flying pains all over him.

'Capiat tæ. iodini gutt. xv. ter in die. Cont. mist. purg. p. r. n.

'June 13th. — For a few days past has been able to take twenty drops of the tincture of iodine. Is troubled with more twitching and pain in the paralytic parts, but thinks the pain has been aggravated by swinging a weight of seven pounds.

'Capiat tæ. iodini gutt. xx. ter in die.

'July 4th. — Has gradually been improving since last report, but has been better and worse on particular days, according to the state of the weather. Is now so far recovered, that he has been able to work a little at his trade for the last five days. His hand is still weak, and trembles.

'Cont. remed.

'July 25th. — Has been in the country by my recommendation, and finds himself much better.

'Cont. remed.

'August 8th and August 22d. — Continues to recover.

'Cont. remed.

'September 5th. — Much better, and says he can now follow his trade in moderation. Is very thankful for the benefit he has received.

'Cont. remed.

'October 3d. — Has so far recovered, that he can work at his trade from morning to night; but the arm and hand are not yet so strong as they were previous to the paralytic seizure.

'Discharged cured.'—Pp. 160—163.

We shall now follow Dr. M. in his researches on the effects of iodine in *Chorea*. There is some analogy, although distant, between this complaint and some species of palsy. This analogy consists in both being related with the nervous system of voluntary motion; but whether the condition of the nerves and of their centres be similarly changed in both affections, has not yet been determined. This, perhaps, is a question of no great moment, if it be found in practice that the same remedies are useful in both diseases. It may be noticed, that chorea is a disease which more frequently attacks young than old subjects; whereas the reverse is the case with paralysis. Dr. M. remarks, that girls are much more subject to chorea than boys. From a list which he made of all the persons labouring under this disease, who have been admitted as in and out-patients of the General Hospital at Nottingham for the last twelve years, he finds 'that the total number amounts to 76, of which 22 are males,

and 54 females, or nearly in the proportion of 2½ of the latter to 1 of the former.'

We have eleven cases of chorea fully related, besides a tabular view of above sixty more. We shall select the first and the eleventh as examples, as we consider them two of the most interesting and instructive.

'Case I. — Ann Harrison, æt. twelve, lace-runner, of Nottingham, admitted an out-patient of the General Hospital, 11th June, 1822. — For three months has laboured under chorea in the right side of the body, which is now in a severe degree; articulates very ill; bowels generally costive; tongue a little furred. Was ordered a powder, with calomel, at bed-time, and a dose of purging mixture the following morning. After continuing the above plan for nearly a month, during which time the patient was purged every day, I find that she had greatly improved in walking, but that the involuntary motions of the arm continued, and that she could not speak better than when admitted. Conceiving that I had given the purgative plan a fair trial, on the 15th of June I ordered the same purging medicines to be exhibited, and ten grains of the subcarbonate of iron to be given in syrup three times a day. Seven days afterwards, her father reported that the powders had done her a deal of good, by stopping her lax, and improving her appetite and strength. At this time she continued to have four or five stools daily. I directed the subcarbonate of iron to be continued, and the purging powder and mixture to be given in turns only every other day, as it was evident that so much purging weakened the patient and retarded the cure. Fourteen days after the carbonate of iron was exhibited, the involuntary motions had diminished very much, and she could articulate much better. The same medicines continued.

'The patient continued gradually to recover, and on the 2d of August was so well, that she could use her needle, and walk very well, and only complained of debility, and that she could not articulate quite so well as before the attack. At this time she continued to have four or five motions daily, which made me discontinue the purging powder. The carbonate of iron was ordered to be continued, and the purging mixture every morning, when necessary.

'August 9th. — She now labours under involuntary motions in the extremities of the *left* side of the body. The right side is now free from twitching, or involuntary motions of the muscles. Her relations gave her three of the purging powders, of their own accord, in the course of last week. Stools black (from the iron).

'Cont. pulv. purg. et mist. purg. Omitt. ferri subcarbonas. Capiat infusi gentianæ c. ℥ss. bis in die.

'August 16th. — The involuntary motions continue in the left extremities. Articulates better. Bowels open. Stools not so dark.

'Cont. remed.

'August 23d. — Rather better.

'Cont. remed.

'August 30th. — The involuntary motions in the left arm have been worse since last report, but now have abated again. She was purged all last week.

'Intermitt. pulv. purg. Cont. alia.

'September 6th. — Rather better. Open in the bowels.

'Cont. remed.

'September 13th. — The purging mixture moves her very often. The involuntary motions continue.

'Cont. mist. purgans, p. r. n. Omitt. infus. gentianæ c. Capiat oxydi zinci gr. x. ter in die ex syrupo.

'September 20th. — Vomited the first dose of the oxyde of zinc, but retained the subsequent doses, which, she informs me, occasioned an unpleasant heat in the abdomen, with now and then a sensation of heat striking as low down as the knees. She further adds, that the oxyde of zinc made her chilly at first, and was succeeded by an intolerable sensation of heat; and that it has taken away her appetite. The involuntary motions have not been so frequent for the last two days.

'Capiat oxydi zinci gr. v. ter in die. Repet. mist. purgans p. r. n.

'September 27th. — The involuntary motions still continue. Complains of being feverish. Has six or seven stools daily, of a light colour, but very offensive.

'Omitt. oxydum zinci. Sumat misturæ purgantis ℥j. omni mane. Capiat tæ. iodini gutt. x. ex aquæ cyatho, ter in die.

'October 4th. — Feels better. Has more command over the left arm, and the involuntary motions are much less frequent. Bowels are moved two or three times every day, and stools of a brownish-yellow colour.

'Cont. mist. purgans. Sumat tæ. iodini gutt. xv. ter in die ex aqua.

'October 11th. — Continues to improve.

'Cont. remed.

'October 18th. — Says she is only twitched a little at times, and that she can speak very well now. Feels stronger. Appetite better. Bowels open.

'Cont. remed.

'October 25th. — Is very little troubled with the involuntary motions or twitchings. Speaks as well as ever. Recovers flesh and strength. Bowels open, without being purged. Iodine agrees very well.

'Cont. mist. purg. p. r. n. Capiat tæ. iodini gutt. xx.

'November 1st. — Is very seldom twitched now. Feels an improvement in her general health. Articulates very distinctly, and to all appearance is well.

'The medicines were continued till the 22d of November, with the view of preventing a relapse, when she was discharged cured.'— Pp. 187—192.

Dr. M., in a note at the end of this case, makes some very

apposite remarks, but our limits will not allow us to notice them further.

The other case which we shall quote is the following:—

'Case XI.—Anne Holmes, aged ten years and six months, Dutch Alley, admitted an out-patient of the General Hospital, the 16th of June, 1824. This patient was brought to my house for gratuitous advice, on the 29th of last month, when I was informed that she had been declining in health and strength for a month, and that the extremities on the right side of the body had been twitched and moved involuntarily for the last week. Walks very badly. Cannot articulate distinctly. The sense of feeling is imperfect in the right side of the body, as the patient declares she can feel best in the left side. Stools said to be natural. I find that the patient laboured under numbness, and want of power in the right hand, in consequence of which she broke several pots belonging to the mistress with whom she then lived, and *previous* to the appearance of the involuntary motions.

'Capiat magnesiæ sulphatis ʒij. omni mane et tæ. iodini gutt. iv. ter in die ex aqua.

'June 1st.—The right arm is constantly in motion, which the patient restrains as much as she can, by holding the right hand with the left. Drags the right foot when she walks. Complains of pain in the right extremities. Speaks better than on the 29th. Had three stools yesterday; to-day she has had two, all of them of a yellow colour, and not particularly offensive. Appetite craving.

'Cont. magnes. sulph. Capiat tæ. iodini gutt. v. ter in die.

'June 3d.—Walks worse, and the involuntary motions increase in frequency. Stools very offensive now.

'Cont. magnes. sulph. Capiat tæ. iodini gutt. vj. ter in die.

'June 10th.—Articulates worse. Was very much twitched yesterday. Stools dark brown, and more offensive. Has not been able to hold any thing in the right hand for a month. The left extremities begin to be slightly twitched. Drivels much now.

'Cont. remed.

'June 14th.—Has made no improvement, and some difficulty in swallowing has occurred. Stools of a brown colour.

'Cont. remed.

'June 16th.—Admitted an out-patient of the General Hospital to-day. Symptoms as stated above. Is so bad she can scarcely walk from chair to chair without being supported. Stools dark brown, and very offensive. Appetite variable.

'Omitt. remed.

'℞ Infusi Sennæ ℥vjss.
Magnes. Sulphatis ℥ss.
Decoct. Aloës comp. ℥j.
Misce. Capiat ℥j. misturæ omni mane.

'June 18th.—Her mother reports that she is much in the same state. Has three or four stools daily, of a light brown colour, by

the physic. Cannot walk. The involuntary motions are chiefly confined to the right side. Is also twitched when asleep.

'Cont. mist. purgans. Sumat tæ. iodini gutt. v. ter in die.

'June 25th. — Yesterday morning the patient walked down stairs, and her mother says that she is better, upon the whole. Vomits the purging mixture.

'Capiat magnesiæ sulphatis ʒij. omni mane et tæ. iodini gutt. vij. ter in die ex aqua. Omitt. mist. purg.

'July 9th. — Is reported as improving. Her mother says that she is better than last week.

'Cont. remed.

'July 23d. — Is so much better that she has walked about three quarters of a mile, from her house to the hospital. The right arm is much more twitched and moved about than the left. The sense of feeling continues to be greatest in the left side of the body. The right arm is sometimes moved about when she is asleep. The iodine agrees.

'Cont. remed.

'August 6th. — Walks better. Still twitched in the arm and hand. Has two dark-coloured stools daily.

'Cont. remed.

'August 20th. — Much better. Can walk very well. The right hand is not much twitched now, but complains of its being weak. She can still feel best with the left hand. Very little twitched when asleep. Drops agree. Bowels moved twice a day.

'Cont. remed.

'September 10th.—Is much stronger. Very little twitched now.

'Cont. remed.

'September 24th. — Very much better. Bowels open.

'Cont. remed.

'October 8th. — Sometimes has slight involuntary motions in the right arm.

'Cont. magnes. sulph. p. r. n. Sumat tæ. iodini gutt. v. bis in die.

'This patient has not come to the hospital for nearly a month, but her mother has lately informed me that she continues free from St. Vitus's dance.

'Discharged cured.' — Pp. 221—225.

Scrofula bears some resemblance in its character to bronchocele. This induced our author to try the effects of iodine in the former disease. The following case of scrofulous enlargement of the conglobate glands is very satisfactory: —

'Case IV. — Mary Wride, æt. twenty-three, lace-mender. Admitted an out-patient of the General Hospital the 1st of April, 1823. For eleven years has laboured under swelling of the conglobate glands in the neck, at the angle of the jaw, and before the ear, on the left side. The glands have now attained a large size, and occasion a considerable degree of deformity. Some of the tumours

begin to be painful. The patient informs me that she has been under the care of different practitioners, and that the late celebrated Mr. Hay, of Leeds, was consulted about ten years ago respecting her case, but that she derived no benefit from any of the means employed. Her bowels are generally tardy. Hair and eyes dark, complexion swarthy, upper lip thick and chapped.

'Sumat ægra pil. cambogiæ comp. gr. x. vel xv. omni nocte h. s. Capiat tæ. iodini gutt. xx. ter in die ex aqua.

'April 18th.—It requires two pills to keep the body open. She began to take twenty-four drops of the tincture for a dose, on the 4th inst. The glands are rather smaller and softer. The tincture warms her throat and stomach, but does not make her sick. Tongue a little furred.

'Cont. remed.

'℞ Adipis præparatæ ℥j.
Tæ. Iodini ʒj. M.
Fiat unguentum; fricentur partes affectæ ʒj. unguenti omni nocte h. s.

'May 9th.—Has lately had a slight sore throat, from cold, but is now well. All the glands are very much reduced in size, and are less painful. General health better.

'Cont. remed.

'May 23d.—There is less general swelling, and the glands are more detached and distinct since the tumour has subsided so much. Catamenia regular. Omitted the medicines for three days during the period.

'Cont. remed.

'June 6th.—The glands are very much reduced in size. The iodine agrees very well. Says that many persons have told her of her improved looks. Upper lip not so much tumefied.

'Cont. remed.

'June 20th.—Is very much confined to the house, and works late. The tumour continues gradually to subside. The upper lip is very much reduced in thickness. Bowels open by the pills and sulphate of magnesia.

'Cont. alia.

'July 4th.—The glands have diminished considerably since last report, and her general health continues to improve.

'Cont. remed.

'July 18th.—Has been in the country for fourteen days. The glands have subsided very considerably since last report, although she has taken no medicines.

'Cont. remed.

'September 19th.—The swellings are so nearly dissipated, that no deformity is occasioned by the tumefaction that remains. Feels in very good health, and menstruates more copiously than she did when admitted. As the patient attends irregularly, now that she is nearly well, I have ordered her a supply of the medicines to last a fortnight, and have discharged her.—Cured.'—Pp. 241—243.

Dr. M. relates also three cases of scrofulous ulcers, which

were cured by the internal use of iodine, assisted by the external application of common cerate. He speaks very highly of the tonic effects of the medicine on a scrofulous constitution. Indeed, the cases which he relates clearly prove it to possess tonic properties when properly administered. The dose should be first small, and should be gradually increased, according to its effects on the stomach. It should not be carried so far as to produce nausea and sickness.

The last case which we shall lay before our readers is the following, of scrofulous ophthalmia: —

'Case I. — Anne Moore, æt. fifty-two, from Stapleford. Admitted an out-patient of the General Hospital the 29th of May, 1821. The eyes are very much inflamed, with intolerance of light. The edges of the eyelids, and tunica conjunctiva lining the eyelids, are also inflamed. Has been subject to inflammation of the eyes for many years, and has nearly lost all useful vision. Bowels generally costive. She was directed to take two ounces of purging mixture every morning, when necessary; to apply twelve leeches to the eyelids, and to encourage the discharge of blood by warm emollient poultices, and the following day to apply pieces of soft old linen, wet with a solution of superacetate of lead, to the eyelids. On the 8th of June, when she returned to the hospital, the inflammation was very much gone, and the intolerance of light very much diminished, so that I could examine the eyes minutely, and found great opacity of the cornea of each eye, and vision very bad. She was directed to continue the purging mixture and saturnine lotion to the eyelids, and to drop six drops of the following solution into each eye at bed-time: —

'℞ Argenti Nitratis gr. iv.
Vini Opii ℥ss.
Aquæ distillatæ ℥jss.

'June 22d. — Eyes much clearer, and the inflammation is nearly gone.

'Cont. remed.

'July 6th. — The eyelids are always glued together in the morning. Eyes clearer. The edges of the eyelids to be anointed with the unguentum zinci every night. Medicines to be continued.

'July 20th. — The specks gradually waste away, and her vision improves by slow degrees. The patient labours under a certain degree of bronchocele, of six or seven years' standing.

'Sumat ægra tæ. iodini gutt. xv. ter in die. Cont. alia.

'August 10th. — The left eye is better; the right cornea is still very dim.

'Aug. nitras argenti ad gr. vj. Cont. alia.

'August 21st. — Eyes much clearer. Bronchocele reduced in size. (This case has been overlooked in my report.)

'Cont. remed.

'September 21st. — Says that her eyes are clearer and freer

from inflammation than they have been for years. Can read print of the ordinary size, and when admitted could not distinguish a letter. Her general health is much improved.

'October 19th. — The inflammation is quite removed, and she says that her eyes have not been so well for the last fourteen years as they are at present. Can read print of the ordinary size, with the assistance of spectacles. Says that at one time she could not see her child at the breast. Vision is more perfect in the left than in the right eye.—Cured.'—Pp. 259—261.

The author relates several more cases of scrofulous ophthalmia similar to the above, where the patients received considerable benefit from the use of iodine. Our limits will not permit us to follow him further at present; but we shall probably resume the subject at a future period. We can recommend the work to the perusal of our readers, who, we have no doubt, will consider the reports of the cases very interesting. The work consists chiefly of cases; and these are related in a manner so plain and simple, that the reader has his judgment free from bias, to draw any inferences which he may think proper from them. It will be seen, from the history of the cases which we have extracted, that particular attention was paid to the state of the bowels during the exhibition of the iodine. Some, perhaps, will be inclined to attribute many of the cures to the aperients alone. There is no doubt but that they rendered considerable assistance towards improving the state of the digestive organs, and, consequently, the health in general; but it must be also admitted, that several of the cases which we have noticed, especially those of bronchocele, were such as would not readily get well under the plan of treatment which has been generally employed in similar cases. Bronchocele and scrofula are analogous diseases. They shew themselves in constitutions possessing similar characters of predisposition. And we think, from the cases which the author relates, that the influence of the iodine was more decided over these two diseases than over paralysis and chorea. Iodine is a substance whose properties, in relation with living parts, are not yet thoroughly understood. As it is a very active medicine, it is well deserving of trial in many diseases, especially in those which are more particularly allied with the absorbent system. It is rather premature to throw out many hints respecting it, otherwise, inferring from its effects on bronchocele, scrofulous enlargement of the lymphatic glands, &c. we should expect it to have some influence over tuberculous affections generally. As these affections are as little under the control of any medicine in our possession as any disease to which our attention is called, and as they

bear some analogy to scrofula and bronchocele, a remedy which has any degree of curative relation with the latter diseases should have its properties proved in relation with the former also. With this hint, we shall at present dismiss the subject.

III.

OF IRRITATIVE FEVER.

Remarks on Irritative Fever, commonly called the Plymouth Dock-Yard Disease. By John Butter, M.D., F.R.S., F.L.S., and W.S., Fellow of the Royal College of Physicians of Edinburgh, and of the Royal College of Surgeons in London, &c. &c. Devonport, 1825. Pp. 302.

The subject of this work is so interesting, that we shall endeavour to give our readers a pretty full account of it. It is written for the purpose of describing a fatal disease which prevailed in the Dock-yard at Plymouth in 1824, and of which, until the appearance of this book, we have had no better history than what might be collected from that most mendacious of all authorities, the daily press. So very incorrect, indeed, were the rumours propagated concerning the disease at the time of its occurrence, that Dr. Butter says he was himself 'led to infer that the disease was either locked jaw, a modified species of plague, or a malady altogether anomalous and new in its character.' — *Pref.* p. 1. Being assisted in the most liberal manner by Mr. Dryden, the principal medical officer of the establishment after the decease of Dr. Bell, Dr. Butter was enabled to collect such accurate details of most of the cases as have thrown much light on the nature, and some on the causes, of the disease. With these cases the book commences. They occurred in men employed in the Dock-yard, and are termed cases of irritative fever, the general character of which was, that 'excitement of the nervous, absorbent, and sanguiferous systems,' followed local injury. All the patients became ill after receiving injuries whilst at work — injuries in many cases of a trifling nature. Of 250 men laid up from their duty from June to December inclusive, in consequence of various kinds of hurts, several of whom had slight attacks of inflammation, fifteen became the subjects of this malignant disease, and all these took place, with two exceptions, in August and September. It is to be observed, that Mr. Dryden, who has filled the situation of assistant-surgeon in the Dock-yard for ten years, had only known two instances, before this occurrence, of men dying in consequence of fever supervening on local injuries; and Dr. Cowan, of the Portsmouth Dock-

yard, in answer to an inquiry made by Dr. Butter, says, that 'although erysipelatous inflammation, accompanied with much constitutional derangement, has occasionally and unexpectedly supervened on the most trifling injuries, not a single death has occurred in consequence during these twelve years.'

From causes hereafter to be spoken of, injuries, more or less slight, were followed, in the cases which have been spoken of, by fever, accompanied — '1st, with inflammation of the absorbent system; 2d, with cellular inflammation and suppuration; 3d, with erysipelas and vesications, or gangrene; 4th, with erythematous patches; 5th, with intense local pain, void of redness.'—P. 128. The injuries consisted of punctured, lacerated, contused, or abraded wounds, not preventing the men's continuance at work, in several cases, for a while after the injury was received. Most of the cases terminated fatally within fifteen days after the commencement of the attack. In all, the attack was 'ushered in by chilliness or shivering, succeeded by a quick pulse, increased heat, disordered functions, nausea, sickness, fainting, and diminution of strength.'—P. 208. It generally became of a typhoid character in its course; was in some instances mistaken for idiopathic fever; and the inflammation, which was attended with most acute pain, great irritability, and great debility, was in all of an erysipelatous or erythematous character, or a kind of combination of both, with a great tendency to gangrene.

'It sometimes ran by continuity of texture through the absorbent vessels or glands, or radiated through the cells of membranes, equally towards the trunk and extremities; whilst at others it leaped from finger to shoulder, without any intermediate or obvious token, from right to left, and from flank to centre. Sometimes it had a fancy to attack successively the bowels, the lungs, or the brain, and to quit them for some part of the extremities; whilst at others it would pass over these organs altogether unnoticed.'—P. 217.

The appearances presented on examination after death, consisted, for the most part, of great distension of the cellular membrane by sero-purulent fluids and by sloughs; with gangrene of the surface: in three cases there was a blackening or lividity about the junction of the ileum and cæcum, and a colouring of the peritoneum shewing previous congestion: in two other cases a collection of matter was found near the kidneys, which appeared, at least in one of them, to be the product of the disease: in one case, part of the lungs was found deeply hepatised and gangrenous: and in several there were evidences of the cerebral sinuses having been

gorged with blood. But, perhaps, the best way to present the reader with the full character of the disorder will be to give insertion to one or two of the cases; and we recommend these to be attentively perused.

'John Bate, æt. forty-seven, shipwright, working as a labourer. Sallow complexion; strumous appearance. On the 16th of August, 1824, had the joint of his left fore-finger jammed off by a plank, and immediately amputated at the last joint. Cathartic pills given. —17th. Perfectly easy. Cathartic mixture ordered. —18th and 19th. Doing well. — 20th. Complains of pain in the hand, and of headach; pulse about 96, and full. Dressings removed, and cataplasms substituted. xxiv. ounces of blood were taken from his arm. —21st. The stump easy, and looking inactive; pulse 110, weak; tongue white and moist. Calomel and opium given with confection at bed-time, and cathartic mixture in the morning. — 22d and 23d. Boluses continued. — 24th. Great prostration of strength, anxiety, and nausea. A blister to the epigastrium; cathartic mixture repeated. — Five o'clock, P.M. Symptoms much aggravated; the pulse scarcely perceptible at the wrist; breathing oppressed; abdomen tense and painful to the touch; singultus. Castor-oil and tincture of senna given immediately, and repeated after two hours. Fomentations to the abdomen and enemata ordered. —Nine o'clock, P.M. Profuse perspiration; breathing excessively oppressed; he is evidently sinking. — 25th. Died at nine o'clock, A.M.: rational almost to the last.

'*Dissection.* — Body examined nine hours after death. The thorax contained about sixteen ounces of serum. The right lobe of the lungs tinged with blood, and bound with strong adhesions to the pleura costalis. The left lobe black, disorganised, easily torn, and apparently gangrenous. The pericardium rather vascular, containing about two ounces of fluid; the heart sound. The intestines were in general excessively distended with gas, particularly the colon and cæcum; no fæces; the whole highly inflamed, particularly the lower portions of the ileum and cæcum, which in some places approached to gangrene. On removing the intestines, a tumour was perceived on the right side, which contained nearly a pint of pus, and was found to surround the right kidney, that viscus being apparently healthy; the left kidney also sound. The liver was much enlarged, very soft, turgid, easily lacerated, and with difficulty separated from the side. The gall-bladder distended with bile. The spleen and pancreas healthy. The stomach also healthy, except a red spot, about an inch in diameter, on the posterior or vertebral side, near the pyloric orifice.'

'Gregory Nichols, æt. forty-five, shipwright: a very tall, stout, and athletic man, generally healthy, excepting some nephritic ailments, and a pain in his right side, the result of a blow received from a fall several years ago, of which he occasionally complained. On the 7th, 8th, and 9th of September, 1824, he received sundry and slight abrasions over his left shin bone, whilst employed as a

labourer stowing timber near the mast and boat ponds in his Majesty's naval yard, at Devonport. The weather was very hot and sultry at this time. On Saturday, the 11th, he did not work, but went to the Dock-yard to have his leg dressed, and was ordered a cold lotion. He confined himself to his house during the latter part of Saturday and the whole of Sunday. On Monday, the 13th, he performed his usual work in the Dock-yard throughout the day, although his leg had become very painful. Whilst at work, he was often shivered, a feeling attributed to the cold lotion he had used. At night a pain ensued, and red lines appeared in the thigh, with tenderness in the inguinal glands; he was flushed and feverish, and had pain also in the occiput. — September 14th, Tuesday. Was reported sick, and visited by Dr. Bell, who immediately pronounced on the character of the disease, and ordered cataplasms and fomentations to the leg. Mr. Dryden, who saw Nichols afterwards, directed an emetic, and, after its operation, some cathartic pills and mixture, which also produced the desired effect before morning. — 15th. The pain had extended itself from the leg to the groin, hip, and back; the absorbents, in their course, exhibited a streaky or erythematous redness, which, in the language of the widow, would "*come and go*," viz. the redness was erratic. There was a particular patch of it in the groin; and there was also considerable œdema of the whole limb. His fever had increased. Pulse 110, and full. Venæsectio ad ℥xxxiv.

'℞ Hydr. Submur. gr. viij.
Pulv. Antimon. gr. vj.
Confect. q. s. M.
Ft. bol. no. ij. Capt. unum hâc nocte et alterum mane.

'16th. Fever lessened; the redness of the limb scarcely apparent; the tenderness in the groin nearly gone. Sumat ol. ricini ℥j. statim. — Six o'clock, P.M. Bowels relieved. Rep. bol. anteà prescript. sextâ quâque horâ.—17th. Not worse; bowels open; he was totally incapable of moving the limb, which was raised for him. Cathartic mixture ordered, with tartarised antimony, every fourth hour.—18th, Saturday. Passed a restless and a dreadful night; complains of an increased pain in the right hypochondrium: pulse 110, and small. His spirits have never flagged: he is even now confident of his recovery, although his danger is apparent. Admov. hirudines 12 lateri dolenti. Rep. medicam. purgantia. — Five o'clock, P.M. Symptoms increased; there had come on pain and tenderness all over the abdomen, with nausea. Venæsectio ad ℥xx. Syncope was produced by the bleeding, and hiccough followed, with occasional fainting. Took castor-oil, and had frequent injections during the night. Twenty-four leeches were directed to the abdomen, and an anodyne draught ordered. — 19th, Sunday, seven o'clock, P.M. Much worse. Leeches could not be applied on account of his restlessness. He had tumbled from one side of the bed to the other, without resting; yet he was rational. Pulse now scarcely perceptible; cold and clammy perspirations had appeared, with nausea, and increased hiccough. The warm bath and effer-

vescent draughts were ordered, but not used. He died rather before ten o'clock on this morning.

'*Sectio Cadaveris.* — The body was examined eight hours after death. Emaciation trifling. Parietes covered with fat. Intestines generally inflamed, particularly about the termination of the ileum and the commencement of the cæcum, which were dark in colour. The mesentery and meso-colon were vascular, with red patches, the whole being amassed in sero-purulent fluid. The right kidney was completely disorganised, and changed into a mass, like thick cream in colour and consistence. The left kidney sound. The urinary bladder adhered very firmly to the surrounding parts, and contained about six ounces of healthy urine. The other viscera, particularly the liver, were healthy in appearance.'

'John Rawling, æt. forty, shipwright; had not been a very healthy man; his complexion was sallow and his countenance meagre; he had occasionally spit blood; but for some time prior to the following accident had made no complaint. — 1824. September 17th (Friday). He was employed as a labourer, with others, in the naval yard, hoisting and stowing timber with a crane, which jammed three fingers of his right hand, and more particularly the middle finger. On Saturday the 18th (not a day of work), he applied at the surgery, and received orders to poultice the fingers. Pulv. jalapæ comp. (Ph. Ed.) ℈ij. mane. — 19th. Easy in the morning, but towards evening shivers appeared, and continued on him for some hours. Bowels open. — 20th (Monday). Went again to the Dock-yard office, but returned, from feeling both shivered and flushed. His hand was now very much swollen, inflamed, and painful, particularly at its back part. The irritation seemed to arise principally from the middle finger. Mr. Dryden was prevented, by unavoidable circumstances, from seeing him until the evening of this day, when considerable fever was present. Pulse about 100, and full. A red patch was now noticed, half way up the internal and fore part of the humerus, like a blush in a person's cheek. There was no visible trace of any inflammation in the absorbent vessels, nor of any connexion between the inflamed hand and this patch over the biceps muscle. Mittatur sanguis ad ℥xl.

'℞ Hydr. Submur. gr. iv.
Pulv. Antim. gr. iij.
Confect. q. s.
Ft. bolus nocte sumend. Sumat cras mane Mistur. Cathart. ℥ij. cum Ant. Tart. gr. ¼.

'21st. Felt easier. Pulse about 90, and soft. The erysipelatous patch on the arm nearly gone. Cont. mist. — 24th, P.M. Mr. Dryden was not able to see Rawling since the last report until this evening, when his attendance on the late Dr. Bell was released; but Mr. Price, surgeon of the ordinary, and Mr. Barnes, a respectable practitioner at Morice Town, kindly lent their assistance, and did every thing which skill and humanity could suggest. At this time the patient's strength was very much exhausted; the whole

arm enormously swollen and reddened; but no vesications were visible. All hope was now lost — pulse rapid (hurried) and feeble; tongue moist; bowels confined. Mr. Lower, an experienced surgeon at Devonport, accidentally passing at the time, gave his opinion on this case: —

'℞ Hydrarg. Submur. gr. x.
Pulv. Antim. gr. iij.
Confect. q. s.
Ft. bolus statim sumend. Sumat post horas duas Ol. Ricini ʒj.

'Eight o'clock, P.M. Bowels opened; pain, swelling, and redness of the whole arm, particularly the humerus, very great. Admov. hirudines xxiv. partibus dolentibus.

'℞ Mist. Camphor. ℥viij.
Tinct. Lavand. comp. ʒij. M.
Capt. cochl. ampla duo pro re natâ. Vinum ad libitum.

'25th. The tension and inflammation of the whole arm reduced; but his strength is fast wasting, and his powers of life sinking. Extremities now cold; pulse scarcely perceptible; singultus; his mind has been very seldom disturbed; an occasional and slight incoherence noticed; he was rational up to the last hour of his death, which took place between nine and ten o'clock on this morning, Saturday. Body not examined.'

Our limits will not permit us to give full insertion to other cases, although the symptoms varied in some of them. But we consider the case of Reeve's (p. 101) as particularly worthy of attention. He was a labourer, forty-four years of age; 'he slipped from a piece of English oak timber, and slightly grazed the skin over the tibialis anticus muscle and shin bone of his left leg.' He continued at work for three weeks, applying dressings to his leg, and was considered to be well; but about this time inflammation came on round the ulcer, with extreme pain, and an inflamed state of the absorbents, rendering the parts exceedingly painful to the touch. This man had not been bled. He was seen three or four days after the supervention of these symptoms by Dr. Butter and Mr. Dryden.

'A dull and unequal redness, not unlike deeply-stained mahogany, now extended itself around the small part of his left leg, from the inner ankle to the calf. The redness was peculiarly mottled, not unlike erythema papulatum, figured in Willan, without vesications. The absorbent vessels, emerging from the reddened patch, were traced by their vivid colour up the thigh, and their valves were easily discerned by their knotty appearance. The ulcer still looked fresh and healing. Agonising pain prevailed, particularly on the inflamed parts of the limb, and increased by the slightest pressure. The skin was very tense and hot on the affected leg.'

The pulse was at this time 100, and full; the tongue moist, but a little coated at its base.

'An incision was immediately made, by Mr. Dryden, through the inflamed skin and subjacent parts down to the fascia, exceeding five inches in length, between the tibia and tendo Achillis, beginning a little above the inner ankle, and carrying it upwards in the direction of the limb. During the operation Reeves suffered acutely, but more particularly from handling than from cutting the diseased skin. The divided edges gaped widely, and looked like sliced bacon or brawn. The epidermis, rete mucosum, and cutis vera, were thicker, denser, and redder than natural. The cellular substance was distended and considerably raised above the muscles by a yellowish, gelatinous, and semi-fluid substance, intermixed here and there with dots of pus, and whitish shreds of slough. Three processes appeared to be going on at the same time, viz. the adhesive, the suppurative, and the sloughy. Several vessels bled freely for a time, and ceased spontaneously. The blood was dark-coloured, though arterial in part. Some lint, sopped in the rectified oil of turpentine, was inserted into the wound, which was well covered with a poultice of oatmeal, first boiled in water, and then worked into a proper consistence with yeast. The operation was performed about noon: at four o'clock, P.M., his leg had become easier: pulse dropped to 90; bowels freely moved; headach gone. He was ordered fomentations to the wound on changing the poultices, which were renewed at every fourth or sixth hour. He then commenced the following mixture: —

'℞ Cinchonæ lancifol. contr. ℥jss.
Aquæ Cinnam. ℥xvj.
Sp. Ammon. Aromatic. ʒiv.
Fiat mistur. cujus capiat cyathum parvum omni 2dâ vel 3tiâ horâ.

'5th. His general appearance and feelings were much improved, although his night had been rendered somewhat restless by the smarting occasioned in his wound from the rectified oil. Pulse 85, and soft; skin moist; tongue a little coated; bowels open. The wound looked very sloughy, and the edges had receded widely from each other; but the cutaneous redness had become more pallid, although it had spread a little over the calf. The absorbents had lost their colour, but the inguinal glands remained enlarged, and tender to the touch.'

The balsam of copaiba was now substituted for the turpentine; the fomentations and poultices being continued, as well as the bark, with an improved diet; and in about a month the patient was perfectly recovered. We recommend Dr. Butter's remarks upon the treatment of this case to the reader's attention.

This epidemic (if it may so be called) was marked by the sacrifice of Dr. James Bell, the able and zealous surgeon of his Majesty's dock-yard at Devonport. He had been ha-

rassed by his duties, and mortified, it would appear, by the unfortunate result of some of the cases; and at this time received a scratch in his right fore-finger, when he was directing a pupil how to sew up the body, on the examination of Gregory Nicholls. He became ill the next day, and died in four days more. The following comparison between the circumstances of his case and those of Professor Dease, of Dublin, will be read with interest: —

'Professor Dease scratched his finger in dissection, on a Saturday, about one or two o'clock, P.M. Dr. Bell wounded his finger on a Sunday, about five or six o'clock, P.M. — The former was attacked early on Sunday morning with a violent shivering, and sickness of stomach; and the latter before noon, on Monday, with violent shivering, and sickness of stomach. Fever appeared in each person, and both were blooded. The blood in neither instance was buffed or cupped. Pain in the shoulder was felt by Professor Dease on Sunday (second day), and by Dr. Bell early on Tuesday (third day). The former had 100 leeches applied to his shoulder, and the latter was blooded a second time from the arm on the third day. On the fourth day after the accident, the Professor had an uneasiness, with a colourless swelling, on the posterior side of his thorax, and the Doctor suffered excruciating pain in his back and sacrum. On this (fourth) day the scratch was first discovered by Dr. Colles on Professor Dease's thumb; but he was so unconscious of "*having received any cut*," as almost to refuse an examination; and therefore this injury, which no doubt was the origin of his complaints, and the cause of his death, could not have affected his mind in the slightest degree. Whereas, in Dr. Bell, the scratch by some people might be left entirely out of the question; and by others allowed only to have augmented that pre-existing anxiety and apprehension, which is supposed to have ultimately terminated his existence. Now, so much as we allow for the one person, we must allow for the other. And if Professor Dease's state of mind had no influence whatever over his disorder, why should the whole of Dr. Bell's disorder, which resembled in its kind, origin, and course, be referred entirely and exclusively to his mental impressions? On the 5th, 6th, and 7th days, there arose a swelling, hard elevations, like vesicles in appearance, with an erysipelatous blush, on the Professor's side; and on the 8th (the day of his death), also a swelling on the affected arm, on which a vesicle had previously formed. These symptoms were, of course, wanting in Dr. Bell, because he died on the 5th day. Indeed, the game was lost on the 4th day, and he was a dying man on the whole of the 5th day, for a space of 17 or 18 hours. The Professor lived 200 hours, or about $8\frac{1}{2}$ days, after the accident, and the Doctor only 121 hours, or about 5 days; so that there was a difference of 80 hours, or thereabouts, in the duration of their complaints.'

[The conclusion of this article is unavoidably postponed to our next Number.]

IV.

THE MANAGEMENT OF CHILDREN.

Instructions to Mothers and Nurses on the Management of Children in Health and Disease; comprehending Directions for Regulating their Diet, Dress, Exercise, and Medicine; with a variety of Prescriptions adapted to the Use of the Nursery, and an Index of Medical Terms. By JAMES KENNEDY, M.D. Glasgow, 1825. Pp. 329.

WE confess ourselves much to blame for not having taken an earlier occasion of introducing this very able work to the particular notice of our readers: but we urge in excuse a deep-rooted antipathy to all books intended for popular perusal. The subject of this, however, seems to us in some measure to excuse its popular form; for we partly agree with the evident opinion of its author as to the propriety of mothers being instructed in the management of their offspring, by those who are alone able to do so. Indeed, it is in no way consistent with the general liberality of the profession, as regards the community, the interests of which its members are ever ready to advance, even to their own pecuniary disadvantage, to withhold such information as is calculated to diminish existing and contingent misery, most particularly among those whose sufferings are not the less interesting that they are generally the least obstrusive, and the most difficult to appreciate or to refer to their intimate causes.

Dr. Kennedy has divided his work into two parts: — the first, after an introductory description of the three first epochs of life, includes a concise illustration of the modes whereby the chief diversities of food, dress, air, and exercise, can be so managed by parents as to promote the comfort, strengthen the constitution, and remove and mitigate the various ailments of children: — in the second part are enumerated the methods of treating their diseases to a definite extent, beyond which any interference of the unskilful might prove injurious or fatal; — more than this — as he well observes — would tend only to perplex, or lead into dangerous security, those to whom the guardianship of young persons are instrusted.

It is obvious that a work like this admits not of analysis: we shall, therefore, place before our readers a few extracts, which will enable them to form an opinion of its merits.

The following remarks on a pernicious custom are judicious: —

'When rightly tended and kept healthy, by being suckled after the manner natural to their condition, infants go to sleep readily, and their inclination to it experiences regular returns: they do not,

therefore, stand in need of rocking in cradles, nor require having themselves subjected to any artificial tumblings whatever, for the purpose of being lulled into a state of quietude and sleep. Let them only have proper nourishment; and they will not suffer those gripings and other internal pains which so often keep them from sleeping: let them not be girded with swaddling-clothes, nor pinioned in rocking couches; and they will seldom experience that constraint of their members, or those irksome and baneful compressions, which fatigue and incessantly arouse the sensibility of their organs: let them be preserved from the effects of their soiled and wet clothes, which excoriate the tender surfaces of their tender persons: let these simple and self-evident precautions only be employed, and nurses, even the most negligent, will be convinced that their charges do not need cradling or rocking, or tossing of any kind, for promoting in them that inclination to slumbering which is so advantageous to them in health, and conduces so much to their recovery from disease. Fretful and impatient nurses have two never-failing methods of compelling babies to sleep, or at least to be silent: Both of them, however, are bad; each of them is absolutely execrable: — that of violent rocking them in the cradle,* as has already been said, disturbs their digestion, predisposes them to reject their food, deranges the sanguineous circulation, induces a degree of congestion in the blood-vessels of the brain, and thus determines a morbid somnolency, which, especially in children having large heads, becomes very often the forerunner of the most unmanageable and destructive maladies: — and that of giving them wine, brandy, gin, or whisky, in sweetened water, and similar ill-concealed but insidious poisons, or laudanum, syrup of poppies, and other preparations of opium, exercises the most pernicious influence on their nervous system; and, as happens with the brutalised orientals who abuse their beneficent boons of nature, renders them

* 'Adult persons, when rocked in a cradle for a short time with considerable briskness, successively experience sickness, ringing in the ears, giddiness, headach, and vomiting. More than one instance is known wherein this operation, the result of an indiscreet frolic, induced in people of ripe years a lethargic state, which ended in a brain fever and frenzy, and long resisted, with the greatest obstinacy, the powers of an energetic and appropriate treatment. When mothers, therefore, shall take the trouble of recollecting, — for the fact cannot be disputed, — that the brain in grown individuals is much firmer, and consequently less susceptible of being affected by mechanical impressions than in infants and children, they will not require an uncommon share of discernment to perceive how what produces such effects on mature organisation, must necessarily be calculated to inflict incalculable and irretrievable mischief on that which is yet tender and has not attained its ultimate completions. It cannot, then, be saying too much, to aver that multitudes of children, especially in the inferior classes of society, are led to perish at a premature age, by diseases having their first origin in the rough rockings employed by their nurses, with the ignorant and mistaken view of promoting what in them should have been the natural inclination to sleep. Many facts furnish evidence legitimately authorising this induction, which must, moreover, be consistent with the experience of every one who has made this interesting matter the subject of observation.'

dull, and heavy, and melancholy, or peevish, and irritable, and irrascible, and, of course, unhealthy and unhappy through life.'—Pp. 184—186.

The treatment recommended by the author in worm-cases, deserves a particular notice:—

'Sucking children rarely have their bowels offended by the presence of worms; hence, it seems deducible that these parasitic animals do not begin infesting the alvine canal, till after the epoch of infancy has considerably advanced. This circumstance, therefore, suggests an idea which may be made an advantageous guide in selecting the means of procuring their expulsion. Milk of the human female, then, is not only the best preventive of their developement, but, when exhibited in sufficient quantity to growing persons, will act with much certainty in accelerating the dislodgement of intestinal worms.

'Milk of the ass, also, conduces to the same ends. Under a regular course of this nutritive fluid, infants who have been much emaciated and pass shreds of worms in their dejections, soon begin gaining strength and vigour, and their morbid symptoms gradually disappear. Its efficacy may be increased, in many instances, by a suitable addition of sherry, or other light wine. More serviceable, however, than either of the former, is milk yielded by the mare. The tape-worm, in particular, has a strong antipathy to this fluid, and on being exposed to its action, either quits the intestines alive in a few days, or dies and is expelled by piecemeal and putrid. It should be drunk when fresh drawn, to the extent of two tea-cupsful in the evening, and one early on the following morning, for several days. When the stomach is in such a state of irritability as to reject even every other medicine, it will retain this, which confers the additional benefit of improving the constitution. Occasionally it excites smart pains in the bowels, but these soon subside, and are followed by expulsion of the animals, and sometimes a rapid recovery of health. Let mothers whose circumstances afford them the opportunity, give this natural remedy only a fair trial, and they will soon perceive the extent of its salutary influences, and the certainty, as well as safety, of its vermifuge powers.

'Sea-water, or a briny solution of sea-salt in spring-water, has many times been employed against worms with decided advantage. When used freely and continuously, it irritates every kind of intestinal worms, and renders them very liable to be dislodged by an active aperient: at the same time it stimulates the bowels, and promotes digestion. Sulphur and sulphureous spring-water may be used with a similar intention; but the former acts with greater certainty when stirred into a large hot poultice laid over the stomach and bowels, after the parts have been well washed with hot water and soap, and thinly besprinkled with mustard. In this way, the blood comes to be impregnated with sulphureous particles, which have a tendency to affect the mucous secretion of the bowels, where

the animals are prone to burrow, and thus ultimately to deprive them of life.

'Castor-oil and that of the olive are sometimes administered, but do not really seem to affect the tranquillity of worms by other than their aperient virtues. Essential oil of turpentine, however, is indubitably one of the surest, the safest, and most convenient of all the vermifuge drugs. On every occasion, after the full operation of an active evacuant of calomel and gamboge in arrow-root, and preferably in the evening, it may be exhibited under various forms,—as a draught, in a poultice, or by lavement. Should the first of these ways be deemed the most expedient, one or two tea-spoonsful of this medicine, according to the child's age, may be mixed, by smart agitation, with four ounces of cold sweetened milk, or of such milk and mucilage of gum-arabic in equal proportions, or in a suitable quantity of the almond emulsion. Draughts of this kind ought to be swallowed as rapidly as possible, and during the act of drinking them, the nostrils may be moderately compressed: diminishing the acuteness of smell, lessens the offensiveness of nauseating tastes. On rejection of the first, a second draught may be given as soon as the disturbance subsides; and washing the mouth with cinnamon or rose-water, holding a little alum in solution, or with ginger or common tea, will at all times be found agreeable.

'When applied over the stomach and belly, thick poultices, made with meal of peas, or linseed and oil of turpentine, produce very surprising effects in disturbing and destroying worms. Their employment should be preceded and followed by such medicines, either by the mouth or lavement, as shall secure two or more free dejections. Their action is much promoted by washing the parts with heated water and soap, before applying a common poultice, as hot as can be borne, and continued for a few hours; and on this being removed, the surface must be well rubbed with a warm rough cloth, have a few grains of mustard sprinkled on it, and then be covered with the turpentine poultice. In twelve or fifteen hours the medicine will have largely impregnated the blood, and may be withdrawn. This singular result shall be attested by the odour of the child's urine, perspiration, and breath.

'Preparatory and subsequent evacuations are equally requisite to the obtaining full advantage from turpentine, when exhibited in the form of lavement. One ounce of the medicine, in two of milk, thin gruel, starch, arrow-root, or mucilage, intimately mixed by shaking them together, may be thus given to very young children, before putting them to sleep. If it remain in the bowels till the breath shall have become tainted, an aperient by the mouth, or a full tepid lavement should be administered, for the purpose of perfecting its effects. The operations of this remedy in eradicating intestinal worms, are as certain and complete as those of ipecacuan, in reverting the actions of the stomach. It may be repeated several times, as appearances shall require.'—Pp. 261—265.

PART II.

ORIGINAL COMMUNICATIONS.

I. *Observations on the Nature and Treatment of Hepatic Ileus — the Disease commonly denominated 'Dry Bellyache' throughout the West Indian Islands.* By ANTHONY MUSGRAVE, M.D., of Antigua, formerly President of the Royal Medical Society of Edinburgh.

'Tis there that nature puts on all her variety of modes, and discloses many appearances which are concealed in temperate climates. An observer there will often find in her rapid changes many fallacious systems overthrown that have been begotten in closets by speculation in other parts of the globe.'

MOSELEY *on the Climate of the West Indies.*

DRY bellyache, as it is usually termed, even by medical writers, is perhaps the severest, in respect of suffering, of all the diseases to which the inhabitants of these islands are subjected; and (notwithstanding Dr. Chisholm's assertion to the contrary*) it has been also, within my own knowledge for several years, one of very frequent occurrence in Antigua. It has, accordingly, occupied much of my attention; and the result of the most anxious observation, on my part, has been an entire conviction that the published descriptions of its symptoms are inaccurate and defective — its real nature imperfectly understood — and its treatment very generally conducted on erroneous principles.

The object of the present communication is to lay before the profession an outline of my own opinions and practice, which, at some future period of greater leisure and more accumulated experience, may be so filled up and completed as to be rendered more worthy its attention.

The disease, as it has presented itself to my notice in a great number of instances, has almost invariably pursued the following course: — The patient, if advice be called for at an early stage of the attack, complains only of an uneasy sense of distension behind the ensiform cartilage, of loss of appetite, a feeling of listlessness, and disturbed rest. His general appearance betrays little of indisposition beyond a slight expression of anxiety in the countenance; his tongue is clean; his skin cool and comfortable; his pulse unaltered, or, if altered at all, it is rather reduced in frequency and augmented in strength; his urine, if examined, is probably found high-coloured and scanty; but, what is especially remarkable, he

* 'As a tropical disease, it seems, therefore, almost unnecessary to treat of dry bellyache, seeing it now so seldom occurs in the western hemisphere, and never in the eastern.'—*Chisholm's Manual of Tropical Diseases,* 1822.

affirms his bowels to be *regularly and sufficiently open*, and his evacuations of natural appearance. If his memory be particularly directed to the state of his health for a few preceding days or weeks, he will admit, (at least, it has happened so to me in nine cases out of ten,) that without being actually unwell, his ordinary mental elasticity and bodily vigour have, during that period, been more or less impaired, and that he has been conscious of a degree of uneasiness in some part of the right hypochondrium, so trifling, however, as to be considered of no importance. This state of things may continue with little variation for a week or more, and, if proper measures be taken, the complaint may be removed before it makes farther progress. But if these premonitory symptoms be disregarded, as is too often the case when the individual is engaged in business, or sometimes, in spite of all that we can do, if they have existed for two or three days before our advice is called for, the uneasiness I have described gradually amounts to pain which, becoming more and more acute, shoots, in a majority of examples, upwards across the chest, still farther misleading the patient or inexperienced practitioner as to the real nature of the approaching illness. About this time nausea will first occur, followed by vomiting of porraceous matter, and subsequent annoyance from twisting pain about the umbilicus; but even now medicines are occasionally retained, and a smart purgative will often act with tolerable effect in discharging the ordinary contents of the canal. Very shortly, however — generally within twenty-four hours after the accession of severe abdominal symptoms — the constipation commences with distressing irritability of stomach; but I think I have remarked, that after the obstruction becomes complete, the matters thrown off in retching are no longer bilious, but consist entirely of the liquids which have been taken into the stomach mixed with its own secretions and those of the fauces: indeed, I have been accustomed to regard the supervention of *bilious* vomiting in the more advanced stages as a peculiarly favourable indication.

These aggravations are accompanied by a slower, harder, and more expanded pulse. I have known it less than fifty, with occasional intermissions, the artery feeling under the finger extremely large and firm. The tongue is still clean — indeed, it continues tolerably so throughout the whole course of the attack, the most common morbid appearance being that of frothy vesicles over a whitish surface, which can scarcely be said to be coated. The patient complains of thirst, is exceedingly restless in whatever position he may be placed, and his countenance betrays the most marked anxiety and alarm. The abdomen, in successful cases, rarely becomes tumid to any considerable extent. Pressure is borne without material inconvenience; and the only peculiarity which minute examination detects, is a degree of hardness from rigidity of its muscular parietes. The knotty lumps and spasmodic retraction of the navel towards the spine, I confess myself to have seldom seen; and I strongly suspect that this part of the description of dry bellyache, as a tropical disease, has been rather copied by one

author from another than derived from clinical observation, it being applicable chiefly to the colica pictonum of Great Britain. The abdominal pain, however, is often highly acute, and the general distress of the patient indescribably great, equalling any thing I have ever witnessed in diseases of fatal termination; but, in my opinion, this distress is not entirely referrible to *pain*, since, being clearly spasmodic in its nature, this last occasionally subsides, affording intervals of comparative ease. Yet the inquietude is unrelieved, and sleep, even for one hour, is vainly courted by the unfortunate sufferer. The cause of this incessant restlessness, whether pain be present or not, is to a superficial inquirer obscure and perplexing; and it will, therefore, be part of my object to attempt an explanation of it when I treat of the theory of the symptoms.

Hepatic ileus, or that species of colic which I have undertaken to delineate, becomes now completely developed. The bowels obstinately resist the most powerful purgatives. Hiccough is often superadded to the other annoyances. Injections are with difficulty retained, and returned untinged by feculent or other admixture, and the stomach rejects almost every thing. Epileptic fits are also no uncommon occurrence at this stage, when the patient is of broken constitution, the consequence of repeated attacks.

This period of dreadful suffering may be protracted for several days, each adding, of course, to the degree of danger to be apprehended; and the judicious practitioner will be careful to mark the most trivial change, as he must be aware that every thing depends upon his prompt discrimination.

While the pulse remains below one hundred in number — the skin continues cool — the tongue retains its moisture — the abdomen is felt free from tympanitic distension, and moderate pressure is borne without shrinking, — we have every right to hope that matters may yet terminate favourably, whatever may be the severity or duration of the other symptoms. But contraction and acceleration of the pulse, with febrile heat and a parched tongue, the constipation remaining unsubdued, are the heralds of an impending assault, which, if not vigorously resisted, menaces the vital powers with speedy destruction. The abdomen soon enlarges, and can be examined only by giving pain. The patient is constantly tossing himself from one part of his bed to another; he earnestly implores relief from intolerable sufferings, which appear to him to be the harbingers of death; his thirst is insatiable, although every thing he swallows is rejected; * hiccough harasses him without intermission; his pulse becomes smaller and more rapid; cold perspirations bedew the extremities; respiration is hurried; the pain is gradually felt less and less acutely, till it ceases altogether.

* *Stercoraceous* vomiting is rare, as it can only occur in neglected cases; but I have at this stage repeatedly observed dark matters, mixed with the fluids thrown up, resembling the depraved secretions which are afterwards passed by stool.

Enormous liquid motions, highly offensive, are squirted from the anus with considerable force, and life is extinguished within a very few hours from their commencement.

Such is the usual progress to death from dry bellyache; but let us turn to the pleasing reverse, and trace the several steps to recovery in more fortunate examples.

The first decidedly favourable indications are, an abatement of the irritability of stomach and less frequent jactitation, which in my own practice have been generally simultaneous with mercurial fœtor of the breath and swelling of the gums. This amendment generally takes place on the third or fourth day from the commencement of total obstruction; and about the same time we find the seat of the pain described as having almost imperceptibly descended to the hypogastric region (the epigastrium and both hypochondria being comparatively at ease): generally, before many hours have subsequently elapsed, the injections, which have hitherto been returned exactly as thrown up, are observed to bring with them some colouring matter which they have dissolved while in the gut. Another will present small portions of a dark-green or darker pitch-like substance floating on its surface. A desire for spontaneous evacuation will shortly afterwards produce a scanty motion composed of several portions of the same kind; and if the advantage gained be assiduously improved, a quantity of this bilious colluvies will be discharged for several days, which must be inconceivable to those who have never seen or treated the disease, the progress to health keeping pace with the gradual improvement in the nature of the evacuations, till nothing but debility and a degree of ptyalism remain. It may be as well to remark, that as the alvine discharges become, in succession, less inspissated, and assume more decidedly the appearance of vitiated bile, they are mixed with a thicker portion (obviously also a depraved secretion from the liver), which has not inaptly been compared to the fat of our West Indian crab; but scybalous masses are never passed upon the first removal of the obstruction, except in cases where the early stage has been entirely neglected; because, as I have already said, we find no difficulty, when applied to in time, in emptying the bowels of their natural contents, even though we fail to arrest the progress of the disease. The inference, therefore, is undeniable, that intestinal or fæcal accumulation can never be admitted among the exciting causes of this species of the complaint.

A reflective view of the symptoms, which I have thus briefly detailed, led me, as far back as the year 1819, to promulgate an opinion which I had long privately entertained, that 'dry bellyache' was not an idiopathic affection of the intestines, but one which originated exclusively in the liver; that it differed, consequently, in some essential particulars, from the colica pictonum of the mother country; and that peculiarities of season and situation had appeared to me, in numerous instances, materially to influence the production of the disease. Subsequent and extended experience have only served to confirm most satisfactorily the correctness of these ideas.

That low damp situations will, at certain seasons, and under particular circumstances, produce this peculiar derangement of the hepatic functions, I became satisfied in 1817, when I had occasion to attend, in succession, eight cases of the disease occurring among the establishment of Government House, and, at the same time, remarked that instances presented themselves in other parts of the island of persons similarly affected, all of whom were exposed, from their places of residence, to the influence of a marshy surface.* During that year, indeed, the disease might almost have been said to be epidemic; but I have since repeatedly known individuals on particular estates to labour under attack after attack, who have been permanently restored to health by such a change of situation as afforded them a purer and drier air; and it has more than once seemed evident to me that the same local causes which excited remittent fever in the plethoric and temperate European, gave rise to hepatic ileus in the Creole or long-assimilated constitution habituated for years to the use of spirituous potations.

But this leads me to observe, that while, for the reasons assigned, I ascribe something to the agency of situation, the most fertile source of the evil is, I am convinced, the prevailing consumption of rum, which undoubtedly acts as a specific poison upon the liver;† and I cannot omit the opportunity which is here afforded, of impressing upon the minds of my countrymen, that the same effects which we see daily exemplified in drinkers of *strong grog*, as it is termed, may, with equal certainty, although more slowly, be produced by indulgence in copious draughts of the weakest *swisel* or *punch*:‡ or, at all events, that this indulgence may cause such a derangement in the functions of an important organ, as will lay the foundation of a long train of nervous and hypochondriacal complaints in after-life. It is a common remark among practitioners in

* The site of Government House is unquestionably ill chosen. It is true that an attempt was made to explain the occurrence of these cases, when some time afterwards a keg, that had once contained paint, was discovered on cleaning out the cistern; but as the water, at the time the disease was in progress, afforded, on trial, no traces of lead, it is difficult to conceive that a portion so minute as to elude the most delicate chemical tests could prove so seriously injurious.

† I have at this moment a little patient, not more than thirty months old, under my care for indurated liver, to be plainly felt through the abdominal parietes, produced, I am convinced, by the acknowledged habit, on the part of his parents, of allowing him to drink rum and water.

‡ Doctors will differ to the end of the chapter. Thus, Dr. James Johnson thinks *punch* less injurious than *grog*, when persons cannot be prevailed upon to abstain altogether from spirituous liquors, because 'acids correct, to a considerable degree, their deleterious qualities.' Dr. Wilson Philip, on the contrary, conceives 'that the usual addition of lemon and sugar, which are supposed by many to bring the spirit into something like its state previous to distillation, only increase the evil, by adding to the hurtful stimulant articles of difficult digestion.' I incline to the latter opinion.— *Johnson on Derangements of the Liver, 3d edit.* 1820; *A. P. W. Philip on Indigestion, &c. 4th edit.* 1824.

the mother country, that those who confine themselves to wine or malt liquors may often take with impunity, during a long life, their bottle of Port or quart or two of ale per diem, although visceral obstruction will be the almost inevitable consequence of equal latitude in the use of ardent spirits. Were it admissible to do so, I could name individuals of this island who, notwithstanding they have been uniformly hard drinkers from their youth, have, by rigidly confining themselves to wine, gone on to a very advanced age, retaining an astonishing degree of vigour to the last; while it is only necessary to ride at any time through our streets in order to meet some bloated miserable victim of the abuse of that pernicious liquor which, being a staple commodity of these colonies, can unfortunately be procured at the cheapest rate. It is by no means my intention to argue that wine-bibbers are secure from suffering by their excess. I only contend, that of two evils (distilled and fermented liquors), the former is beyond all calculation the greatest; and that, if a man is determined to exceed in stimulus of some kind, he will do well to confine himself entirely to that which experience has proved to be least injurious to the system. Were it consistent with the scope of this contracted sketch, I could considerably extend my quotations; but those which I have placed in the margin,* from authors whose works are in the hands of every one, will suffice to establish that my ideas of the peculiarly destructive effects of distilled spirits, *taken under any form whatever*, have no claim to singularity, but are supported by the concurrent testimony of the most accurate observers. A single instance of *longevity* under their *excessive* use, I venture to affirm, has never occurred in any climate; and when, in opposition to the opinions I have

* 'The effects of wine, like tyranny in a well-formed government, are first felt in the extremities; while spirits, like a bold invader, seize at once upon the *vitals* of the constitution.'—*Rush.*

'Wine, in moderation, is, like tea, salutary, and its noxious portion is guarded by the extractive matter, perhaps the acid, from being, in general, injurious. In this it differs from ardent spirits, which not only want this sheathing, protecting ingredient, but seem to acquire additional deleterious properties from the fire, particularly by the evolution of an acrid, often an empyreumatic, oily principle.'— *Parr.*

'*Spirits*, however diluted, should be shunned as a certain enemy. Although good wine contains so large a proportion of alcohol, as to amount generally to one-fourth, according to the experiments of Mr. Brande, yet the spirit is in such a state of combination with several peculiar principles, that its influence on the stomach, when thus combined, is very different from that of raw spirits, mixed or unmixed; and more especially, in proportion as the wine has received its improvements from age, are its stimulating properties favourable, and less likely to be injurious.'— *Scudamore.*

'Whatever be the change induced by distillation, there are no facts, I believe, better ascertained, than that the same quantity of alcohol in the form of distilled spirits, although equally diluted, both by its immediate operation, gives more *temporary* assistance to the stomach, and by its secondary effects, *hurts it more*, than in that of any fermented liquor which has not been distilled.'— *Wilson Philip.*

expressed, a solitary example has more than once been adduced of some hearty septuagenarian whose constant beverage has been *weak* punch or rum and water, I have always felt inclined to offer the reply of the late celebrated Dr. Parry, who, on receiving the account of a case of pneumonia, which was treated about the middle of its course with beef-steaks, raw onions, porter, and gin, simply answered, that he once knew a man who fell from a scaffolding twenty or thirty feet from the ground, and when people expected that all his bones were broken, he got up from the ground, and, to their surprise, walked away unhurt.*

As I have already expressed my belief that the disease in question differs materially from the colica pictonum of the mother country, it may be expected that I should point out those peculiarities in each complaint by which an accurate diagnosis may be established. Unfortunately, as it regards this object, the disease manifestly produced by the introduction of lead into the system is of comparatively rare occurrence in the West Indies, where the metallic manufactures are extremely inconsiderable; still we do occasionally meet with it among house painters: but as this class of persons, commonly of the lowest description, have joyfully embraced the idea that the securest shield against the deleterious effects of this poison is to be found in drinking large quantities of rum, we almost always have to encounter symptoms so mixed in their character, as to confound every thing like an attempt at framing diagnostic inferences. That there is a general similarity, however, cannot, I believe, be disputed; but I think it will be discovered by the attentive observer, that constipation from the very outset of the complaint — a protracted duration — a greater degree of violence in the spasmodic action, as well of the intestines as of the abdominal muscles, and the appearance of the stools when procured, furnish, during our earlier attendance, marks sufficiently distinctive of painter's colic, as contrasted with hepatic ileus. As paralysis never has supervened upon the latter in my experience, it may subsequently tend, when it does occur, to elucidate a doubtful case, although it may be too late to influence our practice.

But to resume my subject. Admitting that I am correct in attributing the particular species of ileus in question to such a derangement in the hepatic functions as produces an increased and depraved secretion of viscid bile, the *ratio symptomatum* appears to me to be abundantly simple, and to afford a ready explanation of circumstances which, upon any other supposition, are contradictory, and not to be reconciled. The dull sense of weight about the right hypochondrium, which, as was formerly stated, is repeatedly found to precede the attack for days or weeks, marks incipient interruption of the regular and healthy process of biliary secretion. The fluid received by the pori biliarii becomes gradually increased in quantity, vitiated in quality, and of a thicker consistence. Hence its course through the ducts must, to a certain extent, be impeded,

* Medico-Chirurgical Review.

and time be given for absorption to effect still greater inspissation, which, of necessity, causes it to flow more and more slowly till it can no longer obtain a passage, and the obstruction becoming complete, the liver is left in a state of dangerous infarction.

This view of the subject being adopted, the real seat of the pain, described as being behind the ensiform cartilage, is at once discovered. It evidently is to be referred to the ductus communis, cystic duct, and gall-bladder, distended with an inspissated mass; while the harassing sense of inquietude and constant jactitation * may be explained as consequent upon the hepatic duct and pori biliarii being gorged with the offensive matter, which is still secreted, although an outlet no longer exists.

Again, assuming these principles to be tenable, the fact that the bowels are easily moved, in the first instance, is explained with equal facility. The disease at this stage is *not in the intestines*. It has not yet proceeded beyond *the liver and its appendages*, and purgatives will therefore produce their usual effect. Subsequently, however, the irritation is communicated from the ductus communis to the duodenum. Doubtless, also, small quantities of this acrid secretion may occasionally escape into the latter, which, throwing the intestines into a state of spasm, † produce abdominal pain, irritability of stomach, obstinate constipation — in a word, all the usual phenomena of ileus; and the quantity of this colluvies which is subsequently voided must be regarded not only as the previous accumulation in the excretory ducts, but as the continued product of an enormous gland stimulated into increased action as well by the original causes as, to a certain extent also, by the effect of remedies employed for the cure of the disease.

Lastly, the slow intermitting pulse, the general occurrence of hiccough, and occasional epileptic fits, are most rationally accounted for by a reference to the liver. The first is peculiarly expressive of interrupted circulation through an important viscus, and the latter are too often attendant upon hepatic irritation to require an additional comment. ‡

Some fifty years ago, when morbid dissections were comparatively rare, it might have been objected to this theory of the symptoms, that the liver, even by my own shewing, gives very uncertain indications of that alarming distension which I contend to be the mainspring of the mischief; but we no longer want the most indis-

* This peculiar and unceasing restlessness from distension, instead of absolute pain, is obviously the consequence of the comparative insensibility of the liver.

† 'A sudden and unnatural acrimony of a secretion may very readily excite the organic contractility of a tissue composing a canal, and thus occasion a stricture of its calibre for the time being.' — *Johnson.*

‡ 'In those who have not been subject to epilepsy before they have arrived to about forty years of age, and who have been intemperate in respect to *spirituous potations*, I have been induced to believe that the fits were occasioned by the pain of diseased liver.' — *Darwin's Zoonomia*, Vol. IV. chap. iii. p. 117.

putable testimony of the comparative insensibility of the parenchymatous structure of this organ. Inflammatory affections of its investing membranes will readily betray themselves by the ordinary symptoms of acute hepatitis, and the parenchyma may, of course, partake of the inflammation: but it is a lamentable fact — lamentable because it leads too often to the irretrievable loss of life before danger is suspected — that not only infarction, but congestion, and even abscess, may slowly become established in the substance of this gland, without one symptom which unequivocally points out to the inexperienced or unprofessional the real seat of the evil. This is no place for numerous quotations in support of my assertions — I have repeatedly experienced in practice the truth of what I state, and seen it confirmed by dissection; but those who are anxious for entire conviction, I refer to an excellent paper, by Dr. Archibald Robertson, on the Dysentery of New Orleans, published in Dr. Johnson's volume on Tropical Diseases.

The following passage will be found in Dr. Mason Good's Study of Medicine, Vol. I. page 179. Speaking of the spasmodic constriction in colica ileus, he says, 'it often, indeed, extends to the other parts and even the bile ducts; and in the last case, even where the fæces are discharged by the mouth, they are untinged by bile, while all the symptoms of jaundice supervene.' The case he describes, I take to be a modification of hepatic ileus; for if the orange tint of jaundice be comparatively rare in this disease, the sallow hue of those who suffer from its attacks is too remarkable to escape the most superficial notice, — a difference which arises, I conceive, from this morbid secretion being generally composed, as was before remarked, of a thicker portion, which furnishes the dark-green colour to the motions, and a thinner 'or chlorotic secretion, which, forced more readily into the sanguineous system, gives a ghastly lividity to the entire surface.'* Indeed, I cannot but entertain the opinion, that Dr. Abercrombie, who admits in his excellent observations on the Pathology of the Intestines,† that 'the causes of ileus are not well ascertained, and the operation of them is involved in considerable obscurity,' would have met a more ready solution of his doubts and difficulties had he viewed the disease as *sometimes*‡ primarily connected with the liver, and, accordingly, directed his attention more frequently to that viscus in his dissections, than by ascribing the phenomena to the distension of some part of the intestinal tube beyond its power of contraction. Many of the cases he details appear to me to warrant this conjecture; but I would more especially refer to the 8th, which he gives as an example of ileus fatal without obstruction, and where the slow pulse (stated to be from *forty* to *sixty*) and open bowels, for

* Mason Good.

† Edinburgh Medical and Surgical Journal, Vol. XVI.

‡ I am, of course, very far from contending that every case of ileus must necessarily proceed from hepatic derangement.

the first few days, are strongly indicative of its hepatic origin.* But, as Dr. Robertson very justly remarks, in the paper already referred to, 'who would dream of cutting into the liver in a disease generally supposed to bear no relation to it;' and yet the same intelligent author distinctly tells us that he has often found this organ externally with the colour and size of health, when, on afterwards examining its substance, extensive abscesses have been discovered.

A tropical climate opposes many obstacles to the zealous cultivation of morbid anatomy. The celerity of the putrefactive process and the prejudices of friends are among the principal of these; but I have, nevertheless, endeavoured to avail myself of every proper opportunity to put the truth of my opinion regarding the nature of dry bellyache to the test of *post mortem* inspection. Hepatic congestion and infarction have been uniformly detected in *all*, and marks of intestinal inflammation and its consequences, in a *majority* of examples, since, whatever may be its source, the termination of the disease is very commonly by mortification of some part of the canal. But these latter appearances are not *invariably* met with; for in the very last instance I examined, occurring in the person of a black servant in the suite of Sir Benjamin D'Urban, our governor, the cavity of the abdomen, on being exposed, presented little evidence of visceral mischief; and it was not till the structure of the liver was explored that its parenchyma was found gorged with blood, and the excretory ducts considerably distended with vitiated bile.† On this occasion, the symptoms preceding death were precisely those which announce the supervention of *gangrene*, yet the traces even of *inflammation* were comparatively slight — a fact in corroboration of Dr. Abercrombie's statements, which I have had occasion to notice in more than one previous dissection. I have, moreover, repeatedly seen, what that gentleman has likewise remarked, that recoveries have unexpectedly taken place after the patient has been, to all appearance, moribund from mortification;

* The able and spirited writer of some pointed strictures on Dr. Abercrombie's doctrines, published in the 2d volume of the Medico-Chirurgical Journal (Quarterly Series), seems to view this case as inflammatory *ab initio*; but I cannot assent to this opinion, for although a *natural* pulse may, on some rare occasions, be compatible with abdominal inflammation, the heart's *retarded* or *interrupted* action appears to me, as stated in the text, to be peculiarly distinctive of obstructed circulation, or the difficult transmission of blood through some important viscus, which, admitting that it may *ultimately lead to* destructive local excitement, has not *yet* produced this effect; and the tympanitic swelling and abdominal pain can surely be referred to flatulent accumulation, which may very well co-exist with the incipient stage of hepatic ileus.

† I have never discovered abscesses in examining fatal cases of this disease, which I would explain by supposing that the ducts are either emulged, or the system completely overwhelmed by previous suffering, before the suppurative process, which cannot commence till congestion terminates in inflammation, has time to become established.

and I have, in consequence, been irresistibly led to the conclusion, that hepatic congestion, altogether unconnected, or connected but slightly, with any ulterior cause discoverable after death, may prove fatal, with all those indications which have hitherto been regarded as characteristic of the last stage of enteritis.

Whether a minor degree of congestion may not, in reality, be the first link in the chain of those peculiar derangements which terminate in hepatic ileus, and if so, why a mere difference in the degree of a cause (as I do not contend that decided congestion necessarily or commonly terminates in ileus,) should produce effects apparently so dissimilar, I leave for future consideration.

So much for the *ratio symptomatum* in hepatic ileus, which, as in all other diseases, however specious it may appear, can be truly valuable only in so far as it leads to the adoption of an effective mode of treatment; and to this, the best of all possible tests, I shall be satisfied to leave the validity of those conclusions at which I have arrived after the most careful consideration; for whether my *theory* be well or ill founded, I speak with security in predicting that the *practice* it suggests will be proved, on experience, to be very generally successful.

The etiological view of the symptoms which I have ventured to submit presents, at once, three principal indications: — to remove the obstruction, if possible, by such medicines as may, in the first instance, stimulate the ducts through the medium of the intestine; to excite the liver to a more healthy action; and, at the same time, to obviate any tendency to inflammation which may chance to occur during the progress of our remedial measures. Calomel, both purgative and cholagogue, must be eminently calculated to answer two of these indications; and hence, the practitioner who most relies upon its *well-regulated* administration will, in the main, have his confidence amply repaid. Perhaps I may even go so far as to say, that this disease, of all others, supplies the most reasonable excuse for a degree of freedom in the employment of mercury, which must appear the extreme of temerity to those unacquainted with what we have to encounter, for the question is too often one not of option but of painful necessity, and resolves itself into the choice of supinely witnessing the otherwise certain approach of death, or of boldly fronting the odium to be incurred by a rapid production of ptyalism; the fact being indisputable, that in the severer cases relief is seldom, if ever, obtained till the gums become swollen, but that, as soon as they do become so, the obstruction, whatever may be its source or situation, can be readily overcome. I have said, the *odium* to be incurred by the latter alternative, because it is undoubtedly true that the reputation of the physician is far less liable to detraction in the event of the death of his patient, than by his being judiciously rescued from danger, provided it so happen that the babbling effects of this powerful agent divulge, during recovery, that it has contributed to the accomplishment of this object. It therefore requires no ordinary share of

moral courage to enable a man to keep the narrow path of his duty, in the face of such evident danger to his interest.*

It is certainly too much the fashion among physicians in the British metropolis to decry the use of mercury, and to insinuate to persons about to sail for this part of the world, and already sufficiently alarmed, that they will place themselves in greater jeopardy by following the prescriptions of those whom they must of necessity consult, than by the effects of the climate itself; and I give my transatlantic brethren credit for purity of intention, and for being totally unconscious of the serious mischiefs they occasion by circulating such an opinion; but it does not, on that account, become less imperatively my duty to expose such mischiefs, and, by doing so, to make them fully aware that prejudices are thus incautiously instilled into the minds of our visitors, which ultimately lead to their premature death, and not improbably the consequent ruin of a numerous and unprotected family. This is no supposititious or barely possible case. I write with a melancholy example conspicuously in view, which occurred not many days since, in the person of a respectable and highly valued mercantile member of this community, who had been about twelve months in the island. On Saturday evening febrile symptoms betrayed themselves; but Sunday, Monday, and Tuesday, were allowed to glide away without application for medical advice, from a dread of calomel so deeply rooted as not to be overcome. On Wednesday he was visited, but medicine at this period proved unavailing; and on the Saturday

* For the benefit of those who may not possess firmness of principle sufficient to enable them to resist the influence of unworthy motives, I extract the following passages from writers admitted by common consent to be of the first professional authority: —

'There is a vulgar antipathy to a mercurial sore mouth, and an illiberal clamour has been raised against mercury by a certain party in the profession. But I would always disregard these things; the credit which you will obtain by firm and successful practice, will eventually overcome any temporary irritation which the exhibition of mercury may produce in your patient; and the dread of this medicine will assuredly disarm you of a powerful weapon in the cure of diseases — a weapon which others may employ if you will not, and thus deprive you of many a patient, and perhaps of reputation.' — *Johnson on Derangements of the Liver, &c.*

'It is scarcely possible for a man, even of the best disciplined mind and purest intentions, to be much engaged in professional business without suffering from the suspicions, misrepresentations, or injustice of those with whom he is concerned.

'An elevation of mind, a magnanimity of spirit, founded on conscious rectitude, will commonly maintain a man under these vexations, and enable him to proceed in the course of his duty, without condescending to notice the assaults of his enemies. If we cannot remain ignorant of the ill offices to which the peculiarity of our vocation may expose us, we can, at least, withdraw our attention, or try to forget them. By thus steadily resisting the suggestions of pride and revenge, we shall best secure our own peace of mind and promote our truest interests.' — *Life of Hey, by John Pearson, F.R.S., &c. &c. London*, 1823.

night following, he left a wife and several children to deplore his loss, when they were fondly expecting his immediate return to an establishment in England.

But the illiberality of these insinuations is the more provoking and unpardonable, as, from my knowledge of the judgment and ability of some of the gentlemen from whom they are said to emanate, I am thoroughly persuaded that one year's local observation would render it evident to themselves that, from the readiness with which the liver sympathises under a tropical sun with diseases originating in other organs, the *prudent* use of mercurial medicines becomes indispensable in the East and West Indies much more frequently than it can possibly be demanded in the more favourable climate of Great Britain.* Without, however, having had an opportunity of acquiring actual experience, or, perhaps, merely from a hurried visit of a few short months, to presume to disseminate censures on the practical methods of men who, educated in the same school with themselves, have subsequently passed a series of years in the laborious investigation and treatment of tropical disease, is most unwarrantably to arrogate *superiority* in matters where it is impossible that even *equality* should exist — to claim a right of dictation upon points of importance, regarding which, on entering this field of practice, they would probably find themselves at a loss to form a competent opinion even for their personal government, when called upon to prescribe.

Having said so much in justification of the frequent employment of mercury in intertropical regions, it becomes doubly necessary that I at once acquit *myself* of the imputation of being an *ultra* in this respect, for no man can deprecate more earnestly than I do that 'outrageous and indiscriminate use' of calomel which candour compels me to acknowledge I have more than once witnessed in the hands of the 'rash and undistinguishing members of our profession;'† of which, it would be truly extraordinary if some were not found among us, as well as in every other part of the habitable world. I, indeed, lament over every such case which falls under

* A leaf out of our book would not, however, be *on all occasions* without its use even to London physicians. For example, had an *experienced* tropical practitioner been in charge of the Milbank Penitentiary, he would at once have arrived at what Drs. Latham and Roget so tardily discovered, and thus have proved instrumental in saving many lives. I have repeatedly met with the particular species of purging which prevailed in that establishment, but chiefly in debilitated habits. An occasional dose of calomel, with blue pill and opium (in proportions varied according to circumstances), every third hour regularly, and alternated with the camphorated mixture, have been in my hands the successful remedies. It is not, perhaps, generally known, that camphor possesses a restraining power over the purgative and griping effect of calomel and blue pill, equal almost to that of opium itself; and I have seen the mistura camphoræ, with the addition of a few drops of tinctura opii to each dose, arrest protracted diarrhœa, which had resisted cretaceous mixtures, &c. in quantities almost as large as those issued by Mr. Pratt.

† Blane's Select Dissertations.

my notice with a sincerity proportioned to the conviction I entertain of the incalculable value of this remedy when skilfully administered, and of the augmentation which the general prejudice must naturally receive from unlucky examples of this kind; and I consequently have it in contemplation, at the first period of leisure, to take occasion to enter more at large upon the effects of mercury as a therapeutical agent, and to endeavour to frame with perspicuity such rules as guides for its employment as have appeared to me to be fairly deducible, from an experience which those who know me will readily admit to have been at least extensive. In the meanwhile, I must content myself with reminding the profession that 'there is no maxim more true, and few more practically important, than that the best things are the most liable to abuse.'

'Nil prodest, quod non potest lædere idem.'*

To return more minutely to the proper mode of treatment. The best plan in ordinary cases is, after having given ten or fifteen grains of calomel alone, to proceed with five more, in combination with another active cathartic under the form of pill, every third hour interposing some purgative mixture, provided the stomach be sufficiently retentive. In recent attacks, I have sometimes succeeded at once by giving a full dose of the submuriate, followed by an ounce or an ounce and a half of the oil of turpentine; but this speedy success is not often to be looked for, and the plan I have ventured to propose must, therefore, be steadily adhered to till relief is the result, omitting such medicines as appear to be more particularly offensive to the stomach — varying the proportion of calomel according to circumstances — and availing ourselves of every favourable opportunity to pause from a too rapid accumulation of this medicine, as we must not fail to remember that absorption will go on for some time after the mercury is withdrawn, and that, if we continue our prescriptions without proper reflection up to the moment their effects become manifest upon the system, those effects may rapidly proceed beyond the possibility of control, and increase to a most inconvenient, if not an alarming extent.† It is, besides, necessary I should remark, that it is not from absorption alone that we have cause for apprehension, for when the bowels have been thus rashly loaded with a quantity of this mineral beyond the power of the absorbents to remove, portions of it become implicated in the folds of the valvulæ conniventes, acting there as an escharotic, and producing ulceration of the mucous membrane of the canal. I remember a remarkable case of this kind, where

* Blane's Medical Logic.

† The principle of this caution may, in some measure, extend to the accumulation of purgative medicine, whether mercurial or not. It is always prudent to pause and wait the effect after a reasonable quantity has been administered, although I believe little is, in general, to be apprehended from hypercatharsis, if we may judge from the necessity which is found to exist for keeping up the action of the bowels by aperients for some time after the obstruction is removed.

purulent matter was repeatedly passed per anum: the patient lay in a deplorable state for weeks, unable to articulate, swallowing with difficulty, his recollection totally lost, and with a general dropsical effusion; yet, to the astonishment of every one, he slowly recovered. For these reasons, the blue pill may be occasionally substituted, as being less likely to produce unpleasant results, or we may resort to frictions, while we try the effect of some purgative not hitherto prescribed. But the grand object of the treatment must never for one moment be lost sight of — which is, by means as gentle as may be devised, to bring the system, *as speedily as it can be accomplished with safety*; under the decided influence of mercury, which would appear to communicate such a salutary impulse to the whole biliary apparatus, as instantly and completely pervades its obstructed channels and evacuates their viscid contents.*

That the complaint may be cured, without calling in the aid of other purgative combinations, by mercury alone, I entertain no doubt whatever; but as I have stated my conviction that an affection of the intestines themselves forms no part of the primary disease — as I am a disciple of neither Broussais nor Abercrombie in regard to the employment of purgatives in abdominal inflammation — and as it is impossible in any given case to say how trifling, in reality, the obstruction in the ducts may prove, — it would be injudicious to deprive the patient of the chance which may be afforded by stimulating the duodenum into increased action, when this stimulus must be directly communicated to the seat of the obstruction,† and may, perhaps, to say the least of it, relieve him from the necessity of suffering the delay inseparable from the more gradual progress of ptyalism. When, however, the spasmodic affection of the intestines becomes severe, and, more particularly, when vascular excitement has commenced, these evils will, I con-

* Drs. Chisholm and Clark recommend mercury in this disease with a view to the saturation of the system; but a reference to their observations will shew that they prescribe it as a kind of *specific*, rather than upon fixed or determinate principles. As a proof of which I may remark, that Dr. Chisholm, so earnest on other occasions in the mercurial cause, allows, in this disease, of a choice between salivation and the use of opium and purgatives. Hillary is violent in his protest against calomel even as a purgative, although previously recommended by Town. Neither Moseley nor Lind make mention of this remedy under any form. Johnson, the latest and ablest writer on tropical climates, is unfortunately silent on the subject of dry bellyache. — *Chisholm's Manual; Clark on Diseases of Dominica; Hillary on the Air and Diseases of Barbadoes; Moseley on Tropical Diseases; Lind on Diseases of Hot Climates.*

† 'The gall-ducts, like many other parts of the system, have an *organic*, though not a *muscular*, contractility. When irritated by an offending substance, the duct contracts, and the foreign body will be gradually moved in the direction where least resistance is offered. This must, of course, be towards the mouths of the excretory ducts; not only because their calibre enlarges in that direction, but because the accumulated secretion behind is constantly lending an impulse forward.' — *Johnson.*

ceive, be aggravated by absurdly persisting in the administration of remedies which only serve to render the constant irritability of stomach, if possible, still more distressing. My entire attention, under such circumstances, has always been directed to tranquillising the alarming tumult, as I have no fondness for those 'contests between the practitioner and the stomach, so strongly recommended by Dr. Pring, in which the point of emulation is whether the Doctor will be first tired of dosing or the stomach of rejecting;* and I have generally thought it prudent for this purpose to have immediate recourse to the lancet, which I have known to act at once like a charm in removing the retching and abdominal pain; or should it even fail in this effect, the loss of blood will certainly contribute to render the system more readily susceptible of the mercurial influence, and the bowels more obedient to the stimulus of medicine, besides affording us time, by preventing organic lesion, to prosecute our curative designs. With the same view, it will be advisable to repeat the venesection at any time during the progress of the case while the strength remains good, provided we have sufficient reason to apprehend the approach of inflammation.

Objections, I am aware, have been frequently urged, even by experienced practitioners, to recurring (as they have been pleased to term it) too hastily to the lancet, till we are satisfied of its being called for by the actual presence of inflammation. But I am too sensibly alive to the immense practical distance between our ability to anticipate visceral mischief, and to repair that mischief after it has already taken place, to be deluded by groundless apprehensions — I say groundless, without hesitation, since I have now put the matter too frequently to the test of experience to admit of farther uncertainty: and reason will here most amply support the dictates of experience; for I would avail myself of one of Dr. James Johnson's happy illustrations, and ask those cautious gentlemen whether, if the female breast were menaced with inflammation from stagnant milk, and it required some days, perhaps, for the completion of a process for emulging its lactiferous ducts, they would hesitate for a moment in the repeated application of leeches in order to arrest the progress of suppuration till they could manage to effect their object? The most successful practitioner, therefore — the profession may rest assured of it — will be he whose guiding principle it is, in the treatment of the severer examples of this disease, so to render the lancet and mercury mutually subservient to his purposes, as that the one may be made to co-operate with, modify, and promote the effects of the other.

It will be found excellent practice, under aggravated suffering, and where no obvious contra-indication exists, to seat the patient upright in a bath, as warm as he can bear it, and while he continues there, to let blood flow from the arm, at as full a stream as can be commanded, till either complete relief be acknowledged or faintness be produced. By such a proceeding, the pulse, which

* Pring's Principles of Pathology, 1823.

was labouring, slow, and intermitting, becomes generally of natural frequency, regularity, and strength, and present advantage is, at all events, procured; but should the distressing symptoms seem disposed to return after a removal from the bath, a full dose of of calomel and opium, (fifteen grains or ℈j. of the former to two or three grains of the latter, in pills,) may be given,* from the effects of which I have been taught confidently to anticipate a more retentive stomach, and an interval of some hours of comparative rest — an interval which we had better suffer to pass over with as little interruption as possible. In about four to six hours afterwards, castor oil, the ol. terebinthinæ, or some other active purgative, under the form of mixture, may again be prescribed, and varied according to circumstances, till success is the result of our trials, or till the continued obstruction after a reasonable interval, and the non-appearance of any affection of the gums, compel us to have further recourse to mercurial combinations. But—I repeat it—the uninterrupted administration of this medicine is always to be regarded as an evil of magnitude, inasmuch as, notwithstanding the utmost vigilance on our part, its effects will often be productive of greater annoyance than we could desire: however, as I can take it upon myself conscientiously to affirm that, *under my own management*, nothing beyond temporary inconvenience has ever succeeded to the treatment I so strongly advise in this disease, I apprehend that this can hardly be placed in the scale against the imminent peril of the patient, or be regarded as a rational objection to its universal adoption under the restrictions I have attempted to define.

In respect to the choice of those purgatives which are, in the first instance, to be combined or alternated with calomel, I may remark, that I myself have been accustomed to prefer the compound extract of colocynth, jalap, scammony, and aloes. For the last two or three years, the croton oil has entered largely into my prescriptions, with a view to quicken the effect of the other ingredients; and I have repeatedly given it the most impartial trial entirely unassisted, or combined with calomel only: but I am obliged to declare that, while it is to be regarded as a valuable addition to the materia medica for the purpose I have mentioned, of increasing the power of other combinations, I cannot admit it to have any claim to superiority when given alone, in the removal of those obstinate obstructions which some practitioners, on its first introduction, were sanguine enough to maintain had become completely tractable under its use.

The oil of turpentine I hold in much higher estimation as an auxiliary in the plan I have detailed. Its safety even in abdominal inflammation is sufficiently established; and, notwithstanding its disgusting taste, it will often remain on the stomach when other

* 'I have occasionally followed with success the plan recommended by Mr. Corbyn in the treatment of Indian cholera, by giving the calomel in powder, and washing it down with the proportion of opium in a draught.'—*Edin. Med. and Surg. Journal, Vol. XVI.*

liquids are rejected. It besides has appeared to me, from the readiness with which it enters the circulation, and the stimulus it communicates to the mouths of the absorbents, to promote the mercurial saturation of the system, which, if actually the case, would give it a decided advantage over all other purgatives. Castor oil, after a passage has been once obtained, will be found extremely effectual in carrying off the vitiated secretions which are so copiously poured into the intestines through the biliary ducts. Senna, the neutral salts, the pulv. jal. comp. suspended in cinnamon water, &c. &c. may severally be called in aid for the purpose of varying the stimulus, which will often contribute not a little to the accomplishment of our object.

Alum, originally proposed by Dr. Percival,* I found, on my arrival in the West Indies, to be a favourite remedy in ten-grain doses, combined with an equal quantity of jalap, and repeated every second or third hour. I have seen it prescribed very often, and have occasionally used it myself, but never with marked advantage — indeed, as the practice manifestly was built upon unsound pathological views, I was soon induced to abandon it altogether.

Opium will be seldom beneficial, most frequently injurious in the earlier stages of this complaint, from lessening the effect of that stimulus which we are anxious to communicate to the ducts; but when the violence of the spasmodic and inverted action of the alimentary tube baffles all our attempts at affording relief, to stimulate farther is to do wrong; and it then becomes one of the most valuable of our resources, in conjunction with calomel and the lancet (as was hinted before), for allaying that inordinate irritability which is a serious obstacle to our designs. It is valuable, however, only as it promotes this object, and ought, therefore, to be abstained from when we can proceed without its assistance. Hyoscyamus may be occasionally substituted with propriety, where the indications for immediate relief are less urgent or imperative.

Having given full weight to all Dr. Abercrombie's suggestions, as far as I could possibly reconcile them with the principles I consider established, the tobacco injections have been repeatedly administered according to the plan he recommends; but I cannot say they have answered the expectation his observations are calculated to raise of their superior efficacy. They have sometimes been the first to return with marks of approaching relief; but as this effect has immediately preceded or succeeded the evidence of mercurialisation, no positive inference can be drawn from so questionable a fact. The practice, however, is rational, and ought to be resorted to in every aggravated case. A pint of the infusion of senna, with a proportion of gamboge dissolved in it, has once or twice appeared, under the circumstances just mentioned, to be the successful remedy; but large quantities of any liquid thrown up by Read's injecting apparatus, promise greater effects than enemata of any other kind: I have not yet had an opportunity of putting this last

* Percival's Essays, Vol. II.

method fairly to the test. A blister, covering at once the epigastrium and hepatic region, has generally been directed by me at an early period of the attack; and I may briefly add, that the warm bath, fomentations, and the whole artillery of remedies recommended by the best writers on ileus, but which it would be tedious to particularise here, may be occasionally employed with advantage, *pro re natâ*, and in aid of the more essential measures.

I must not, however, omit to urge the propriety of never hastily abandoning a patient in dry bellyache, however hopeless, to appearance, his situation may be. We have seen that sinking of the vital powers may arise from simple congestion; and we must, consequently, be diligent, on the very first evidence of approaching debility, in pouring down brandy, wine, and the different medicinal stimulants, with a rapidity proportioned to the impending danger. By such means I have succeeded when even hope appeared absurd, and others have done the same. We have, consequently, the strongest encouragement to persevere to the last.

With one more observation, I take my leave for the present of hepatic ileus, 'knowing that it is one thing to cure symptoms, and another to subvert the tendency by which they have been produced, and may be produced again when the influence of the remedy has passed'* — a principle more forcibly illustrated in this than in most diseases, by the constant liability of the subject to renewed attacks, — I have been in the habit of recommending a colder climate to those who could afford the change, and I can only say I have never been disappointed in the anticipated benefit, which has generally been commensurate with the period of absence.

Antigua, 11th August, 1825.

II. *On the Extraordinary Obliteration of the Canal of the Strangulated Portion of Intestine, which has occasionally been produced by Adhesive Inflammation of its Mucous Membrane in Inguinal Hernia.* By Thomas Bishopp, M.D., Thornby, Northamptonshire.

In 1817 I met with the following instance of a very unusual obliteration of the calibre of the whole of that portion of intestine which was strangulated, in a case of recent inguinal hernia, under ordinary circumstances; to the relation of which I am desirous of giving a greater share of publicity than it derives from appearing only in my inaugural thesis published at Edinburgh in 1822, under the title 'De Hernia Enterocele Acuta Dissertatio,' &c. John Hardstaff, a miller, at Leicester, aged twenty, previously in good health, was seized 27th March, after having carried a sack of corn, with pain in the bowels, accompanied with nausea and severe vomiting; I visited him at noon, which was about four hours after

* Pring's Principles of Pathology.

the attack, and found that a bubonocele of moderate dimensions, formed apparently of intestine, without any portion of omentum, had made its first appearance at this time. I immediately bled him largely, and attempted reduction by the taxis in the usual way, but without success; oily and tobacco glysters were then employed, and the coldest water locally, with great diligence.

On the following morning, 28th, I found him nearly in *statu quo;* repeated the abstraction of blood from the arm to syncope, and again attempted manual reduction with the utmost caution, and I flattered myself at first with success; but in this I was soon undeceived, by the re-appearance of the hernial tumour. The operation was now proposed, but firmly rejected both by patient and relatives. In the evening the symptoms were somewhat less urgent; the tobacco glyster was repeated, and an opiate given.

29th. — The symptoms continued with little variation; glysters continued, and the operation still repelled; the taxis was again employed very slightly for a few minutes, unsuccessfully.

30th. — A bad night; worse in all respects; the only proper remedy still urged in vain; he suffered a farther loss of blood, and took only the citrate of potash.

31st. — Finding, at length, that he had no possible chance of recovery without the operation, all his symptoms having been more pressing, with the addition of hiccup, during the last night, he submitted to it. The sac contained about three ounces of a serous fluid. The intestine, unaccompanied with omentum, was slightly discoloured, its texture apparently uninjured, but very firmly embraced by the mouth of the sac, was reduced with sufficient readiness. The urgent symptoms now nearly ceased for several hours, but afterwards returned with increased urgency, more especially the bilious vomiting, acute pain in the bowels, and tension of the hypogastric region. Exhausted by these, he remained in a very composed state about twelve hours; and now yielded to the violence of the vomiting and pain, twenty hours after the operation.

On opening the body forty hours after death, it appeared that the intestine had been completely reduced; traces of considerable inflammation were obvious over the whole cavity of the abdomen, but not the slightest approach to gangrene; the inflammation was most considerable in that portion of the gut (part of the ileum) which had been strangulated. *This portion I cut out, and, on minute examination, found that it measured an inch and a half, and was so completely impervious throughout its whole extent, as not to admit either the smallest probe or a drop of water, in consequence of a very firm cohesion of the villous coat, most clearly produced by the adhesive inflammation, giving the whole a very notable degree of firmness and thickening; so that nothing like mobility between the coats could be perceived when the sides of the gut were rubbed together between the thumb and finger.*

It is unnecessary to remark, that this singular variety of obliteration of the canal of the strangulated intestine was a circumstance in the history of hernia which neither myself nor Dr. William

Arnold, who kindly aided me in the operation, were prepared to meet with. The fact appeared, indeed, to militate against the received opinions respecting the pathology of inflammation of the mucous tissue, at least where a morbid process had not been previously established. The fact was equally novel to Sir Astley Cooper, to whom I related the case, promising, at the same time, to present to him the preparation of the part in question; but in this respect we met with a mutual disappointment, which, from the importance attached to it, I feel it necessary to explain. The morning after this conversation with Sir A. C., I breakfasted with Mr. Brodie, putting the preparation alluded to into my pocket; Mr. Brodie was so much interested with it, that he prevailed on me to leave it with him for the purpose of more minute inspection, engaging to forward it afterwards to Sir Astley. Very unfortunately, Mr. B. left the preparation out of the spirits till it was spoiled. This I mention with great concern, considering it as invaluable; but must add, that Mr. B. apologised ingenuously to both parties for the misfortune; while he corroborated fully the statement of the fact which I have here given. Mr. Travers politely referred me to a parallel case related in the Mémoires de l'Académie de Chirurgie, tome iv. p. 173, communicated by M. Ritsh, which follows:—

'Un homme de quarante cinq ans, d'un tempérament bilieux, portoit depuis plusieurs années une hernie inguinale au côté droit, qu'il contenoit par un bandage. Il en étoit peu incommode, à quelques douleurs de coliques près qu'il sentoit de temps à autre de ce côté. Il se plaignoit d'être souvent constipé. Un jour, en faisant un grand effort pour soulever un fardeau, la hernie sortit: dès le moment il fut attaqué des accidents qui annoncent l'étranglement de l'intestin. Il appela un chirurgien et un médecin, qui n'omirent rien de ce qui pouvoit combattre les symptômes presents. Ils avoient mis en usage la saignée réitérée, les lavements emolliens, les demi-bains, les cataplasmes emolliens, et mêmes les clystères de fumée de tabac. Le tout ayant été continué soigneusement pendant deux jours sans ancun succes, le troisième on consulta M. Ritsh. Voyant que les symptômes persistoient malgré tous les secours, il crut que l'opération étoit indispensable, et il la fit. Ayant incisé les ligaments et ouvert le sac herniaire, il trouva l'intestin enflammé. Mais cette inflammation ne parut pas assez grave pour contre-indiquer la réduction. A peine fut elle faite, que les accidents parurent calmés; on fit prendre quelques lavements à demi-seringue, pour débarrasser les gros intestins, et malgré cela, le malade n'avoit pas été à la selle six heures après l'opération. Les accidents réparurent peu après qu'elle fut faite. Les clystères avec la fumée de tabac ne réussirent pas plus après qu'avant l'opération; et le malade mourut au bout de douze heures. A l'ouverture du cadavre, on trouva l'intestin iléon aussi excessivement rétréci en deux points, aux endroits qui avoient été étranglé par l'anneau, que si on l'avoit fortement serré avec une ficelle. Il y avoit adhérence mutuelle des parois internes de l'intestin, en sorte que la capacité qui étoit au

dessus de cette bride n'avoit aucune communication avec le reste de la continuité du canal: en un mot, le passage pour toute matière étoit exactement interrompu. On connut alors la cause des accidents secondaires, et de la mort qui en a été la suite funeste.'

In this instance, however, the obliteration was limited to the two points in the duplicature of intestine at which it had been chiefly compressed by the abdominal rings, while the intermediate portion contained in the sac remained entire. Professor Monro, in his elaborate and excellent work on the Pathology of the Human Gullet, &c. relates an instance in which the canal of intestine under strangulation was so completely obstructed by a firm coagulum of fibrine, that a probe could not be passed through it. But here, although there was neither any vestige of inflammation in the villous coat, nor of incipient organisation in the fibrine effused, the case shews, I think, clearly the possibility of both these events concurring, under a slight variation of circumstances. If this opinion be admitted, the case may be adduced as an important illustration of the two preceding instances: but the subject of inflammation of the mucous membrane, in its adhesive stage, has received the most able illustration from the labours and genius of the great oracle of modern surgery, John Hunter; when treating of the two parts that have the orders of inflammation respecting priority inverted, in his work on the Blood, Inflammation, and Gun-shot Wounds, p. 242, 4to edition, he says, alluding to inflammation of the mucous membrane of the nose, lungs, intestines, &c.: — 'If this inflammation, which produced suppuration on those surfaces (the secreting surfaces), become more violent, or have something of the erysipelatous disposition, we find that it moves from the suppurative to the adhesive, and throws out the coagulable lymph. I have seen this in the intestines, often on the inside of intestines that have been strangulated in a hernia. I have also been able to produce it on the inside of the vagina of an ass, by injecting a strong solution of corrosive sublimate. But, if the erysipelatous kind, the surfaces will take on the adhesive action immediately, or at first. This is evidently the case in what is called the ulcerous sore-throat. I have seen it in the trachea. I have seen it thrown up from the lungs in branches. I have seen it in the pelvis of the kidneys, ureters, bladder, and urethra. This is contrary to the mode of action of the erysipelatous inflammation in the cellular membrane and circumscribed cavities: for there it hardly produces adhesions; and, when it suppurates, the suppuration takes place first, &c. In the experiment on the ass, the horns of the uterus were filled with serum, and the inflammation had run so high, that the coagulating lymph had been thrown out, so as almost to obliterate the vagina, uterus, &c. by those adhesions which are the ultimate effects of inflammation on secreting canals, while suppuration is the ultimate effect of inflammation on internal surfaces.'

These observations of Mr. Hunter afford, in my opinion, the most satisfactory solution of the difficulties upon this topic. That similar examples have not been noticed more frequently, I conceive

to have arisen from an oversight in the dissection of these cases, the gut not having been inspected interiorly with due attention.

In the Edinburgh Medical and Surgical Journal for January 1824, Mr. Geoghigan has inserted a letter on the subject of hernia, addressed to John Abernethy, Esq., in which he affirms, that the reduction of hernia, either by taxis or operation, under an inflamed and tumefied state of the prolapsed gut, frequently fails of success, in consequence of its being in an impervious state, arising from the establishment of an agglutination of its villous coat. But he adduces no *post mortem* facts to confirm his statement. That the operation frequently fails, and that apparently from the new circumstances in which the strangulated portion of gut was subjected prior to the operation, is sufficiently notorious; but I here request from this author, who has laid his fraternity under great obligations to him for his former important contributions to the science of surgery, any further illustration on this subject, and especially, that he would have the kindness to favour the public with the more precise ideas and facts, which he may possess respecting the species of agglutination above alluded to.

In Anderson's Journal for July 1824, p. 475, is cited from Graefe and Walther's Journal, B. 2 ters. Heft. a case of inguinal hernia, by Dr. Gunther, of Cologne, in which the patient died on the seventh day of strangulation; all the ordinary measures failing, and the patient refusing to submit to the operation. As the case is of practical interest to the surgeon, and may otherwise escape the observation of many, I beg to transcribe it, that it may be collated with my own under one view.

'A middle-aged labouring man had had an inguinal hernia on the right side for a considerable length of time, which, not being retained by a suitable bandage, protruded, and became strangulated. The strangulation was relieved by the taxis, but vomiting and constipation remained. They, however, gradually diminished so far, that the vomiting became less frequent, and a small, rather firm motion occurred every eight or ten hours; his condition, in general, improved so much, that he could follow his business in some degree, and his appetite returned. He continued in the same condition for two years, when the hernia again protruded, and became strangulated, with the usual symptoms. The surgeon who had often before attended him reduced the hernia by the taxis, but the symptoms continuing unabated, I was called in, and, on examination, found the abdominal ring pervious, the belly tense, but not particularly painful. I ordered magnes. sulph. c. tra. theb. and the injection of tobacco-smoke, but without success. In two days, a little discharge took place from the bowels, but the rest remained as before. As I suspected that a partial strangulation still remained, and as the patient refused to submit to the operation, I gave him ol. ricini c. tra. theb. and clysters of tobacco decoction with vinegar; put him in the warm bath, &c., but all in vain. On the fifth day of my attendance, and the seventh from the appearance of the symptoms, the patient died. On examining the body, we found that

there was not any strangulation, and that the viscera of the abdomen generally were in a healthy state; but in the small intestine we found a portion, about an inch and a half long, constricted and nearly altogether obliterated, presenting also the appearance of commencing gangrene. This state of disease probably originated in the constriction caused by the inguinal ring, during the long time that the intestine had remained fixed there at a former period.'

The practical inferences to be drawn from these cases are obviously the following: — If the parietes of the gut, on exposure, appear to be more dense and firm than ordinary, without mobility, when examined and gently rubbed between the finger and thumb, the constricting aperture through which it escaped should be sufficiently dilated by the bistoury; the intestine may be left unreduced, connected to the integuments by a ligature passed through the mesentery. If no evacuation takes place in a few hours, and the gut appear to undergo no diminution of bulk, an exploratory orifice may be made to admit a probe; if by this means the canal appear to be clear, it should be returned into the abdomen, a fine silk ligature being passed to close the orifice made in it: but if an obstruction be detected, the part should be slit open and treated as under gangrene.

PART III.

COLLECTION OF MEDICAL FACTS AND OBSERVATIONS.

SECTION I. — BRITISH.*

I. *THREE CASES OF CROUP; indicating apparently Contagious Properties in this Disease.*†

1st.—On Thursday, December 4th, 1817, Mrs. Jackson, a respectable woman, residing in Portland Street, Soho, applied at the St. George and St. James' Dispensary for advice for her eldest son, a boy four and a half years old, whom she described as labouring under a severe attack of cynanche tonsillaris.

On being visited, however, the child was found extremely ill with

* The 'FACTS,' &c. quoted in this Section, are drawn exclusively from British sources, and more especially from the *Original Communications* contained in the recent Numbers of the other medical journals of Great Britain; an abstract of the more valuable parts of which will thus, monthly, find a place in the REPOSITORY, in a condensed form, and illustrated by occasional observations of our own.—EDITORS.

† From an article by DR. G. GREGORY, in the Lon. Med. Journal for October, p. 283.

ulcerated sore throat; which had been present for six days, and which, by the mother's account, (which, however, was very indistinct) had been preceded (or attended at an early stage) by a scarlet eruption.

Decoction of bark, with acid, a purgative, and a blister, were now ordered; but about midnight he was seized with well-marked symptoms of Croup; which, notwithstanding the application of leeches, and the free exhibition of calomel, proved fatal in about twenty-four hours after its invasion. On examination after death, the trachea was found lined by a pretty thick tube of coagulated lymph, which extended down nearly as far as the division of the bronchiæ.

2d.—Four days subsequent to the death of this child, the second son, a remarkably stout and healthy boy of three years old, began to complain of illness,* which, as in the preceding case, was followed about the seventh day by a severe attack of Croup, under which he sunk in about thirty hours. The body was not examined, the complaint being obviously similar to that of which the brother had died.

3d.—One other child still remained, a very fine girl, aged six years; and in her, on the day following the death of the second boy, (that is on the 19th December) symptoms of cynanche tonsillaris appeared.

It is not necessary for our purpose to follow Dr. Gregory through the detail of this case. Suffice it to say, that the patient was seen by him on the first day of her illness, and carefully attended throughout. Nevertheless, on the fourth day (Dec. 22,) symptoms of Croup arose, and she died on the seventh, exhausted by the disease, and by the treatment necessarily employed for its suppression.

On dissection, a blush of inflammation appeared towards the upper rings of the trachea, while a considerable quantity of matter of a purulent appearance, blocked up the passage; but no membrane, nor any attempt at the formation of one, was to be observed.† The lungs were perfectly healthy.

Observations.—It may remain a question, how far contagion had a share in the production of the disease of which the two latter of these patients died. Sufficient, however, we think, appears upon the face of these cases, to justify a strong suspicion that it had some share in this event; and this suspicion is strengthened by our learning that a family of children, of nearly the same ages, which occupied an adjoining room, but which, by the prudence of the mother, had been prevented from having any communication with the subjects of the preceding cases, continued perfectly healthy.

Nor should the impression made upon the mind of the reporter

* The nature of this illness is not particularly stated; but the entire context indicates it to have been similar to that in the other two children, namely, an attack of cynanche tonsillaris.

† The absence of any membranous deposition in this case, is to be attributed, no doubt, to the active measures which were early adopted, for the suppression of the tracheal inflammation.

himself at the time be entirely neglected, situated as he was, and qualified as he is, to form a correct opinion on the subject; and this impression, we may therefore add, seems to have been decidedly in favour of the opinion, that the disease was, and therefore may be, propagated by contagion.

Under these circumstances, precautionary measures, founded upon a belief in, or suspicion of the contagious nature of croup, should never, we think, be omitted when it makes its appearance; for no serious injury or inconvenience can ever, perhaps, arise from their adoption, nor any material advantage ever spring from their neglect.

We may here add, that the contagious nature of croup has not hitherto entirely escaped notice, as Dr. Gregory seems to intimate in the article before us. Amongst others, CHEYNE, in his work on the Pathology of the Larynx, mentions the subject, intimating, however, at the same time, if we are not mistaken, that the disease in such cases is in general connected with *cynanche maligna*, as actually happened in the first of the preceding examples with which we have been furnished by Dr. Gregory: and instances in proof of the contagious nature of the disease have occasionally appeared during the last five years, in some of the foreign medical journals.

II. *HERPES GENITALIS,—Remarks on, &c.*

Herpes genitalis is a common affection, simple in itself, pursuing a determinate course, and easily understood; but if it be misconceived or mismanaged, and particularly if treated as a syphilitic affection, the consequences may be very serious.

Royston and Bateman have written on præputial herpes, without intimating that the disease has a wider range; whereas there are three species, viz. herpes *præputii*, herpes *glandis*, herpes *scroti*.

Herpes genitalis then, is a generic term, implying a slight circumscribed inflammatory affection of the *male* genitals, proceeding to ulceration, advancing regularly towards a cure, and leaving no cicatrix.

1st species.—*Herpes præputii* presents two varieties, viz. herpes præp. *interni*, and herpes præp. *externi*.

a. Herpes præputii interni.—Heat and itching are experienced under the prepuce, and upon examination, a reddish and elevated pot is visible, as large as, or larger than a silver penny. In a few hours, more or less according to the severity of the attack, three or four, or even more watery points appear. Next day these points coalesce and form an ulcer, rather painful, and exhibiting a whitish surface. Under proper management, the heat and other unpleasant symptoms soon cease, the ulcer becomes clear and red, and gradually heals. *Ceratum calaminæ*, spread on lint, is the best application; it imparts immediate ease, and always succeeds. No internal medicine is required, and he who employs dry lint, or any other (*irritating?*) application, will repent his rashness.

The time of cure varies from three, to seven, twelve, or even more

than twenty days; for in severe cases the tumefaction of the prepuce is considerable, and the pain and heat distressing.

b. Herpes præputii externi.—The stages of this variety are less obvious, for being external, it is liable to irritation from the dress. By mismanagement also it sometimes degenerates into a troublesome ulcer, which has been, and may be mistaken for a chancre. No treatment but care is required; for if irritation be guarded against, the discharge forms an incrustation, which left to itself slowly separates, and discloses the part beneath perfectly healed. But if this salutary process be interfered with, great mischief ensues; and the ulcer extends, creating anxiety and doubt.

2d species.—*Herpes glandis.*—Here the affection is more irritable, and the ulcer obstinate in proportion—the cure, therefore, is in general more tedious; and every application is injurious, except the *ceratum calaminæ* spread on lint.

3d species.—*Herpes scroti.*—This affection begins at the lower part of the scrotum, near the raphi. No treatment but care is necessary; if this be attended to, an incrustration gradually forms, dries, drops off, and leaves the parts beneath sound.*

Observation.—The exciting cause of this last, and indeed of every other species of herpes genitalis, is, we are assured, *irritability of the urethra.* This is no doubt *often* the case, but we cannot admit that it is so *always.*

The author also appears to us to have taken rather a practical view of the disease, in limiting its range as he has done to the *male* genitals; for females are surely liable to a similar eruption, and upon parts to which the term *genitalis* is as applicable as it is to the *penis* or the *scrotum.*

III. *On the Action of* Poisons *on the Vegetable Kingdom. Experiments, &c.*

So little attention has hitherto been paid to the action of *poisons* on the *vegetable* kingdom, that every fact calculated to illustrate the subject, is deserving of notice. We have much pleasure, therefore, in directing the attention of our brethren to the following details, relative to a series of experiments instituted for this purpose by Mr. F. Marcet,† of Geneva, and communicated by him to the Society of Natural History in that city, in December 1824.

From these experiments Mr. Marcet concludes, that both *mineral* and *vegetable* poisons act upon plants very nearly in the same manner as they do upon animals. Some, as the metallic poisons for

* *Amicus*, in Med. Chir. Rev., Oct. p. 556.

† The original memoir of Mr. Marcet is to appear, we are told, (perhaps has already appeared) in the 3d volume of the 'Mémoirs de la Société de Physique et d'Histoire Naturelle de Génève.'

For the details given by us, we are indebted to two abstracts of this memoir, inserted, one in the London, the other in the Edinburgh Journal of Science for October. These articles we have compared together, and from each have extracted what to us seemed most interesting; our report, therefore, is at least as accurate, and more full than either of those alluded to.

instance, appearing to operate by a kind of *corroding* power, which produces organic changes in the plant; whilst others, drawn from the vegetable kingdom, seem to kill by what may be called their *narcotic* influence.

With respect to the former of these classes we may observe, that the results obtained are not of a nature to unsettle any existing doctrines, provided it be admitted, that their action is principally exerted upon the *vascular* system, a part common to both plants and animals.

But with the latter it is far different, for should the results detailed with respect to them be confirmed by further experience, we must either abandon the notion that *narcotic* poisons exert their destructive influence upon the *nervous* system of animals, or we must admit, contrary to our present doctrines, that plants are endowed with some system of parts of an analogous nature.

We shall first proceed to notice the experiments made with *metallic* and other *mineral* substances; and afterwards those in which *vegetable* substances and certain of the *gases* were employed.

I. *Experiments with Metallic Substances.—*ARSENIC.

Exp. 1.—Two or three plants of the French bean *(phaseolus vulgaris)* were watered with a solution of six grains of oxide of arsenic in one ounce of water.*

By two ounces of this solution, the plants, at the end of from twenty-four or thirty-six hours, were completely withered, the leaves faded, and some even rendered yellow. An appreciable quantity of arsenic was afterwards found in the leaves and stalk of the plant.†

Exp. 2.—A branch of a *rose-tree*, with a flower at its extremity just beginning to blow, was introduced into a similar solution of arsenic, on the 31st March. Next day, the external petals of the flower had become flabby and slightly purple, and the leaves began to droop. On the fourth day, (April 3d) the petals were still more flabby, much withered, and of a deeper purple; the flower also had lost its odour, and the leaves were quite withered. Next day, the fifth, the branch was quite dead.

On examination, it was found that *one-fifth of a grain* only of arsenic had been absorbed; and traces of the mineral were detected in the leaves and flower.

Similar branches placed in pure water, had, after five days, their flowers fully expanded, and their leaves fresh and green.

Exp. 3.—On the 1st of June, a cut about an inch and a half long was made in the stem of a *lilac-tree;* the stem was about an inch in diameter, and the cut penetrated to the pith. Into this cut about fifteen or twenty grains of arsenic (the oxide), moistened with water,

* The *bean-plants* mentioned in the following experiments were all of the same kind, viz. the *phaseolus vulgaris;* and the *solutions* employed (unless when it is otherwise specified) were always of the same relative strength, namely, with six grains of the mineral to one ounce of water.

† We are not told whether the arsenic was found in *each* plant, or in *one* of the plants; nor is any *date* given.

were introduced, and the wound bound up. On the eighth day the leaves began to close and curl up; on the fifteenth day they were withered, and the branches had begun to dry. On the twenty-eighth day the branches were all dry, and in the second week of July, (about the fortieth day) the stem was quite dry, and the entire tree dead.

At the side of this lilac was another, the stem of which joined its poisoned companion a little above the earth. In about fifteen days after the death of the first, the second tree became dry, and perished in the same manner. But another tree, apart from these, and similarly wounded as the first, (but not poisoned,) suffered no damage.

Exp. 4.—Some arsenic was introduced *below the back* of another lilac-tree. At the end of fifteen days the principal branches near the wound were quite dry; but the rest did not suffer. *No date given.*

II. *Copper.*—*Exp.* 5.—The roots of a bean-plant were withdrawn from the earth, and placed in a vessel containing a solution of the sulphate of copper, of the usual strength. In twenty-four hours the leaves of this plant had entirely faded; but a longer time, and a stronger solution, seem to have been necessary to kill it completely.* *No date given.*

III. *Lead.*—*Exp.* 6.—The roots of a bean-plant were introduced into a solution of the acetate of lead, of the usual strength. On the second day the lower leaves were faded, and on the third, the plant was dead. *No date.*

IV. *Mercury.*—*Exp.* 7.—Two or three bean-plants growing in a pot were watered (May 5th) with a solution of the muriate of mercury, of the usual strength.

Next day the leaves drooped, and the stems had assumed a yellow-brown colour. The watering was continued, and on the third day the plants were quite dead, the stems yellow, and the leaves dry and faded. Traces of mercury were found in the leaves.

Exp. 8.—A branch of a rose-tree, with two or three half-expanded flowers, had its extremity immersed in a flask containing a similar solution of the muriate. This was on the 3d of April.

On the third day the leaves were discoloured here and there, and the external petals were faded; but the flower had expanded a little. On the fourth the discoloration was deeper and more extensive, and the leaves appeared very unhealthy; and on the *fifth* day the branch was quite dry; but the central petals of the flowers were not yet withered.†

On examination, it appeared that thirty-two grains of the solution, containing half a grain of the poison, had been absorbed.

* In the Annals of Philosophy, (N. S. XVIII. p. 76) mention is made of an experiment by Mr. Phillips, in which a young poplar-tree was killed by watering it with a solution of the sulphate of copper, traces of which metal were afterwards found in the plant.

† In the Lon. Journ. of Science, p. 193, the second, third, and fourth days are specified, instead of the third, fourth, and fifth, which are here given. *Our* authority is the dates of the 5th, 6th, and 7th of April, given in the Edin. Journ. of Science, p. 295.

V. *Tin.—Exp.* 9.—A branch of a rose-tree, with two or three half-expanded flowers, was introduced into a solution of the muriate of tin, of the usual strength, April 13th.

On the third day the leaves were in part discoloured; on the fourth they were all yellow, and the branch was dead.

The leaves steeped in water yielded, on examination, traces of tin.

Exp. 10.—Bean-plants were affected by a similar solution, in the same manner as those subjected to the influence of the muriate of mercury, as in Exp. 7.*

II. *With other Mineral Substances.*

Baryta.—A solution of the muriate of baryta is stated to have affected bean-plants in the same manner as the acetate of lead, in the 6th experiment. No details given.

Magnesia.—It has been stated that this earth is injurious to vegetation. Bean-plants, however, with their roots immersed in a solution of the sulphate, did not suffer; although the strength of the solution was gradually increased from six to eighteen grains in the ounce of water.

Potash.—Some bean-plants were introduced into a solution of potash, composed of one part of the liquid alkali to three of water. In a few hours they began to droop, and in twenty-four they were entirely faded.

Sulphuric Acid.—This acid, diluted and employed in the same manner as the potash, is stated to have produced upon some bean-plants similar effects. No details given.

Note.—In our next Number we shall proceed to notice the experiments made with *vegetable* poisons, and with certain of the *gases;* for the introduction of which, at present, we cannot conveniently afford sufficient space.

We cannot, however, abstain from remarking, that our contemporaries, into whose hands the original memoir fell, should have paid more attention to the *dates* of the experiments than they appear to have done; for statements with respect to plants may be either true or false, according to the season of the year to which they refer.

We must not omit to state, that comparative experiments with *simple* water, appear always to have been made at the same time with the others.

IV. *Transfusion of Blood, recently performed in a case of Uterine Hæmorrhage. Case, &c.*

Case I.†—A delicate woman, a patient in a public charitable institution, was delivered, as we are given to understand, after an easy natural labour, on the ——‡

* We are not told whether these plants were *introduced* into the solution, as in the preceding experiment, or merely *watered* with it, as in the experiment referred to.

† From a communication by Mr. Waller, in Aldersgate Street, in the Lond. Med. Journal, October, p. 273.

‡ The patient's age, a material point, is not mentioned by Mr. Waller; a contemporary journal, however, states it to be about twenty-five. Nor are

The expulsion of the placenta, however, (which was accomplished by nature) was followed by profuse hæmorrhage from the uterus; so that in a little time the patient was reduced to the most extreme state of exhaustion, the pulse, respiration, and power of deglutition having nearly ceased, whilst the surface was blanched and cold.

From this state the patient was in a little time partly roused by the application of external warmth and the exhibition of diffusible stimuli, such as brandy and ammonia; but the reaction produced by these measures was still so feeble, that at the end of five or six hours all hope was extinguished of being able by them, or any other means in common use, to prevent the speedy accession of death.

It was determined, therefore, in this predicament, to try the effect of *transfusing* some fresh blood into the system: and the aid and approbation of Dr. Blundell (the well-known advocate for this measure) having been obtained, the operation was accordingly performed, and in the following manner.

One of the veins at the bend of the arm having been laid bare, an incision was made into it sufficiently large to admit the pipe of a syringe capable of holding two ounces.* The syringe was then filled with blood, drawn at the moment from the husband of the patient; and the pipe being immediately introduced into the vein, the fluid was slowly injected. This part of the operation was repeated a second time, so that about four fluid ounces of blood were thus introduced.

From the injection of the first syringeful no particular effect was observed; but towards the end of the second there was an approach to syncope, with sighing, and efforts to vomit. These symptoms, however, ceased spontaneously in the course of a few minutes. After this, no further medical aid seems to have been necessary; the powers of life gradually returning, and without the occurrence of a single unpleasant symptom, as we are told, until health was established.

Observations.—It is impossible, perhaps, at present, to come to any positive conclusions with respect to this case; for the quantity of blood injected was so small, that we find it difficult to believe it could have been productive of much benefit; whilst, at the same time, the powers of life were so reduced before the operation, that death seems to have been inevitable, had the patient been abandoned to her fate. One thing indeed is manifest, that the operation was productive of no injury, and the establishment of this fact, under circumstances of such peculiar danger, is sufficient to entitle the gentleman to whom we are indebted for it, to the thanks of the profession. Impressed with this feeling, we cannot abstain from expressing our regret that Mr. Waller should have wasted so much space upon

any *dates* given by this gentleman, so that we can only state upon conjecture, that the occurrences which are the subject of this article took place some time in July or August last.

* On opening the vein a little blood flowed from it, which was arrested by passing a blunt needle under the vessel, a little below the orifice; a measure of precaution recommended to future operators as a preliminary step.

speculations and remarks of little interest or value;* whilst he has, at the same time, omitted many minute details, both with respect to the state of the patient, and the performance of the operation, which might have been useful hereafter, in enabling us to compare this case with others of a similar description.

Note.—Since the preceding article was prepared, it has come to our knowledge, that the operation of transfusion has been again performed in this city, and in a case very similar to the preceding. The operator was Mr. Doubleday, of Blackfriar's Road, by whom the necessary details will doubtless be speedily given to the profession: in the absence of these we shall merely state, that the case terminated favourably.

Section II.—Foreign.

I. *Comparative Anatomy.*

M. Flourens, whose former inquiries were directed to the brain of the superior animals, which he represented as consisting of four parts of essentially distinct properties, viz. the cerebral lobes, the cerebellum, the thalami optici, and medulla oblongata, has given us the result of his investigations into the brain of fishes. This he has found to be generally divided into five parts, resembling so far the mammiferous animals, and differing from the brain of birds, which has only four. The carp, for example, has a brain composed — independently of the medulla oblongata properly so called — of four distinct protuberances. The first two, reckoning them from the anterior to the posterior part, are in pairs, or double; the third is single; the fourth is composed of a middle tubercle and two lateral lobes.

The anterior portion corresponds to the cerebral lobes; it gives origin to no nerves; and when stimulated, no convulsions are excited. The second portion gives origin to the optic nerves, and therefore corresponds to the thalami optici. On being pricked, convulsions are produced.

The third protuberance, which is single, does not give origin to nerves, neither does it excite convulsions through the application of stimuli. Its removal disturbs the harmony of muscular action: it is therefore analogous to the cerebellum.

The fourth portion, consisting, as we have seen, of a middle

* The original article occupies upwards of *four* pages of the journal in which it appears. Of these cases generally, it may be remarked, as we have already observed, that they shew the operation to be attended by no hurtful effects—a fact which however, is satisfactorily enough shewn, even by the results of trials made by the earlier experimenters in this way. Judging from what has been published respecting the history of these cases, and recollecting the effects produced by the experiments of MM. Prevost and Dumas, who revived this practice a few years since, and to whom we are therefore indebted for whatever facts have since been promulgated respecting it, we can come to no other inference, than that the patients now referred to would have recovered if the operation had not been performed.

tubercle and two lateral lobes, gives origin to the nerves distributed on the respiratory organs, which are affected with convulsive motions when this part of the brain is stimulated, and have their function destroyed when its substance is removed. It therefore corresponds to the medulla oblongata, which has acquired a considerable development; whilst in other animals it scarcely forms an organ distinct from the rest.

As respiration is a function of a much more laborious nature in fishes than in animals of a higher order, who act directly upon the air, whilst the former act upon it only through the medium of water, so we find in these the brain to preside over the respiratory organs, and to possess a development which constitutes the essential distinction between the brain of fishes and of other classes of animals.

II. *On the Conditions essential to the Sense of Hearing, and the various Causes of Deafness.*

M. Flourens, after detailing the various delicate experiments undertaken to discover the influence of the different parts of the ear on the sense of hearing, has deduced the following conclusions:

1st, That the destruction of the tympanum and hammer do not materially affect the hearing.

2d, The removal of the stirrup weakens it considerably.

3d, The destruction of the membrane which covers the fenestrum ovale (the stirrup being still removed) weakens the auditory sense still more.

4th, The replacing of the stirrup restores to it some degree of energy.

5th, The rupture of the semicircular canals renders suddenly the hearing painful and confused, and causes, at the same time, a quick and violent agitation of the head.

6th, When the vestibule is exposed, there does not result any remarkable affection of the hearing.

7th, The partial destruction of the nervous expansion in the vestibule partially destroys the sense. The complete destruction destroys it entirely.

Hence we find the part most essential to the function to be the nervous expansion of the vestibule; and that, strictly speaking, it is the only indispensable part, the others merely contributing to the extension, the energy, and modifications of the function, or to the preservation of the organ.

We perceive, also, in making a practical application of these experiments, that there is one cause of immediate and absolute deafness, namely, the destruction of the nerve or of its expansion in the vestibule; and that there are several causes of dulness of hearing, such as the destruction of the stirrup, of the vestibulary orifices, and of the walls of the vestibule and semicircular canals.

Moreover, the previous experiments of M. Flourens having shewn that the sense of hearing is lost by the removal of the cerebral lobes, without any part of the ear being touched, it follows that the

loss of the organ of sense is completely distinct from the loss of the organ of sensation; and that, as each of these species of deafness is attended by peculiar symptoms, we may hence be able to ascertain the part affected; and, having discovered the seat, may thence determine the comparative importance and severity of the disease.

III. *Origin of the Spinal Nerves.*

M. Amussat, in a verbal communication to the Académie Royale de Médecine, states his having ascertained that the ganglion placed near the origin of the spinal nerves, and which belongs exclusively to the posterior fasciculus, having the filaments of the anterior merely in apposition, is not formed of a homogeneous tissue.

The nervous threads form a larger fasciculus in entering this ganglion than in leaving it; and in their course through it, each filament preserves itself distinct and perfectly continuous, merely receiving an addition of cineritious substance. In their subsequent ramifications, each thread of nerve, however minute, is composed of a filament of either fasciculus, the one subservient to sensation, the other to motion.

M. Amussat also states, that the nerves of the sacral plexus cross each other in pairs in uniting to form the sciatic nerve.

PART IV.

INTELLIGENCE RELATING TO MEDICINE AND THE MEDICAL SCIENCES,

FOREIGN AND DOMESTIC.

I. *On Egyptian Mummies and the Art of Embalming.**

(Concluded from page 375.)

Having given a full account of Dr. Granville's dissection of his mummy in our immediately preceding Number, we now proceed to notice his very interesting researches respecting her age, the disease of which she died, and the manner in which she was prepared.

Dr. G. thinks that she died at an age between fifty and fifty-five, after having borne children. The chief circumstance on which he rests this opinion is the thinning of the centre of the plates of the ilia, which was very remarkable in his mummy, and which, according to the numerous observations of Professor Chaussier and others, indicate these facts. This thinning of the osseous plates of the pelvis is seldom observed until after the fortieth year; it takes place only in females who have borne children; and it reaches its maximum about the fifty-fifth year.

With respect to the disease of which she died, Dr. G. considers that it was ovarian dropsy, attended with structural derangement of

* An Essay on Egyptian Mummies; with Observations on the Art of Embalming among the ancient Egyptians. By A. B. Granville, M.D., F.R.S. (Read before the Royal Society, April 14th, 1825.)

the uterine system generally: and he states, in support of his assertion, ' that the womb is of larger dimensions than it is known to have at the age in question: that the ovarium and broad ligament of the right side are enveloped in a mass of diseased structure, while the Fallopian tube of the same side is perfectly sound and beautifully preserved; and, lastly, that the contracted parietes of what (to judge from the dimensions of the remains) must have been a large sac connected with the left ovarium, leave no room to doubt of the correctness of the opinion I have ventured to express. This opinion, I have the satisfaction to add, has not been disputed by a single individual out of the many very competent judges to whom I submitted the parts, among whom I may mention the late Dr. Baillie, and Mr. Wilson, Mr. Carpue, Mr. Brooks, and others. Another mark, denoting the previous existence of disease, I detected on the scalp, namely, the remains of that peculiar cutaneous affection of the head, which has been denominated *porrigo decalvans*, from its effect of destroying the hair as well as of preventing its growth. Was it for this that the head of this mummy had been shaved, as practised at the present day, and with what sort of instrument has the operation been executed? It certainly could not have been performed with scissors, however skilfully constructed, as the hair could not have been cut so close, nor of such uniform length with them. If with any instrument approaching to our razors in structure, of what material was it made? These are highly curious inquiries, which naturally spring from the examination of the condition of this mummy.'

The next points of inquiry to which Dr. G. directed his attention were, first, to discover, if possible, the method by which this perfect specimen of Egyptian mummies had been preserved. Secondly, to ascertain how far the description given by ancient writers of the art of embalming among the Egyptians applied to the present specimen. And, lastly, to determine the nature of the substances employed for the purpose.

' The *first* fact to be noticed,' he proceeds to state, ' in regard to the preparation of the mummy, is the chestnut-brown tint of all the bandages, denoting the presence of some colouring matter in them, the nature of which it was important to ascertain, in order to judge of the intention of those who employed it. For this purpose I made a few experiments with portions of the bandages taken from different parts of the body, when it was found that they had all been steeped in some vegetable solution, which, when treated with gelatine, exhibited the presence of tannin in considerable quantity, a circumstance farther corroborated by the peculiar taste of the infusion. Now, as every particle of the bandages had been equally died with this vegetable solution; and as it appears evident, from other circumstances, that such a process had not been adopted for the sake of giving to the envelopes of the mummy the particular colour in question, may we not infer that the Egyptian embalmers were acquainted with the antiseptic power of astringent and slightly vegetable infusions?

'This inference is confirmed by the *second* fact to be noticed, namely, the appearance and condition of the integuments, which, besides being of a dark brown colour, differ in no respect from prepared leather, particularly those of the abdomen, the thighs, and the mammæ. A question then will naturally arise, was it the bark of the acacia, so plentiful in Egypt, that was employed for the purpose; or did the Egyptians import oak-bark from the coast of Syria, where that tree grows in abundance? It is not improbable, that a gum, not unlike kino, may have been the substance used for the purpose of tanning the integuments, as I found, among the various lumps of resin contained in the abdomen, several portions of such a substance, specimens of which I exhibited to the Society, and which gave to distilled water a deep brown colour, from which a precipitate is obtained by gelatine.

'The *next* fact worthy of notice, is the appearance of minute saline crystals, found in great abundance in almost every part of the external, but more particularly of the internal, surface of the body. This saline efflorescence I gently swept off the surface with a new brush, and subjected to various analytical experiments, from which it results, that it consists of nitrate of potash, carbonate, sulphate, and muriate of soda, and traces of lime. Now, as none of these salts have ever been observed to form spontaneously, either within or upon the surface of preserved human bodies, particularly where the contact of external air has been so studiously excluded as in the present case, it follows, that in the preparation of mummies the embalmers must have had recourse to the immersion of the body into a saline solution of a mixed kind. The presence of lime may be accounted for by supposing, that in a preliminary operation, the cuticle, which, as I before stated, could not be detected in any part of the body except the head and the extremity of the toes, and has been found invariably wanting in all other mummies, was removed by means of that alkaline substance. This circumstance again goes far to shew that the Egyptian embalmers were acquainted with an important physiological truth, namely, that in order to promote the absorption of liquid substances, particularly of the tanning liquor and saline solution, applied to the external surface of the body, the cuticle must first be removed.

'A *fourth* fact, deserving of our attention, is the presence of a resino-bituminous substance between some of the folds of the remaining portions of the peritoneal membrane. On collecting this substance, and instituting some experiments upon it, I ascertained that the bitumen was mixed with a greater proportion of wax, so as to have rendered the mixture perfectly plastic. To have penetrated thus far, and to have lodged between closely adhering membraneous folds, this mixture must either have been injected quite warm into the cavity of the abdomen, or the body itself must have been plunged into a vessel containing a liquefied mixture of wax and bitumen, and there kept for some hours or days, over a gentle fire. The latter operation, not noticed by the older historians, has indeed been surmised by some of the modern writers on the subject;

but in none of them have I been able to find a corroborating proof of the correctness of such a surmise. The examination of my mummy has afforded me that proof, in the shape of a *fifth fact*, namely, the thoroughly impregnated state of the bones, membranes, and muscles, in every part of the body, by the same waxy and bituminous substance. Now, such a condition of the parts could not have been produced but by maceration or immersion, for a length of time, of the whole body, into a liquefied mixture of those two ingredients; accordingly, we must conclude that such a process was actually followed by the embalmers; unless we feel disposed to believe that they injected the body through the blood-vessels — an operation of which there is not the most distant evidence in the mummy before us.

'The adoption of my view on this point is farther authorised by the soft and pliant condition of the capsular membranes, of the cellular texture, and, above all, of the two coverings of the spinal marrow, than which nothing can be more beautiful or striking. I have already noticed to the Society the flexibility of the joints, a circumstance which is entirely due to the process here explained; and now I have to add, that this process is made out beyond contradiction, by my having been able to separate the wax by means of combustion and ebullition, from the soft parts, particularly the muscles, the singularly distinct fibres of which, beautifully arranged and displayed, the Society will not omit remarking.

'The *sixth*, and last fact to be noticed, is the presence of several moderately sized lumps of an earthy matter, mixed with pieces of resin, found loose in the cavity of the abdomen. That these were thrown into that cavity for the double purpose of filling up the space left in it by the abstraction of some of the viscera, and of adding, at the same time, to the antiseptic power of the process employed in embalming, are conjectures that will perhaps be readily admitted. The experiments made to ascertain the nature of the earthy substance in question, tend to prove the latter part of these conjectural propositions. It was found to consist of the same saline compounds noticed on the surface of the mummy, mixed with argillaceous earth. Now, if the embalmers used the water from the natron lakes, as I have laid down good grounds for believing, nothing is more probable than that they also made use of the earthy sediment of that water which contains the salt in question, and which could be procured in abundance at the margin of those lakes, where it has been observed by the naturalists who accompanied the French expedition into Egypt.

'As to the nature of the resin and bitumen used as ingredients in the embalming process, it is a question of comparatively little interest. In the mummy before us, two or three small pieces of myrrh in a loose state were found, and evidence is not wanting of both resin and bitumen, though not in their purest form, having been had recourse to. But their presence seems by no means necessary for the completion of that admirable method of embalming, devised and followed by the ancient Egyptians, which my

inquiries have been directed to ascertain, and which may be summed up in a few words by saying — that it consisted in impregnating the body with bees' wax.'

The various circumstances detailed have furnished Dr. Granville with sufficient reasons for believing, that in the most perfect and *primitive* specimens of the art of embalming, after the viscera of the abdomen were either wholly or partially removed, the brain extracted by breaking through the nasal plates, the cranium washed out, and the cuticle removed from the surface of the body by means of quick lime, 'the body was immersed into a capacious vessel, containing a liquefied mixture of wax and resin, the former predominating; and some sort of bituminous substance being added, not, however, essential to the process. In this situation the body was suffered to remain a certain number of days over a gentle fire, with the avowed intention of allowing the liquefied mixture to penetrate the innermost and minutest structure; nor can there exist any doubt, but that on this part of the embalming process depended not only its great preservative power, but also its various degrees of perfection.

'When the body was taken out of the warm liquid mixture, every part of it must have been in a very soft and supple condition, wholly unsusceptible of putrefaction. The next steps, therefore, to be taken, with a view to convert it into a perfect mummy, must have been those, which, had they been taken before that part of the process that has been just described, would have exposed the body to inevitable putrefaction, in a climate like that of Egypt. I allude to the tanning of the integuments, and the exposing of their surface to the additional influence of those salts, the presence of which, as well as that of tannin, I have most clearly demonstrated.

'Whether an infusion of the vegetable astringent employed for tanning the integuments was had recourse to in the first instance, and the immersion of the body into the concentrated water of the natron lakes followed, or whether the tanning liquid was itself made by infusing the vegetable astringents themselves into the water of the natron lakes, and the body then immersed into it, are questions which it is neither possible nor important to decide; the body was unquestionably submitted to the operation of both those means, but in what order, it is difficult to ascertain; and when the embalmers judged by the condition of the integuments, that they were sufficiently impregnated with the active principles employed, the body was allowed to dry for a few hours, and then the bandages previously prepared with a solution of *tannin* also, as proved by my experiments, were applied to the different parts, beginning with each separate limb.'*

* Dr. Granville exhibited, after the meeting of the Society, four different specimens of imitative mummies, each of them illustrative of one or two of the successive stages of the process of embalming detailed in this essay; the last being intended to illustrate all the stages together, and exhibiting a close resemblance to the Egyptian mummy itself. A still-born child had been employed for the purpose, and this modern mummy has now been, Dr.

Proposed College in London.

We think we shall be doing what will be found agreeable to many of our readers, if we give a place to some observations, from the pen of Mr. T. Campbell, on the subject of the effect likely to be produced, by a *College in London*, on the *medical school of the metropolis;* on which we shall merely, at present, remark, that they appear to be exceedingly sensible and liberal. The subject is one of great interest, and we shall probably take other opportunities of referring to it.

'But the alleged fact, that the learned professions are so well taught in London as to supersede all ideas of improving professional education, is rather gratuitously assumed. How happens it that so many London physicians go to Edinburgh and other places for instruction in the healing art? I have been assured by London physicians of the first authority, that while surgery is superlatively taught in London, medical knowledge is, with some few exceptions, taught with no such success and celebrity. Yet the London physicians are confessedly famous, and the hospitals afford a wider field of experience than is any where else to be found. The medical lectures in the metropolis are inferior to the surgical, I think, on this account: that a London surgeon in first-rate employment gains considerable sums, at once, by important operations, and can, therefore, spare time to lecture, though his practice be extensive. But a London physician has to travel considerable distances for single fees, and it is not worth his while to retain a lectureship after he is fully employed in practice. Thus, it is only whilst he is comparatively young, and before he has acquired his highest experience, that a physician, here, condescends to be a teacher of medicine. This is not the case at Edinburgh, where it is so much more difficult to make large incomes by medical practice, that the best physician finds it worth his while to continue in a lecturing professorship, though it should yield him but some hundreds a-year. In London it would require some thousands to remunerate a man of high medical fame, for continuing to teach medicine. Who can wonder, then, that the number of superior teachers in medicine is so few, and so utterly disproportioned to the magnitude of London, and to its demand for medical instruction? The matter of astonishment is, that we have even a few distinguished medical lecturers.

'Now, if first-rate London physicians were so remunerated for

Granville states, in existence upwards of three years, without bandage or covering of any kind, exposed to all sorts of temperature and rough usage, without betraying the slightest vestige of decay or putrefaction. It is rather darker than the Egyptian mummy, from the circumstance of a too concentrated solution of tannin having been employed in preparing it.

Since the foregoing abstract was written, we have had an opportunity of examining the parts of the mummy more particularly referred to in Dr. Granville's able and very ingenious paper, and we consider that he has fully established his positions.

teaching, as to make it worth their while to sacrifice a portion of their practice, there would instantly arise a school of medicine in the metropolis, that would annihilate the rivalship of all other medical schools. It might be hazardous to assert, that the incorporating medical chairs in the proposed College would immediately accomplish so desirable an event. But it would certainly tend to do so. It is evident that the establishment of new medical professorships would increase competition in that species of teaching, and that the very novelty of their appointment would give an *ictus* to public attention likely to be favourable to the cause of science. It is proper on this subject that the projectors of the College scheme should give a clear assurance to the public of their having no idea of introducing medical instruction, for the purpose of reducing its price to students. Their main object is to make it better, and not cheaper. When we spoke of thirty pounds a year, as likely to cover all the expenses (exclusive of his maintenance) of a student at the proposed College, the calculation had no intended reference to the expenses of medical education, which could by no possibility be reduced to so small a sum. It could not well enter into our plan to make the medical chairs vie in cheapness of instruction with the terms of existing lecturers; for we should do nothing without eminent men, and consequently without men who would require to be highly paid. But if the new establishment could be so contrived as to attract multitudes of students by its combined facilities of instruction, the same fees which are at present paid by medical and surgical students would create very large incomes to professors—and many scientific men, whose lecturing is now a speculation at their own hazard, and attended with many drawbacks of expense, would derive very serious advantages by being transferred to chairs where their lecture-rooms and apparatus would cost them nothing.

'To diffuse medical instruction, and to excite the warmest possible zeal for its cultivation, is an object of peculiar importance in this metropolis. For though it be true that surgeons and physicians contrive to get themselves well educated for London practice, it is a certain and serious fact, if I may rely on the information of many men eminent in the vocation to which I allude, that the education of surgeon-apothecaries is in general still destitute of many advantages which it ought to possess. The surgeon-apothecary begins his course with an apprenticeship of five years, during the greater part of which his time is spent in pharmaceutical manipulations, such as the boiling of salves, the shaking of bottles, and the rolling of pills, which he generally finds himself able to perform in six months, as neatly and expeditiously as at the end of six years. At all events, a year is notoriously sufficient to accomplish any pupil in the manual part of his business. That he spends the other four years of his apprenticeship so much more generally in drudgery than in making scientific acquirements, is certainly owing, in the first instance, to the system of apprenticeship itself, which makes it the master's interest rather to employ him servilely, than to give him leisure for scientific pursuits. But supposing apprenticeships

to be put upon a better footing, the facilities of medical education would still require to be extended.

'I understand that more liberal and creditable wishes, with regard to the education of their apprentices, now begin to prevail among the surgeon-apothecaries. It must be noticed, that liberal views on this subject cannot justly be expected from masters, unless they be indemnified, by high apprenticeship premiums, and by a full payment of the board of their apprentices, for giving them time and means to study whilst they are under indentures. If pupils are bound under illiberal terms, it is perfectly natural that masters should try to make the most of their services, and keep them at manual drudgery. But people are now opening their eyes to the serious importance of those popular practitioners being well educated, and their education must come in time to be put on a better footing. It will be stipulated, if apprenticeships be necessary, that the apprentice shall have leisure to study after he has learnt the art of bolus and pill-making; the masters will get higher premiums, and the pupils will be earlier initiated in science, — so that both parties will be gainers.

'When the intended surgeon-apothecary has finished his apprenticeship, he generally walks the hospitals; and these furnish a field of pathological observation, which has no parallel in the world for instructive variety. But it stands to reason, that if his education has been hitherto more mechanical than mental, the student can derive but comparatively little advantage from his new place of study; nay, I am informed, that the fashionable rage for surgical, in preference to medical instruction, makes the hospital itself of less use to the noviciate than it ought to be. He appears at the hospital, he mingles with the students, hears their talk, learns their opinion, and imbibes their spirit; he finds that practical anatomy and operative surgery, that dissections on the living and the dead, are the favourite topics of discourse, and that the opportunities for witnessing and performing them are constantly desired and sought. As a natural consequence, he determines to cultivate anatomy and surgery, not indeed to the exclusion of other studies, but more diligently, in a tenfold degree; and accordingly, without one thought of the physicians who attend the hospital, and of what they may be doing there, he enters himself a pupil of the more popular surgeon. That a very large majority of the students in the London hospitals are surgeons' pupils, and that very few are physicians' pupils, is a fact which cannot be controverted, and may be easily confirmed.

'Now the business of a surgeon-apothecary is to be either a surgeon or physician, as occasion may require; but, in point of fact, he is much more frequently called upon to act as a physician. In London, the general practitioner is very rarely, indeed, called upon to act as a surgeon, and both in town and country the great majority of practice ought to be medical more than surgical. A surgical operation is, after all, but too often a confession of the blindness and weakness of the healing science, the highest exaltation of which is to prevent the necessity of operations, and to save

man without appeasing the demon disease by the sacrifice of blood. Here we have proof positive, however, that the majority who frequent the London hospitals, including all the intended general practitioners, are trained rather to be surgeons than physicians, although it is as physicians that their services are mostly to be required.

'Physiology and the practice of medicine are confessedly less diligently and perfectly taught in London than surgery. This fact is a disadvantage to London, but, if properly explained, is not the slightest reproach to its physicians. Nobody can doubt how well the most experienced of them would teach, if they had a temptation to be teachers; but in this respect they are not like the great surgeons, and have no motive to sacrifice any portion of their lucrative practice.

'I have letters before me from several medical men, of whose ability, and intention to give me sound opinions on this subject, it is not easy for me to doubt, who concur in recommending that a medical school should form a part of the new College. It is an error to suppose that the opening of such a school would be detrimental to lecturers, who at present make teaching a private speculation; for it is obvious that the most popular of these would be immediately invited to the College chairs. And should the scheme succeed so as to include two thousand subscribers, it is lowering no man's reputation to say, that his being invited to lecture by the election of so large a body of his fellow-citizens, would be a public acknowledgment of his merit, likely to make his students more numerous than they would otherwise be.

'Again, let us ask, how the establishment of a London College, including medical classes, would tend to overstock the business of the healing art. It lies with the faculty, and the Surgeons' College, and the Apothecaries' Hall, to limit the numbers of the three kinds of practitioners, by debarring incompetent candidates from being physicians, surgeons, or apothecaries. As it is not proposed that the new College should have the power of conferring medical degrees, the limitary power of the above examining bodies would not be in the least degree invalidated by its establishment. From what has been said, it is also evident that it is not the cheapening of London medical education, but the rendering it better, that is the main effect likely to result from a college. *That* amelioration will depend on the possibility of classes being collected in such numbers, as to make the payment of the same fees which are now paid, amount to sums that will offer a temptation to popular physicians to relax their lucrative practice for professorships. Whilst this object is contemplated, the idea of reducing the expense of medical education in London is out of the question, and thus nobody needs to apprehend a rush of new candidates from low life into the medical profession. On the contrary, the more multifariously the branches of medical knowledge are taught, the higher will the standard of common medical education be raised; and, consequently, the students unable to support the expense of nume-

rous classes, will be driven to abandon the vocation. At the same time, a College school of medicine, by enforcing discipline, attendance, and examination, would place the habits and attainments of medical students more immediately under the public eye: it would expose and discourage the lazy and frivolous; ignorance and empiricism would be discountenanced, and genius and industry would be called forth.'

III. *Comparative Anatomy — remarkable Fossil Remains found in England.*

It is well known that in all *quadrupedal* animals at present existing the number of *cervical* vertebræ is extremely limited — thus, in the mammalia (with one exception*) it is invariably *seven*, and in the reptilia it never exceeds *eight*.

A *fossil genus* of quadruped has, however, lately been brought to light, belonging to the order reptilia, in *one species* of which, at least, the number of true *cervical* vertebræ amounts to no less than thirty-five; to which, if we add six others which partake of the character of *dorsal* vertebræ, we shall have the suprising number of forty-one of these bones interposed between the head and the anterior extremities.

Of this *species* (to which the name of Plesio-saurus Dolichodeirus has been given), a magnificent specimen was not long since discovered at Lyme, in Dorsetshire; from which, and from other less perfect remains previously known, an engraving of the skeleton and some interesting details with respect to the living animal have been published by the Rev. W. D. Conybeare.

For these, the Geological Transactions, Vol. I. *new series*, and the Philosophical Magazine, June 1825, may be consulted.

IV. *Opium—Quantity consumed in Great Britain, &c.*

It appears that the quantity of opium annually consumed in Great Britain is about 50,000 pounds — in addition to which, a large quantity is exported to foreign parts; as to the South Sea Islands, where it is said to be used as tobacco is in Europe. Of these quantities a part is of native growth, and the article thus produced sells, in consequence of its superior quality, for even more than that which is imported. The exertions, however, of the cultivators in this country are at present, it appears, limited by the want of a sufficient number of hands to collect the opium when ripe; and, therefore, it has been suggested by Mr. W. Salisbury,† that the cultivation of poppies for this purpose might be very profitably undertaken in IRELAND,‡ where labourers, as he justly observes,

* This exception is the *tridactyle sloth*, which has *nine* cervical vertebræ.

† In the Technical Repository for September, p. 222.

‡ Mr. Salisbury states, that the Irish farmer might, at the present prices of opium, realise a profit of nearly nine pounds sterling per acre—a calculation founded, we may observe, upon the assumption that the produce of each acre would be about fifteen pounds of opium, as it is in this country.

are abundant; where the climate is more congenial to the production of tender plants than in England; and where thousands of acres of the best land in the empire are still covered with noxious weeds, or saturated with obnoxious water.

V. *Skeleton of the Elk in the Museum at Edinburgh.*

It is well known to many of our readers that there is in the Museum of the College of Edinburgh a fossil skeleton of the *gigantic elk*, which was found, as it is said, some few years ago in the Isle of Man, and was presented to the College by his Grace the Duke of Athol.

Of this skeleton, which was conceived to be a pure and perfect specimen of the antediluvian animal, our northern brethren were not a little proud; and rung the changes for some time with great effect on the magnitude of the elk, the munificence of the Duke, and the magnificence of the Museum.

Their feelings, however, upon this subject have lately received a rude shock from Dr. Hibbert, and Mr. Oswald of the Isle of Man; who both concur in stating, that this skeleton was the ingenious *compilation* of a blacksmith at Ballorugh, in this island; that it was principally got up from bones which had been found in a *dispersed* state; and that a part of these bones (*a few odd joints*) belonged to *other* animals. — Vide *Hibbert and Oswald, in Edin. Journ. of Science for July, pp.* 26 *and* 34.

VI. *Preservation of Water at Sea.*

One of the earliest, and still one of the most important uses to which iron has of late years been applied in nautical affairs, was in the four-feet cubes or tanks for holding water, By means of this contrivance, water may now be kept for any length of time, without the slightest perceptible change or contamination. Of this interesting fact, Capt. Basil Hall, of the Royal Navy, has just furnished us with a striking example.

"I once," says this gentleman, "filled a tank (*an iron tank*) with clear water at Portsmouth Harbour, and having carried it four times across the torrid zone, and round Cape Horn—over a greater distance than the circuit of the globe—brought it back again, more than two years afterwards, in the same tank, not in the least discoloured, and in all respects as good as when it was first taken up from the spring." —*Edin. Phil. Journ., October, p.* 325.

VII. *Operation of Gastrotomy.*

Dr. Mott performed the operation of gastrotomy at the end of the preceding year (1824), for the purpose of extracting an extra-uterine fœtus, which had remained in the abdomen two years and eleven months. The patient was thirty-four years of age. 'The fœtus was in a very perfect state, and of the ordinary size of a child about seven months and a half old. It lay under the umbilicus

upon the small intestines, with the head to the left side. One delicate membrane surrounded it, which was closely applied to the body, but easily separated, and in some parts having an aqueous fluid underneath it. From near the feet a narrow membranous attachment went to the broad ligament on the right side. Two other more acute adhesions were found adhering to the parietes of the abdomen of the mother: one opposite the umbilicus, and the other a little to the left.

'In about eleven hours after the operation vomiting came on, which continued about twenty-four hours, when the patient expired.

'On inspecting the body, no inflammation was found in the intestines or peritoneum. She appeared to have perished from the irritation of the operation.' — *New York Med. and Phys. Journ., Dec.* 1824.

VIII. *Reply of a 'Disinterested Physician' to the Observations, in the Medico-Chirurgical Review, on his Remarks on the Coroner's Inquest lately held at St. George's Hospital.*

I HAVE seen, with some surprise, the Editor of the Medico-Chirurgical Review's remarks, in the last Number of that journal, on the duties of a coroner's jury. I have only to observe upon it, that he has not taken the trouble to read my observations attentively, and certainly has entirely misunderstood me. It is not by fixing upon a single sentence that the whole of a writer's meaning can ever be obtained. 'The clear point of view by an example' which this Editor has given, has somewhat of the 'lucus à non lucendo' in it. If he means what he says, he is perfectly ignorant of a jury's office; but it is scarcely worth while discussing the matter. The plain truth is, a coroner's jury is bound, like other juries, to decide *by evidence, and not contrary to evidence;* and if a medical opinion is positively given to one side, they have no power to decide on the other. In the case of a division of opinion among medical men, they have only a power of adhering to one or the other, or, perhaps, taking something from both, but none whatever of calling for the history of a case, and forming their opinions upon such history, having medical evidence before them at the same time. Whether competent or not to form such opinions, they are bound by their oaths to decide according to evidence. They may, it is true, dispense with medical evidence, but whether properly, justly, or honourably, will not bear a question. If a jury really wishes to make 'a true presentment,' it is very manifest that they will call for the best information. My remarks tended to this point — viz. that a jury ought to call for medical witnesses, and if dissatisfied with the first to require others; but not without further investigation to decide against the only medical evidence received. E.

IX. *Clinical Report of the Diseases most prevalent during the preceding Month.*

October has, upon the whole, been mild, though damp and showery. Towards the 18th, the cold for a few days was very severe, and frost prevailed; and though again rather warmer, fires have become general.

The change in the weather appears to have given a decisive check to the bowel complaints, which both in adults and children have, from the commencement of the month, gradually decreased. As usual, however, at this season, febrile disorders have been more numerous, though for the most part slight, and most frequently referrible for their origin to common catarrh. The general form has been coryza, headach, shiverings, thirst, &c. The first symptom has sometimes suddenly ceased; and a practitioner unacquainted with its course might readily mistake it for an attack of simple fever. Its duration has not often exceeded a week, and the patients have very seldom kept their beds.

Pneumonia has prevailed in children to a considerable extent; and in adults the pneumonic diseases have been generally in the form of sub-acute bronchitis. In some few cases, simple and very acute pneumonia has had place, and required very copious bleedings. Rheumatism still continues to occupy a prominent situation in the diseases of the season, and acute cases have been more common.

Within this month, we have had the opportunity of examining the body of a man who died after taking a dose of colchicum. The circumstances were shortly these: — He had been subject to rheumatism, for which he had taken a tincture of colchicum, of the full strength of the Pharmacopœia, (made, however, from a private receipt,) in the dose of a table-spoonful night and morning, and with the effect of removing his pain, vomiting and purging, at the same time, occurring. A week before his death, which took place on the 3d of October, he had an attack of the bowel complaint, then very prevalent. This was on the Monday. On the Saturday, about ten o'clock in the morning, feeling a return of his rheumatic pains, he asked his wife for the medicine that had formerly relieved him, and which had then stood upon the colchicum seeds for three months. There was little more than the dregs remaining, of which he took nearly a table-spoonful, and then went for three or four hours, as usual, about his work. At two o'clock, he complained of sickness; vomiting and purging ensued; and the next morning, at five o'clock, he died. On examination, not the slightest diseased appearance was discoverable in the structure of the alimentary canal. There was no inflammation, nor even an unusual degree of vascularity. The only unusual circumstance was the hue of the fæces in the jejunum, ileum, and colon, which were of a slate colour. The other parts of the body were examined, but in none was any thing extraordinary observable.

A case of phlegmonoid erysipelas has fallen under our observation. It affected the whole of one side from the axilla to the os ilii, and from the breast to the spine. It had commenced two days before we saw it, with violent pain in the shoulder, but without swelling or redness. The appearances were those which have been so well described by Dr. Duncan. A boggy feel, a slight redness, and accompanied with fever of a typhoid form. Incisions were made, extensive and very deep, but without letting out any matter. The boggy feeling disappeared from the neighbourhood of the incisions, and for a day the patient appeared to be doing well. The next morning, the disease had spread along the neck of the affected side up to the ear. Incisions were again made, but without relief. Very little blood followed the knife; and the patient sunk on the fifth day from the commencement of the disease. No entreaties, we regret to say, could prevail upon the friends of the patient to permit an examination.

In the examination of a consumptive patient in whom there were very extensive abscesses in the lungs, the inner membrane of the bronchial tubes was much ulcerated, and deep and large ulcerations existed in the lower end of the ileum and cæcum. The valve was nearly destroyed. The ulcerations were surrounded with deep orange-coloured patches, the hue of which was most intense at the edges of the ulcers.

The four cases of puerperal fever to which we alluded in our last report have all recovered. Five other cases of the disease have fallen under our notice during October. One of these proved fatal. In the remaining cases, the oil of turpentine was given after bleeding; and large doses of calomel and camphor were exhibited at intervals varying according to circumstances. The patients are either recovered or convalescent.

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

1. An Introduction to the Use of the Stethoscope, with its Application to the Diagnosis in Diseases of the Thoracic Viscera; including the Pathology of the various Affections. By William Stokes, M.D.; 8vo. pp. 226. Edinburgh. 1825.

2. A Century of Surgeons on Gonorrhœa, and on Strictures of the Urethra. "Multum in Parvo." Pp. 190. London. 1825.

3. An Address to the Inhabitants of Lancashire, and of the adjoining Counties, on the present state of the Medical Profession; with Remarks on the Elementary Education of the Student, and the best means of its Acquirement. Intended to shew the practicability and importance of establishing a School (on a more extended Scale) in Manchester, for the Cultivation of Medical and Surgical Knowledge. By Thomas Turner, Member of the Royal College of Surgeons, London, Lecturer on Anatomy, &c. London. 1825.

THE METEOROLOGICAL JOURNAL,

From the 19th of SEPTEMBER to the 20th of OCTOBER, 1825.

By Messrs. HARRIS and Co.

Mathematical Instrument Makers, 50 High Holborn.

September.	Moon.	Rain Guage.	Therm.			Barom.		De Luc's Hygrom.		Winds.		Atmo. Variation.		
			9 A. M.	Max.	Min.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	2 P. M.	10 P. M.
20			65	71	62	29 65	29 67	81	80	WSW	SW	Fine	Fine	Fine
21			66	69	57	29 47	29 50	85	75	WSW	WSW	Rain	——	——
22		,17	62	69	49	29 52	29 74	75	76	WNW	NW	Clo.	——	——
23			54	69	59	29 81	29 92	72	77	W	SW	Fog.	——	——
24			63	70	63	29 90	29 93	76	87	WSW	WSW	Fine	——	Clo.
25			66	70	62	29 93	29 89	85	68	W	WSW	Clo.	——	——
26			65	69	50	29 83	29 78	61	61	WSW	WNW	Rain	——	Fine
27	●	,53	60	64	48	30 01	30 14	69	75	W	NNE	Fine	——	——
28			54	64	50	30 23	30 18	80	69	NE	ESE	——	——	——
29			58	60	46	30 14	29 98	55	65	ESE	ESE	——	——	——
30			50	58	55	29 85	29 78	70	76	SSE	SE	——	——	Rain
1		,40	56	61	58	29 74	29 67	89	77	ESE	S	Rain	——	Sho.
2			62	60	55	29 60	29 60	85	85	S	S	——	Rain	Rain
3		,25	59	63	57	29 56	29 54	89	85	SSE	S	——	——	Fine
4			60	65	55	29 70	29 89	87	80	SW	SSW	Clo.	Fine	——
5	(		60	67	58	29 98	30 00	84	75	SW	SSW	Fine	——	Clo.
6			63	67	55	29 90	29 74	80	83	SW	S	Rain	——	Rain
7		,62	57	65	47	29 45	29 88	73	76	SW	W	Fine	——	Fine
8			54	64	51	29 90	29 74	72	76	SW	SSW	——	Clo.	Clo.
9		,38	55	62	58	29 85	29 90	75	75	W	W	——	——	——
10			60	64	57	30 10	30 13	74	83	W	WSW	Clo.	——	——
11	☾		61	69	58	30 22	30 18	82	82	WSW	SW	Fog.	Fine	Fine
12			62	66	50	30 03	30 06	85	80	SW	NW	——	——	Fog.
13			55	62	50	30 02	30 02	82	70	W	WSW	——	——	Clo.
14			52	60	46	30 10	30 08	79	80	NW	W	——	——	Sho.
15			51	58	44	30 29	30 35	70	73	WNW	NW	Fine	——	Fine
16			54	58	44	30 35	30 22	72	76	WSW	SW	——	——	——
17			47	52	42	30 13	29 95	80	74	WSW	WNW	Fog.	Rain	——
18	☽	,67	46	53	47	29 99	29 51	75	85	W	WSW	Fine	——	Rain
19			50	63	37	29 31	28 94	72	78	WNW	S var.	Clo.	Clo.	Clo.

The quantity of rain fallen in September was 2 inch. 128-100ths.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the EDITORS, to the care of Messrs. T. and G. UNDERWOOD, 32 Fleet Street.

THE LONDON MEDICAL

REPOSITORY AND REVIEW.

No. 144. DECEMBER 1, 1825. VOL. XXIV.

No. VI.——NEW SERIES.——VOL. I.

PART I.

REVIEW.

I.

OF THE PATHOLOGY OF GOUT.

Observations on Gout, Critical and Pathological; or, an Analytical Survey of the Views at present entertained of the Nature of that Disorder: with Practical Remarks on the Injurious Effects of Colchicum, and on certain Modes of Diet. By A. RENNIE, Surgeon, &c. 8vo. Pp. xx. 179. London, 1825.

As Mr. Rennie's book is only a more extended review, or, as he terms it, an analytical survey, of the opinions of others, it would scarcely have drawn our critical notice if it had not been accompanied or interspersed with practical remarks, and intended to preface a volume of observations exclusively of a practical nature — the result, it appears, (*Preface*, p. i.) in a great measure, of such painful *personal* experience of gout, as few writers, however anxious for the improvement of pathology or practice, would wish to have the advantage of. Perhaps it may be partly from the unwillingness with which men, in general, look forward to this particular kind of experience, that they are also often a good deal disposed to question its utility. It cannot be denied, that the attacks of disease are hostile to the unimpassioned exercise of observation, and that our sensations, in a state of suffering, are exposed to much exaggeration and some mistake, and particularly in acute disorders: for which reason few sensible practitioners dispense with the advice of professional friends when they themselves become the subjects of diseases which it is usually their vocation to drive away from others. The degree of sensorial disturbance caused by different maladies is, however, very variable, and where this is least, the

judgment of the patient concerning himself will be the best. We should not expect any man to keep an accurate record of his personal experience of a fever beyond the first day or two of his disorder, and it is to be feared that the gout is not often consistent with such a placable state of the economy as is required for the purpose; although we admit that a gouty patient of any discretion must in time learn to know and to avoid exciting causes, and even become a little learned in the means of warding off, interrupting, or escaping from the lively attacks of his enemy. Mr. Rennie is surely to be congratulated if, as he says, he has by these means obtained entire immunity from such incursions; and we cannot but admire the self-devotion with which he declares that he thinks his knowledge of this disease has been well purchased by his sufferings.

The reader is informed, that Mr. Rennie was incited to the difficult task of investigating the nature of gout by an assertion of M. Bayle's, that 'the nature of gout is yet unknown.' (*Observations*, p. 1.) We applaud the professional zeal which converted this too true remark into a stimulus to research, but, at the same time, are greatly disposed to think the observation might be justly made of most other diseases, if not of all. In examining and recording the phenomena of gout, in tracing its history, in marking its varieties, there has been assuredly no want of industry or of accuracy; and when this is done, concerning other diseases as well as concerning this, we fear we have arrived at that impassable limit which hems in our little knowledge on every side, and which cannot be thrown down or surmounted without the aid of higher faculties than are allowed to us in our present state of existence. The history of physic shews us at once the discontentedness with which those who have cultivated it have submitted to this limitation of their curiosity, and their inability to go beyond it. We see one theory following another in long succession; each successive theorist believing himself nearer the truth than his predecessors; each in his turn transmitted to the ranks of error by the one succeeding him: now and then some man arising who tries to blend and harmonise a collection of theories, and for a time neutralising the hostility of many parties, and, by conceding a little to all, commanding them all; whilst the real knowledge acquired by the disciples, during these revolutions in the empire of medical opinion, is generally that which is least enthralled by the theories of their preceptors.

Notwithstanding these undeniable truths, the industry of those who make attempts to penetrate into the mysteries of a proximate cause ought not to be discouraged. Their efforts,

like the midnight labour of those who, in various parts of this kingdom, are yet cherishing a hope of discovering the principle of perpetual motion, frequently lead to the elicitation and establishment of collateral truths, and throw new and unexpected light on neighbouring subjects of inquiry. That gout is an inflammation, is, we presume, pretty generally admitted; that it is an inflammation *sui generis*, is what few who have observed it, and none who have felt it, seem disposed to deny; that it is seldom unaccompanied with disturbance of the digestive functions, seems consistent with all experience: but on what specific irritations of certain structures in the human body, or on what discordant accidents, in its component parts, the peculiar character of gout depends, has not, we fear, even after Mr. Rennie's close and acute inquiries, been satisfactorily ascertained. But it would be illiberal and unjust to deny the important benefits done by authors who, like this gentleman, proceed to the inquiry concerning these matters with a determination to be uninfluenced by preconceptions and prejudices; and who exercise their observing and reasoning powers with all the accuracy of which they are capable, and with the utmost freedom. They dispel the delusive glare which sophistry or circumstance have thrown round the subjects of investigation, and bring them into the light of truth: they pioneer for the march of future inquirers, removing the embarrassments which the imagination or the unskilfulness of former explorers have added to the difficulties of the path that leads to true and certain knowledge: if they do not attain the object of their researches, they, at least, often point out the way which leads to it.

Divesting ourselves of all prejudice: — does the morbific matter in the blood, the theory of Sydenham, fall farther short of explaining the phenomena and consequences of a paroxysm of gout, than the plethora, with debility of the extremities, and re-action of Cullen? — does this, again, appear less sensible than the asthenic theory of Brown? — or is the latter without the support of particular facts? Who shall decide between the 'debility of the extremities' of Cullen and the irritability of Darwin, or say whether the first produces 're-action,' or the second 'consequent inflammation?' Is there no reason to suspect that this variety of terms is merely appended to the same simple conception, concealing it truly after the manner of a musical variation, but still allowing it to be recognised by those who try to follow and understand it? Do we not still discern something of it in Mr. Parkinson's theory; who admits an irritation and excitation to morbid action of the minute termina-

tions of the arteries in certain parts of the body, but ascribes it to a peculiar saline acrimony in the blood? We profess to labour under an irresistible tendency to see this same theory, dressed in various forms, disguised in divers manners, sometimes humorously transposed, but always with the distinctive points of plethora, debility, and irritation somewhere or other about it, in all the subsequent theories of this painful disorder; — in Dr. Parry's, in Dr. James Johnson's, or rather, we believe we should say, in MM. Guilbert and Halle's, and in Dr. Scudamore's. And this being the case, we are inclined to claim for all these authors, of whom, we trust, we shall not be suspected of thinking unworthily, the merit of having approached as nearly to an explanation of the nature of the malady as can be expected, and to consider the points in which they agree as the direct products of faithful observation of the usual order of the phenomena of gout.

It may be objected to us, that the tendency of these remarks is to discountenance all inquiry into the states of the body during disease, on which all practical knowledge should be founded. Sincerely do we wish that practical knowledge was often built on so good a foundation. Then, indeed, we might hope to see medicine aspiring to something more than the control of symptoms of functional disorder, to something more than checking often, and sometimes, but rarely, removing organic disease. Then, going up to the first impressions of the causes of illness, it might arrest their violent and sad development. But views and hopes like these belong to the dreams of men far more sanguine than ourselves. The reality presents a strong and broad contrast with them. The single instance of inflammation may serve to shew us that our most successful practice is not based on any very certain knowledge beyond that gained by experience of visible and sensible phenomena, a knowledge which we are far from meaning to depreciate. If there be any morbid process over which we have direct control in most instances, it is this: but what is inflammation? The question is promptly replied to by numerous theorists, by numerous indefatigable and most deserving experimenters; — but who is in the right? In the very few instances in which, not content with combating troublesome symptoms, we do really succeed in dislodging a whole disease at once, and almost with infallible success; for example, in syphilis and in scabies (almost the only two that can be named), what do we really know of the action of mercury or sulphur, or of those changes effected by them on which the cure depends? Our practice is here, in fact — here where most successful — more than usually empirical. We give the medicine, because

we know it is serviceable. To assent to this is not to discourage inquiry, but to discourage a belief in error. The sphere of empirical practice can never be extensive; and those will always practise with most general success who have paid the most attention to disease: but this attention must not be given to the suggestions of fancy, but to those circumstances concerning which our senses give us information.

The error of theorists, it is also very essential to remark in this place, has not consisted solely or even principally in the disposition to theorise — a disposition inseparable from any mind capable of the exercise of thought. Their first step towards error has always been the admission of an unsubstantiated fact. There is nothing very unreasonable in the idea of the gout being a natural effort to expel morbific matter or saline acrimony, but the constant proofs of either of these is wanting to the confirmation of our belief in it: and in assuming what is only probable and not proved, theorists have necessarily on many occasions assumed what was not true: they are thus continually illustrating the imperfect definition of insanity with which certain metaphysical physicians have been satisfied: they reason correctly on false premises: and furnish a corroboration of the very true observation of Dr. Cullen, inasmuch as we do not so often find the reasoning part of the theory unskilful, as the facts, on which it is said to be founded, unreal.

For these reasons, it is not with any particular grief that we behold our author proceed to put aside the speculations of a whole army of theoretical martyrs: nay, we go along with him, although not implicitly, yet, for the most part, not unwillingly: but we demur when we find him meditating the substitution, for all these transient theories, of one of his own. The very lesson we have learnt even in the course of criticism through which he has led us, and which, by the way, is occasionally pretty severe, has taught us caution as regards himself; but we listen to him with attention, and mean to give the reader an opportunity of doing so.

Mr. Rennie entirely discredits the belief so long entertained by physicians as well as by the vulgar, and which has the support of so many great names, ancient and modern, that 'gout depends upon plethora:' he maintains that a state exactly the reverse is favourable to the development of the disorder, an opinion which he entertained before he knew that Brown had held the same. Dr. Brown, who, with all his acknowledged talent, delighted in paradox, and often, as it appears to us who are just not old enough to have ever been among his worshippers or his persecutors, was pleased

to contend for points which he knew to be untenable, because by that means he kept up a harassing skirmish with those whom he had no great reason to love, was still consistent with himself when he boldly, and as it were in the face of disease and death itself, recommended the gouty patient to take rich food in plenty, particularly animal food, and strong drink, as a part of his plan of cure: he was not, it would appear, of a nervous or timid temperament, for the more severe the malady was, the higher diet and the stronger drink did he recommend; and when even these failed, he gave large doses of those medicines which are accounted the most stimulant. This was all very striking, no doubt, and the public like to be astonished. But why does Mr. Rennie hesitate to follow this daring leader, we mean in a general way, for from the case detailed at page 109 he seems sometimes to have ventured on these unusual measures, and with singular success? Doubtless, for very sufficient reasons, and from a conviction that if it be not the presence, neither is it the absence of plethora that produces gout. But the author opposes the plethoric doctrine of gout on these grounds; — that gouty people are not invariably of a large frame of body and full habit; — that many luxurious and inordinate eaters are free from gout, whilst very abstemious habits of life sometimes appear to conduce to it; — that though sedentary habits lead to gout in some persons, they do not necessarily do so through the medium of plethora, whilst they often induce plethora without gout; — that neither enlarged veins nor the occurrence of hæmorrhages are peculiar to gouty people (pp. 59, 60); — observations of which the correctness cannot be disputed, and the tenour of which is certainly to put away the too exclusive idea of plethora; though not absolutely to disprove the belief, (included, it would appear, in Mr. Rennie's objection,) that luxurious living sometimes generates and often excites gout; a belief which seems to have arisen out of the general observation and experience of mankind in all ages and in all countries. Still we are far from contending that good eating and drinking are the only exciting causes of gout, or that gout may not exist without either. Every day shews us the operation of other disturbances of the constitution, excessive evacuations, sudden changes of diet, violent passions of the mind, anxious and prolonged mental occupation, and many other circumstances; the enumeration of which, however, does not much advance us towards that grand desideratum of the theorists, a *proximate* cause. The single fact, that the reduction of plethora is sometimes actually sufficient to produce a paroxysm of gout, is also enough to set this theory at

rest, at least; but we imagine Mr. Rennie has not been regardful of the possible combination of plethora and debility, on which we think Dr. Cullen, as well as others, laid considerable stress; and to have overlooked the possibility of a plethoric state of the vascular system without a robust habit of body, a plethora *ad vires*, if we may venture on the term. Far be it from us, however, to dwell on these conditions, except as among the occasional predisposing causes: as for the proximate cause, that on which the disease intimately and constantly depends, it is evidently something of a different kind. That the whole class of predisposing and exciting causes become agents of disease through some influence exercised over the organs concerned in digestion, appears a reasonable supposition, whether we consider the history, the symptoms, the products, or the juvantia and lædentia of gout: but why this specific inflammation should take place more than any other, has not yet been explained; why one man should have the gout, another have erysipelas, and another become mad — the digestive organs disturbed in all — although now and then, perhaps, accounted for by concurrent accidents, is, in a general way, quite inexplicable by any theory; for no theory yet devised, not even that of our author, is independent of a cause which produces different effects in different persons.

After taking a review of various theories, Mr. Rennie proceeds to examine, with sufficient acumen, several opinions connected with them, and, in particular, that somewhat prevalent one, of an acid in the blood. The following summary of the subject appears to us to be judicious: —

'The amount of the whole view of the subject presented in this relation is — 1st, That acid matter in the stomach, whether extraneously received, or formed in that organ, is of very frequent coincidence with the occurrence of gout; but as gastric acid occasionally is manifested, in almost every constitution and period of life, unconnected with gout, the presence of this matter can only be regarded as capable of exciting gout when associated with some other peculiar constitutional condition.

'2d, That increased secretion of acid principle in the urine is also of frequent occurrence in gout; but is not peculiar to these constitutions, occurring indiscriminately, in most disorders connected with disordered digestive functions. That increased specific gravity of urine is also common to gout and to other inflammatory disorders. From which observations, no direct or satisfactory evidence is afforded respecting the proximate cause of gout.

'3d, The same may be said of acid in the perspiration, which is not peculiar to gouty habits.

'4th, That the formation of concretions in the joints, though apparently peculiar to gouty constitutions, (vide Scudamore, p. 125,)

is of rare occurrence, comparatively, and can afford no satisfactory basis for any direct conclusion respecting a proximate cause.

'5th, That there is no evidence of the presence of acid already formed, or of the principle of acid in excess, in the blood of gouty constitutions; seeing the deposition of such matter, by the various secreting acts, gastric, renal, capsular, and cutaneous, may take place from blood in its usual constituent condition, by some change in the secretory processes, to which the gouty constitution is peculiarly liable.

'6th, That the assumption of a depraved state of the blood, by imbibition of saline acrimony from the stomach, being the proximate cause of gout, is entirely hypothetical, and inadequate to afford any intelligible or rational explanation of the symptoms of gout.

'7th, That some other mode of explaining the *modus agendi* of gastric acid in the production of gout must be attempted, necessarily bearing reference to some peculiar state of the constitution, which may be denominated the gouty disposition or diathesis.'—P. 122.

The arguments which are gone into by the author in the course of his inquiry into the various conditions of the blood, &c. as connected with gout, being recapitulated in the following manner, we cannot do better, perhaps, than place the recapitulation before the reader, with what appears to be Mr. Rennie's intention in making it, that of introducing his own peculiar views.

'In summing up these critical remarks and practical observations, the following general inferences are suggested:—

'1st, That gout is not simply a local, but a constitutional disorder.

'2d, That, from the concurrent observations of the various authors noticed, certain derangements of the hepatic, gastric, and alvine visceral functions, though not adequate to the production of gout, are, in some manner or other unexplained, invariably and essentially contributive to that disorder.

'3d, That though the gout is usually associated with certain disordered conditions of the lymphatic and absorbent system, the cause of the disease does not ultimately reside in that texture.

'4th, That, in respect of the circulation, gout does not essentially depend either on the existence of a morbific matter in the blood, or on general superabundance of that fluid beyond the healthy standard.

'5th, That though, by the concurrence of medical authority and observation, certain disordered conditions of the circulation, especially consisting of irregular distribution of the circulating equilibrium, and variation in velocity, consisting of inactivity and collapse, followed by febrile re-action, are, in some obscure manner, essentially connected with the production of the disorder termed gout; yet these derangements of the circulation appear to be refer-

rible ultimately to some peculiar condition of the power by which the circulation is effected.

'6th, That the probability, *à priori*, lies strongly in favour of the position, that the proximate cause of gout ultimately is referrible to the nervous system, the organic source of vital and functional power: which supposition is confirmed by the result of the preceding observations: vide 1st, 3d, and 5th.'—P. 143.

Mr. Rennie adduces the evidence of many authorities, some of which are of a kind which may be called involuntary, in support of this view of the subject, and then proceeds to state more particularly the condition of the nervous system, to which we have seen that he ultimately refers the gout. It is due to him to let him speak for himself:—

'Having thus adduced evidence almost amounting to demonstration, — consisting, firstly, of indirect and negative inferences, founded on observation; and, secondly, of direct proofs derived from the pathological views of the most eminent authors on this subject, and confirmed by the concurrent practical observations of accurate and original observers of the phenomena, — that the constitutional tendency to the disorder of the vital and textural functions denominated gout, ultimately is referrible to some peculiar condition of the nervous system, the organic source of general, vital, and functional power, — the important query is, What is that condition?

'This question may be answered in two methods. First, by a general pathognomonic proposition, founded on the materials already adduced, as comprising the views of pathological observers in general on this disease. In this method, the following enunciation appears to be suggested.

'*That the gouty disposition or diathesis is to be regarded as consisting of a debilitated condition of the general nervous system, and of increased susceptibility to the influence of causes productive of collapse and re-action generally, and a peculiar morbid action locally, induced by the operation of debilitating influences affecting the animal system; this deficiency of nervous energy consequently affecting the whole organised textures and functional capacities, but especially manifested in the digestive organs and extremities.*

'The second method of reply is, by independent observation and induction, — by inferences drawn from the acknowledged influence of those causes by which the gouty diathesis or disposition has been induced, — and by reference to those symptoms manifested by the constitution when subjected to their operation, and thereby rendered liable to the disease. How far results thus attained by the author are accordant with those suggested by preceding inquirers, will hereafter appear. Vide Vol. II.'—P. 176.

We shall not take upon us just now to pronounce how much of this theory is new, and how much is true: we understand the author to contend rather for its truth than its originality, and we shall be interested in the perusal of those

practical proofs which he leads us to expect. Neither do we think it necessary to consider at present the precise degree of advancement which would ensue in our knowledge of gout on the admission of this theory to the fullest extent. In truth, opinions of this sort are generally very safe: no one can deny that the nerves are connected with this disease or with any other; but, from our unconsciousness of those primary irritations or impressions on the nervous system which are said always to lead to disease, it is often difficult to satisfy ourselves by the mere contemplation of the chain of sensible irritations, beginning with its first link of manifestation, whether that of the nervous or that of the vascular was actually primary. And, above all, if we doubt a neurological theory ever so much, we have few means and opportunities of justifying our scepticism by proofs. We may receive the faith with a very bad grace; we may question and even disbelieve it; but if the *onus probandi* is thrown upon us, we find it intolerable. The mind is rendered uneasy by these cloudy researches, and is never more recreated than when such dreamy mists are cleared away, and it can once more be occupied with palpabilities. The darkness which prevails in these regions of investigation is so complete, that the senses, which are the eyes of the mind, are of no service to us, and we feel all the uncertainty and all the insecurity and uncomfortableness of blindness.

We must not conclude, however, without saying, and we say it very sincerely, that from the proofs Mr. Rennie has given us of his acuteness, his habits of observation, and general freedom from absurd preconceptions, we shall expect from him, in the next and practical part of his work, much that will deserve the attentive study of those practitioners who, after the labours of so many writers, continue to find gout one of the most puzzling and intractable of the various disorders which infest the frame. We shall defer any observations on the use of colchicum, the abuse of which is so justly deprecated by Mr. Rennie, until the appearance of the next volume.

Previous to appearing again before the public, we would suggest to Mr. R., who has wielded the weapons of criticism with considerable freedom, that we cannot altogether approve of the style in which many of his opinions and sentiments are expressed. The words of many passages are so redundant as greatly to obscure the meaning, and we now and then noticed some of these words employed, as we suspect, to express ideas of which they are not commonly considered the representatives. These may seem matters of no great consequence; but we have a fault more serious to find with

the author. We think he has not always been mindful of that established courtesy from which gentlemen of the same profession, engaged in the pursuit of the same science, professedly for the good of mankind, can never depart without a suspicion of motives quite unconnected with the public benefit. Towards Dr. Scudamore, in an especial manner, (although his work is allowed to contain 'much solid and useful practical matter,' p. 175,) he is in many passages unnecessarily discourteous; alleging and reiterating charges of inconsistency, confusion, and we know not what besides, until the reader is wearied therewith. At page 106, we were sorry to observe such a passage as the following: —

'In quest of evidence to support his assumption, our author betakes himself from botany to chemistry, and, with mortar, crucible, and alembics, straightway descends into his favourite element, the gouty urine, where we suddenly lose sight of him, and of all rational pathology together.'

And to this passage is appended a note, with the following among other not very civil expressions: —

'After a long and fruitless search amid the commotion of "pink and brick-dust sediments," we are compelled to leave our author for drowned. Not all the inductive powers of a Davy, the scientific accuracy of Thomson, or the ingenuity of Brande, can save his chemical life; pathologically he was proved *felo de se*, on incontrovertible evidence, some pages back.'

Nay, so pleased is Mr. Rennie with this piece of drollery, that we find him again, at page 119, alluding to the 'rather awkward predicament' in which he left Dr. Scudamore at page 106. All this may be very witty, and if it had been directed against an ignorant presuming quack, it might have been very proper, for such men are best assailed with ridicule; but it is sadly misapplied when the subject of it is a physician who has, at least, spared no labour in the cause of pathological science, and it is altogether ill-suited to the subject. It can have no good effect: it may irritate Dr. Scudamore, and offend those who are impartial, but will convince nobody, nor be in any way useful to the cause of truth.

II.

OF IRRITATIVE FEVER.

Remarks on Irritative Fever, commonly called the Plymouth Dock-Yard Disease. By JOHN BUTTER, M.D., F.R.S., F.L.S., and W.S., Fellow of the Royal College of Physicians of Edinburgh, and of the Royal College of Surgeons in London, &c. &c. Devonport, 1825. Pp. 302.

(Concluded from page 436.)

ALTHOUGH a careful perusal of the history of the several cases published by Dr. Butter does not leave us much in the dark respecting what is important with relation to the causes, the nature, and the treatment of this fatal malady, the author has, with much patience, and great care and skill, investigated whatever could throw light on these circumstances, separately considering every thing which has been looked upon as a possible cause, and estimating without prejudice every probable analogy. In this way the Teak wood, the mineral tar, the sticking plaster, &c. are singly examined, and, as we think, fairly acquitted of having any thing to do with the matter. As to the state of the air, though Dr. Butter seems to disbelieve that there was any thing peculiar in it, and though neither the barometer nor thermometer indicated such a peculiar state, we are really disposed to think there was something more concerned in producing this disease than has yet been explained — some epidemic influence exerted at the time — a conjecture by no means inconsistent with the season of the year, one which is countenanced, if not justified, by the contemporary prevalence of a severe form of erysipelas *out* of the Dock-yard as well as in it; and which may be admitted without inconvenience, provided it is done without excluding the obvious exciting cause of the accidental wounds. It is, at the same time, not easy to explain why the same circumstances should not have been observed to follow the same exciting causes in the town of Devonport, unless, remembering that not twenty cases of a malignant nature occurred out of a great number of accidents, we conclude that the unknown cause, whatever it might be, was neither very powerful nor very extensively diffused.

This question concerning the unusual fatality of simple wounds is discussed by Dr. Butter with reference to two points: —

'1st, Either that some morbific and unsuspected substance was applied to the bodies of the deceased men, the effects of which substance have not been marked at any former or subsequent period, in such an accumulated degree:

'2d, Or that their constitutions must have been unusually susceptible of irritation at this particular crisis.'—P. 144.

The first supposition seems to be negatived by the diversity of the substances with which the wounds were inflicted; as leather, wood, iron, glass, &c., and by the absence of the same symptoms in any of the 250 men already said to have been laid up from duty at the same time. It rests, indeed, as Dr. Butter has observed, 'on such shallow and untenable grounds, as to warrant us altogether in relinquishing it.'

That part of the work which relates to the inquiry into the second supposition, namely, of susceptibility, is enriched by the opinions of one or two of the most distinguished men in the profession; among the rest, by the following letter:—

'Spring Gardens, London, March 2d, 1825.

'Dear Sir,—In answer to your inquiries, I have to observe—

'1st, That I have given Anatomical Demonstrations since 1788, and Anatomical Lectures since 1791.

'2d, I have frequently seen irritative fever produced by slight wounds in dissection.

'3d, I am of opinion that such irritative fever generally arises independent of absorption of morbific matter, but I have seen two instances of the contrary.

'4th, Death has sometimes ensued from these injuries, when the local injury has been apparently very slight.

'5th, I have only once severely suffered from a wound in dissection, and then it was the result of an injury upon my thumb, in dissecting a person who had been executed the day before. The symptoms were, pain in the injured part, swelling, inflamed absorbents, enlarged absorbent glands in the axilla, irritative fever, a continued sore throat, an inflammation, first in my left, and, after a few days, in my right knee. Medical means relieved, but did not cure me, but I recovered by going into the country.

'6th, My plan of preventing irritation has been, to put the point of a lancet into the puncture, to make it an incised wound, and to touch the part with argentum nitratum, to destroy the vitality of the wounded surface. The *general* treatment of irritation consists in restoring the secretion, by giving submur. hyd. cum opio et pulv. antim., the liquor ammoniæ acetatis cum magnes. sulphat. The *local*, in applying fomentations and poultices. Gravitation of the blood into the part is to be prevented by attention to posture; rest is required; abstinence from all stimulants is necessary, as they do harm.

'7th, Local blood-letting is highly useful. From twenty to thirty leeches should be applied upon the limb if the symptoms are severe.

'8th, I have repeatedly known some persons die, but others have had violent symptoms and have recovered, from punctures by

needles, forks, broken shells or bones, from scissors, penknives, and skewers.

'I am yours truly,

'ASTLEY COOPER.'

'Dr. BUTTER, Plymouth.'

With a view to prove that in certain unhealthy states of the constitution the slightest wounds become productive of violent irritative symptoms, several instances are adduced. Dr. B. says, that the only two patients whom he has known to die from inflammation of the veins after bleeding were in bad health — a remark which, without any violence to the rules of reasoning, may, perhaps, be applied to all such cases. He notices the well-known fact that some persons suffer more from stings, blisters, &c. than others, and quotes the very interesting case of Dr. A. T. Thomson, (from the 16th Number of the last Series of this Journal, April 1825,) whose life was endangered by the slightest imaginable scratch, received when the system appeared to be depressed by previous mental and bodily fatigue; circumstances which have undoubtedly been implicated in the fatal result of several cases occurring to students or others residing in hospitals. Allusion is made to Dr. Hennen's account of hospital gangrene as it appeared at Bilboa, when 'the slightest scratch of the dissecting-knife festered; ulcers, whether simple or constitutional, became gangrenous; wounds long healed broke up, and fell into a state of foul suppuration; nay, the skin, although perfectly sound, which had been touched with a sponge employed in washing the gangrenous sores, ulcerated and soon became a slough.'* In the latter instances, also, the air was *felt* to be impure; and except something of this kind is to be understood, we cannot quite comprehend the circumstance believed by Dr. Butter with respect to the towns of Plymouth and Devonport, the inhabitants of which he considers to be 'physically and geographically liable to erysipelas.'

No doubt, however, can be entertained that irritative symptoms will occasionally come on without any discoverable local cause, and apparently from a disordered state of the constitution, as in instances of inflammation followed by gangrene in the extremities or elsewhere; and in these examples the original cause may sometimes be of a mental kind; though even then, it probably first operates on the organs concerned in digestion, and from this operation spring the visible effects. Causes acting immediately on the diges-

* Military Surgery, 2d edit. p. 218.

tive organs must be familiar to every body; and of all causes of this nature, the ergot of rye may be selected as the most remarkable, producing a tendency to inflammation and mortification in the body of man and animals. A circumstance just alluded to, relating to the locality of Plymouth and Devonport, may, perhaps, have some connexion with a fact which we find noticed at page 195, that the food of the inhabitants consists in great proportion of fish. If we admit, with Dr. Butter, that the peculiar severity of these cases depended on causes in the constitution of the patients only, we do not see that the occurrence of all these cases at or near the same time, with features either not known before, or certainly not familiarly known, and the fact of such cases all ceasing to occur at once, are in any way explained. We here enter, it is true, on the ancient perplexity which surrounds all questions of contagion; and must be equally opposed to those who attribute it to different single causes, or to those who attribute it to a combination of causes, if they all agree in believing that occasional effects may arise from any permanent single cause, or from any permanent combination of many causes. We should say there must be the superadded combination of a cause as transient as the effect, and are not afraid to think that this cause may be in the earth or the air, because science has not yet detected its nature or even its existence. We can readily understand how a cause of this kind acts only when it meets with a combination of causes more palpable; and, although we own that the cause yet remains unknown, the admission of its probable influence frees us from much of the perplexity and contradiction in which we see the combatants on this great question continually involved.

We cannot deny ourselves the pleasure of inserting the following letter from a distinguished man, whom Dr. Butter so justly speaks of in terms of the highest praise and respect: —

'Bedford Row, London, 2d April, 1825.

'Dear Sir, — I have known numerous cases of mechanical injuries causing very severe disturbance of the system, and even death, in consequence of the morbid predispositions of the party affected. Even pricks from clean sewing needles have occasioned peculiar inflammation of the absorbing vessels, and consequent violent febrile action and nervous irritation. I remember a young lady, residing in the house of a medical man, who, some days after having pricked her finger, had irritation, commencing in the wounded part, transmitted along the absorbents to the axilla, which was accompanied with great acceleration of the pulse, alienation of mind, and convulsions, so that her life was despaired of. The pulp

of bread poultice was applied to the inflamed parts; the bowels were cleared and kept gently lax. Alterative doses of calomel and blue pill, effervescing saline draughts, and infus. menth. sulphuric., were the only medicines employed. The inflammation and general disturbance subsided, and in a week the patient seemed to be well; but three days afterwards, the bowels becoming disordered, inflammation in the absorbents recurred, and the constitution was again disturbed in the same manner, though in a less degree. This second attack was soon tranquillised by the same measures which had been adopted on the former occasion.

'I have no doubt that *general irritability* is the predisponent cause of inflammation in the absorbent vessels, and that it gives a character to the inflammation which takes place. That the inflammation which is induced is of a peculiar character, and excites a correspondent disturbance of the system in general, may be inferred from our often meeting with cases of inflammation of the absorbing vessels and their glands, in which the general health is not affected in the same manner as in these peculiar cases. That the inflammation induced in these cases, of the kind which I term irritative, and capable of exciting the same disease in contiguous parts, is observable in various instances.

'I knew a gentleman who, having grazed his heel, irritated the tender surface by travelling all night in his boots, and produced inflammation and sloughing of the injured part, with inflammation of the absorbents on the back of the leg as high as the ham, and on the groin, causing also swelling and tenderness of the inguinal glands. Large patches of mortification took place on the inflamed skin on the back of the leg, and on the inner part of it, extending even above the knee, and the patient died. This young man was disordered in his stomach and bowels before he undertook the journey, and afterwards, when the inflammation occurred, had violent fever, restlessness, wandering, delirium, and subsultus of the muscles.

'I have also known several cases of slight mechanical injuries, such as I am convinced would not have produced the same effects in other persons, occasioning suppuration, ulceration, sloughing, and abscesses, in contiguous parts, attended with great disturbance of the functions of the sanguiferous and nervous systems, and of the chylopoietic viscera.

'With respect to the wounds made in dissection, we are warranted to suppose that the matter applied is stimulating, because it often produces fretful sores, and because we know that the absorption of animal matter, in a state of putrefaction, produces a most pestilential fever. Yet very rarely do we find that the matter applied acts as a morbific poison, contaminating the system, and inducing remote morbid affections, as it does in the cases of transplantation of teeth, sucking of children, &c. Therefore I am led to conclude, that the effects of these wounds also very much depend upon the morbid predispositions of the party affected.

'I do not think there is reason to believe, in general, that the

animal matter which may be on the instrument inflicting the wound, acts as a morbific poison. Though I have had inflammation of the absorbents, shivering, and fever, perhaps a hundred times, I never had peculiar disease, locally or generally, but once. Yet I think there is reason to believe, that putrid matter produces a more than ordinary degree of fever in such cases. I have seen numbers of instances in which the local irritation, occasioned by the wound, affected the sinewy parts of the finger; and numbers, where these were unaffected, and the disease seemed only to extend through the medium of the nerves and absorbents. When much nervous irritation and febrile affection is induced, it increases all the morbid propensities of the system, and rouses into a state of activity dormant local affections, which, re-acting upon the health in general, aggravate the malady. Thus I have known persons die after such illness, apparently from affections of the bowels, brain, and lungs.

'With respect to blood-letting, I may add that I do not think we are warranted to bleed in cases of irritative inflammation and fever, because these maladies are indicative of weakness, and likely to induce, as a consequence, a greatly augmented debility.

'I have thus, my dear Sir, put together what, I believe, I told you before, and what I have been accustomed to say on these subjects in my lectures.

'I have endeavoured to be brief, and, perhaps, it may be thought "brevis esse laboro, obscurus fio."

'I am, dear Sir, yours very sincerely,

'JOHN ABERNETHY.'

'Dr. BUTTER.'

The cases and remarks laid before the reader by Dr. Butter assuredly indicate that, at least, antiphlogistic measures did not agree with the Plymouth dock-yard disease. They gained a brief victory over active inflammation, but seemed to reduce the powers of nature too low for the exertion of the restorative process. Few of the patients recovered after being bled, and it seems almost certain that others would have died (for instance Lobb) if venesection had been performed: '*two* out of the *three* patients who recovered were *not* blooded, and *twelve* died out of *thirteen* who lost blood.'—P. 248. Of three cases, also, of wounds in dissection, related by Dr. Colles, two patients were not bled, and they recovered; one (Professor Dease) was bled, and died. But these remarks are not to be considered as grounds for a general rule of exclusion as regards blood-letting. The cases often present, as Dr. Duncan has very judiciously remarked, opposite indications, and the alternate, or even simultaneous, employment of opposite remedies is demanded. And erysipelatous and analagous disorders appear to be influenced by climate and many other circumstances, which render them sometimes more active and more decidedly inflammatory than at others;

and the existence of these circumstances, and the character of the prevailing epidemic, should always be carefully considered. Generally speaking, however, venesection does not appear to be useful, or even safe, in diseases of this description, except when it is employed early, and when it is employed moderately. Local bleedings appear to be generally less exceptionable, and sometimes highly useful. On the whole, we think Dr. Butter has

—— 'satisfactorily shewn, both from experience and authority, that excessive depletion fails to arrest that fever which is excited by ulcers and wounds of various kinds, and which is called irritative; and that the want of blood may be found out towards its termination, when immense demands are made on the system, by the breaking down of the cellular tissue, loss of skin, and copious discharges, flowing from the diffusion of this disease through the cellular substance, and stripping the skin from the subjacent muscles.' —P. 260.

The other parts of the general treatment are comprehended under these indications — 'To cleanse out the stomach and bowels is the *first* consideration; to restore, or rather to regulate, the secretions the *second;* and to remove nervous irritation the *third.*' — P. 239. Emetics, purgatives, and sudorifics, need not here be spoken of. Bark and opium were found very useful: the first in removing that debility which interfered with the healing process, or which attended the changes produced in the cellular substance; the second by allaying the great irritability which attended the disease. Stimulants appear to be indicated, both by their well-known effects in cases of poison from venomous animals, and by the reputed effects of some of them, and particularly of musk, ammonia, and ardent spirits, in erysipelas and gangrene. Dr. Butter says,

'In the erratic form of this fever, after a retrocession from the surface to the interior, I would give brandy frequently, five or six times within the hour; for it is as much the practitioner's object to keep out the cutaneous redness in irritative fever, as it is in the exanthemata, in scarlatina, measles, and small-pox.'—P. 297.

With respect to the local treatment, the author does not approve of cold lotions, but rather recommends emollient fomentations, and poultices calculated to allay local irritation, and sometimes to promote the digestion of wounds: oatmeal boiled in water, and then fermented with yeast or stale beer-grounds, is, he thinks, a good application, or linseed meal mixed with Port wine. Might not the addition of a solution of opium be sometimes advantageous? The use of bandages, with complete rest, is important: and Dr. Butter thinks that the rectified oil of turpentine might be sometimes beneficially

employed: it doubtless appeared to be strikingly useful in Reeves's case. The balsam of copaiba may be also beneficial.

As regards having recourse to an incision, Dr. B. thus expresses himself:—

'I need not recapitulate the circumstances calling for incision, as every practitioner must see its object, where he wishes to relieve tension, and to evacuate offending materials. It is delightful to think how much good surgery can effect in such a case; for by laying open the thickened integuments freely and properly at first, and exposing the nidus of all the misery, we may prevent that engorgement of the cellular substance, which has been compared to *a quagmire* by Mr. John Pearson, and called *boggy* by John Bell, Dr. Duncan, and Mr. Lizars. We outwardly invite materials, which, pent up, produce a deadly operation on the patient.'—P. 229.

In a recent letter from Dr. Copland Hutchinson to Dr. Butter, that gentleman thus expresses himself concerning this point in practice, which he recommended so forcibly to the attention of surgeons some years ago. He says,

'After *ten* years' experience since the publication of my remarks, I cannot furnish any additional instructions for the treatment of erysipelas phlegmonodes besides incision, which, I am convinced, is the best practice in this formidable disease, both as regards my own experience, and that of every other surgeon who has pursued it.'—P. 233.

In conclusion, Dr. Butter states his belief, that the constitutions of the above patients had been rendered, by diet, air, their occupation, and other circumstances, unusually susceptible of irritation; that the disease was not confined to the Dock-yard; that it was the traumatic erysipelas of some authors, and what others have called irritative inflammation; that bleeding and other depletory measures proved inadequate to the cure; that the object of the practitioner should be to invite and keep the disease to the surface by local measures; and that the general treatment should be directed to invigorate the constitution, &c. &c.—articles, most of which admit of no dispute.

We must here conclude our notice of this work—a work unquestionably indicative of talent, independent thinking, and great industry. Will Dr. Butter forgive us if we say something on the mere literary part of his work? Admitting the general excuse of haste and numerous avocations, and well aware as we are that the avocations of our profession exhaust the mind even more than the body, we yet cannot but find fault with a gentleman of Dr. Butter's evident powers and knowledge, and whose language is sometimes

very happily original, and strongly expressive of ideas by no means common-place, when we find him guilty of inaccuracies, both as regards words and phrases, by which some passages become as enigmatical as some of John Hunter's, but without the excuse which that great man had in a most defective education. We have a tolerably long list of instances before us; but the task of copying them is really repugnant to our better feeling, and we have no wish to give our worthy author an attack of *irritative fever*. Very far are we, however, from considering these things as of no consequence. A physician is reasonably supposed to have had the means of refining his taste and forming his style, as well as of informing his mind; and when he is regardless of these particulars, he either exposes himself to individual censure, or lowers the standard by which the public judge of the profession to which he belongs. It may be said that facts are superior to words; but this is to suppose correct language incompatible with sound sense, to the proper expression of which it is in reality indispensable. We remember reading an apology for the frequent obscurities which occur in Dr. Philip's writing, founded on the assertion that he wrote like a gentleman and not like a pedant; but such praise is rather equivocal, and very much like praising a poet by saying he writes verses like 'a person of quality.' Above all things, we would have anxiety about things, but the great Roman authority for this advice did not, when recommending the '*rerum solicitudinem*,' forget to couple with it the '*curam verborum*.'*

It will not, we trust, be suspected, that we make these remarks in a mischievous and captious spirit, without any care or concern for the good effect that may arise from them. Dr. Butter is not an *old* physician; he is active, intelligent—may we add ambitious; and we venture to prophesy does not now appear before the medical public for the last time. We hope, therefore, that he will not think these trifles below his consideration, but that, like Mr. Abernethy, of whom he is so justly an admirer, his future works may only be less admired for their style than valued for their matter: or if this be saying more than is required, that, at least, his good sense and penetration may not be obscured by faults which those can so easily observe who are unable to appreciate that which compensates for, if it does not excuse them.

* Quinctil. Inst. Orat. Lib. VIII. c. 1.

III.

OF HYDROCEPHALUS.

An Essay on the Nature, Causes, and Treatment of Water in the Brain. By WILLIAM SHEARMAN, M.D., Member of the Royal College of Physicians, and Senior Physician to the Royal West London Infirmary. Pp. 123. London, 1825.

THIS Essay is divided into three general heads: the first consists of remarks on the character of hydrocephalus; the second 'embraces an enumeration of some of its most frequent causes; and the third briefly expounds the general principles of treatment, founded upon the views previously exhibited in the two former parts of the essay.'

Dr. Shearman considers hydrocephalus according to the strict derivation of the term; that is, that the term should not be applied to any disease which may precede the effusion of fluid into the brain, nor to the symptoms which are produced by that fluid when effused. He considers that, by viewing the disease in this light, it would simplify our notions of its pathology, by the analogy which would exist between it and 'dropsy generally, which is usually considered to be the result of previous disease of different kinds, rather than itself to constitute a distinct disease.' According to this view, the disease in question may proceed from affections of various kinds, whether general or local, if there exist a predisposition in the membranes of the brain to throw out a superabundant fluid, and if there be a greater determination of blood to the head than usual, which is generally the case in children, especially during dentition, with whatever malady they may be affected.

The following paragraph will illustrate the author's view of water in the brain:—

'I am inclined to think that hydrocephalus, or water in the brain, is an accidental circumstance, occurring during the progress of several diseases, and is produced by a variety of causes; and that its occurrence in this case depends on the predisposition or previous state of the serous membranes of the brain in the individual; and that therefore the essential character of hydrencephalus, when the term is employed to designate any protracted series of symptoms, consists in that previous state of membranes, or predisposition.'

Dr. S. founds this opinion upon the circumstance, that the symptoms which precede effusion into the cavities of the brain, are common to many diseases, and that none of them are diagnostic of hydrocephalus in particular, till effusion has taken place. These common symptoms, he maintains, frequently continue for some time, till either recovery or death takes place, without producing any effusion; whereas, if the

membranes are in that peculiar state of predisposition, fluid is effused. This state consists in 'too great irritability and too augmented circulation.' The former term, namely, *irritability*, is a very undefined one, although frequently made use of. It gives us no clear notion of that condition of parts which predisposes them to assume the character of disease. However, as it is a term very frequently used in modern pathology, we shall make no comments upon it at present, further than that we think the term *predisposition* alone would give as clear an idea of that state of parts which readily admits them to become diseased. In the order of phenomena, this condition of the membranes precedes the 'too augmented circulation.' It consists in a peculiar modification of the extreme vessels, which admits them to increase their calibre, and to contain a preternatural quantity of blood. But there is something more than this necessary in order to produce effusion; for we frequently find the cerebral vessels gorged with blood when no fluid is thrown out into the cerebral cavities. Indeed, we know nothing more of this state of the vessels, than the fact, that fluid in the ventricles is sometimes concurrent with vascular fulness, and that sometimes it is not so; and now and then also we find fluid where the vessels are not fuller than in their healthy state.

It is often difficult, by observing the symptoms of disease, to distinguish the effect from the cause, especially when these symptoms are common to many diseases. That state of the system which precedes an effusion of fluid into the ventricles of the brain, is generaly attended with fever, which is manifested by all its common symptoms. The system appears to suffer universally, but the head more particularly than any other part. The question then is, does this general fever arise from an original affection of the brain? or, does the brain become affected, more severely than other parts, in the common course of that fever? Dr. S. maintains the latter opinion. His remarks are the following, respecting this point:—

'We frequently find, for instance, children of five or six years of age attacked with symptoms of fever,—headach, vomiting, foul tongue, and constipated bowels,—all of which symptoms are removed by antimonial medicines and mercurial purgatives; yet if these means are neglected, this febrile state is succeeded by effusion into the ventricles. Are these symptoms then, at the first, to be termed incipient hydrocephalus, a peculiar, distinct disease of the brain, of which all the rest are symptomatic? or, is not rather the effusion to be considered, not as a distinct idiopathic disease, but the simple result of that general vascular excitement which exists in the membranes of the ventricles in common with all other parts,

but in the former in a greater degree, on account of some peculiar state, or of the more easy excitability of their vessels, arising from the operation of some of the predisposing or occasional causes?'

We have already noticed, that, by the term *irritability*, we can mean no more than a particular, undefined condition of a part, which disposes it to become diseased by a slighter cause than what would be necessary, in an absolutely healthy state, to disorder its function. The ordinary result of this state, is an accumulation of blood in the part so predisposed. Dr. S. says in one place, (p. 26,) that these two states, namely, 'irritability and augmented circulation, may exist either seperately or combined;' but in another place, (p. 30,) he observes, that 'undue irritability of any organ *necessarily* occasions a proportionate degree of *augmented* circulation in that organ.' With respect to diseases which are characterised in their progress by symptoms of determination of blood, it is doubtful whether, at their very origin, or even during the predisposition to disease of the parts which they affect, a degree of this preternatural determination does not exist. We are therefore inclined to agree with the author in his latter observation, viz. that the one state of an organ is a necessary result of the other, when the disease is related with the extreme vessels.

Dr. S. remarks, that the irritability of the system is in proportion to its weakness, 'so that not only is disease produced by slighter exciting causes, but when there exists disproportionate irritability of the serous membranes of the brain, effusion more readily takes place in all the various diseases of children.' 'It is, accordingly, in children of weakly constitutions, or who have been rendered weak from debilitating causes, that effusion is commonly produced during the course of infantile disorders; the same disorders terminating in other children, who do not possess this predisposition, either in recovery or death, without effusion taking place.'

The author is of opinion, that effusion occurs in most instances independent of any inflammatory affection of the membranes of the brain; and that we have no reason to attribute it to chronic inflammation previously existing in these membranes. The principal proof, observable after death, of inflammation having existed, consists in thickening of the membranes, with a gelatinous sort of substance adhering to their surfaces, and fulness of the cerebral vessels. We frequently find the brain and its membranes in this state in patients who have died of hydrocephalus; indeed, we have seldom examined any cases of this disease without finding them in this state. These are certainly the common appearances of the parts when death has been produced by inflam-

mation, without effusion, and they most commonly manifest similar appearances when the brain contains fluid. There are certainly some exceptions, but these are comparatively few. Whether or no the inflammation which leads to the effusion of fluid be different in kind from that which destroys life without producing effusion, or whether the disease is of the same kind in both circumstances, only differing in degree, are questions which have not yet been decided.

Dr. S. considers the symptoms which 'denote undue irritability of the brain, or increased circulation through its vessels, without the pressure of actual disease,' to be 'great wakefulness, great sensibility to slight impressions, with restlessness, and animation in a high degree; the retina of the eye is particularly sensible to light, and the pupil is sometimes much contracted; the child becomes fretful, and often cries without any apparent cause.' These indications precede any actual disease of the cerebral membranes; but, if the child should be attacked by any general fever, while they are in this condition, the disease in question becomes established, and a general torpor and paralysis, strabismus, dilated pupils, unaffected by strong light,' &c., indicate the effusion of fluid.

Acute hydrocephalus and the water stroke, the author considers to be two distinct diseases, as will be seen in the following paragraph:

'It is probable that when effusion takes place, the danger is in proportion to the rapidity of the effusion, rather than to its actual quantity: as when it takes place slowly, the brain may gradually accommodate itself to the pressure, and time is allowed for the removal of the fluid. When the effusion is suddenly large, as in the water stroke, the functions of the brain are at once speedily overwhelmed, and death ensues. Accordingly, the water stroke is invariably fatal; the acute hydrocephalus may occasionally be cured; that is, in my view of the matter, the general disease of the system may be conquered previous to effusion coming on. In the water stroke, the effusion taking place as the direct effect of the exciting cause, without any intermediate general disease of the system, and occurring with great rapidity, the case is rendered hopeless. Water stroke is the actual original disease, not the accidental termination of some other disease.'

We may be allowed here to notice, that we have examined the head in some cases where death was produced by what is called the water stroke, and found the brain to contain but very little fluid. We believe the complication of symptoms which so suddenly take place in this affection, to depend upon some other cause than the pressure of fluid; for, it now and then happens that the child recovers, in a few hours, the power of sensibility, after a very severe attack of convulsion,

with dilatation of the pupils, screaming, and all the other symptoms which characterise the water stroke. We have noticed the same child to have repeated attacks denoted by the above symptoms, and to shew a moderate degree of animation between each. Nor do we consider this affection necessarily fatal, although commonly it is so. We have seen one case, although not a very severe one, where the child recovered under the use of very large doses of calomel, frequently repeated. We have examined several cases that had died of this affection, and the quantity of fluid existing in the brain was generally very small, not amounting to more than four or six drams, and sometimes even less than that.

Causes.—Dr. S. divides the causes of hydrocephalus into 'predisposing, and occasional, or exciting;' and these latter may be further divided into such as act primarily on the brain, and into such as act primarily upon the general system, and remotely on the brain; or, as it is sometimes termed, by sympathy.' Fever, of whatever description, he considers to be one of the most frequent causes of effusion in the brain. Scarlatina has a greater tendency to produce this effect than most of the other febrile diseases, because it is a disease attended with a great degree of vascular excitement. He thinks, however, that hydrocephalus seldom succeeds small-pox and measles. We cannot agree with the author here, especially as it regards the latter disease; for we have met with a great number of instances of effusion of water on the brain in children who had died of the sequelæ of measles. Out of a considerable number which we have had an opportunity of examining, we do not recollect a single case without effusion: the cerebral membranes were, in all of them, much thickened, and the erachnoid in particular, was covered with lymph in a gelatinous state; there was fluid, both between this membrane and the pia mater, and in the ventricles. The other causes which the author mentions are, debility, scrofula, costiveness of the bowels, the exhibition of mercury, premature mental exertion, concussion or agitation of the brain, dentition, worms and other irritating substances in the alimentary canal, hereditary predisposition, and every other cause which tends to reduce the power and increase the irritability of the system. He thinks also, that the brain becomes frequently affected from *sympathy* subsisting between it and other parts. His words respecting this mode of affection are the following:—

'It must be admitted, that affections of the brain certainly do arise frequently from what has been denominated sympathy; that is, when some other part of the animal system suffers under any deviation from its natural and healthy state, the functions of the

brain become disturbed and interrupted; and this takes place whatever be the part of the system affected. This circumstance is not to be wondered at, considering that the brain is the centre and probably the origin of all nervous influence, although the mode in which this sympathetic influence is exerted remains inexplicable.'

General Principles of Treatment. — The mode of treatment recommended by Dr. S. is founded upon the view which he has taken of the disease. The following paragraph will illustrate the principle upon which the treatment is conducted:

'The medical treatment of hydrocephalus must be regulated in no inconsiderable degree by the view which is taken of its essential and characteristic nature, and its mediate proximate cause. Those who believe the train of symptoms denominated hydrocephalus acutus to be a distinct or specific disease, arising even in its earliest stages from inflammation, will resort to those depletory methods which are commonly employed to check inflammation; whilst others, who consider the effusion as an accidental circumstance, occurring in various diseases of different descriptions, and the symptoms preceding effusion, as those belonging to such diseases, respectively, and not constituting a distinct or specific disease, having effusion as its natural and essential termination,—will adapt their treatment to these particular diseases.'

As the author maintains the latter opinion, his treatment consists in subduing the disease which is likely to produce effusion if allowed to go on. When worms or costiveness form the cause of the general affection, he recommends the bowels to be emptied by a combination of scammony, jalap, and calomel, which he considers 'preferable to the modern method of trusting to calomel alone as a purgative, or of promoting its action by a solution of Epsom salts or other saline neutrals.'

As the author considers *fever* to be the most frequent cause of hydrocephalus, he recommends our remedies to be chiefly applied to that disease. 'We are also to direct our attention to relieving any particular organ which may be attacked by the fever in a disproportionate degree, and thus obviate the danger of organic mischief.' For subduing the fever and irritability when combined, sedatives and diuretics are particularly recommended. General bleeding, Dr. S. considers injurious, as it increases the irritability of the system generally, and particularly of the brain; but he recommends local bloodletting. When the disease results from general debility, preparations of iron are to be given; and the diet is to be nourishing and easily digestible.

The plan of treatment which is recommended is altogether general, and it applies chiefly to the prevention of effusion taking place, by the removal of the affection of which that

effusion is an accidental circumstance. There is no plan pointed out by which the fluid may be removed when once effused.—We have noticed the leading points contained in the Essay; and as the author's remarks are very general, this is all we are able to do. We have endeavoured to illustrate his views of the disease of which he treats in the best manner we could according to the limits necessarily prescribed for this review; but for obtaining a more correct notion of them, we beg to refer our readers to the Essay itself, which will fully repay an attentive perusal.

IV.

THE UNPUBLISHED WORK OF DR. BAILLIE.

Lectures and Observations on Medicine. By the late MATTHEW BAILLIE, M.D. London, 1825.

As only one hundred and fifty copies of this volume were printed, for distribution amongst Dr. Baillie's medical friends, and as there are many in the profession who, either from curiosity or expectations of advantage, are desirous of perusing that part of it entitled '*Some Brief Observations drawn from my own Experience, upon a considerable number of Diseases,*' we therefore insert it, unabridged, and without comment. It is prefaced with the following remarks:—

'I have now practised as a physician for more than thirty years, and have for the greater part of that time been so much occupied with visiting patients, that I have seldom been able to write notes of individual cases. It has occurred to me, however, that some advantage might be derived from my leaving a short record of the results of my experience in a considerable number of diseases.*

'I am convinced that the most successful treatment of patients will depend upon the exertion of sagacity or good common sense, guided by a competent professional knowledge; and not by following strictly the rules of practice laid down in books, even by men of the greatest talents and experience. It is very seldom that diseases are found pure and unmixed, as they are commonly described by

* 'The plan of recording the results of his experience, appears to have been first adopted by Dr. Baillie in 1819, when, in consequence of some arrangements which he made, he hoped to have had more time at his disposal. There is reason to believe that he meant to have given a more extended account of his own experience; but almost every moment of the short remainder of his life continued to be occupied with the active duties of his profession; and he was, besides, constantly harassed with the feeling, that, notwithstanding his utmost exertions, he was unable to answer all the demands made upon him, or to perform the various duties that were continually presenting themselves to his conscientious mind.'

authors; and there is almost an endless variety of constitutions. The treatment must be adapted to this mixture and variety, in order to be as successful as circumstances will permit; and this allows of a very wide field for the exercise of good common sense on the part of the physician. A physician who should be guided strictly by the rules laid down in books, would be a very bad practitioner. In the following short observations on the treatment of various diseases, I shall state impartially the result of my experience, without entering into any speculative reasoning, which is often very fallacious.

'*Hanger Hill*,† *July* 22, 1819.

'Complaints of the Head. — Many persons of both sexes are affected daily with headaches, of more or less severity, for many months, and often for some years. They chiefly prevail towards the middle time of life, but occur often at an earlier period. They may take place in any part of the head, but are more commonly felt in the forehead, or over one eye, or in the back part of the head. Such headaches I have found, in general, to be very little benefited by bleeding, either general or topical. In the accounts which patients have given me of the effect of this remedy, they have said that they have either received from it no benefit at all, or that it has lasted but a few hours; or that the headaches have even been worse after cupping, or the application of leeches. I have generally found such headaches to be most benefited by temperate living, great attention to avoid improper diet, purgative medicines, and bitters. The best common medicine is rhubarb and soap, in such doses as to give two motions daily. A few grains of calomel, with an aperient draught, such as an infusion of senna with a drachm or two of Epsom salts given occasionally,—as, for instance, once in a fortnight or three weeks, — are sometimes of much use. A due degree of exercise taken daily, both on foot and on horseback, is likewise in some cases very serviceable. Some headaches I have known relieved by nervous medicines, but not frequently. In some cases this complaint is relieved by no plan of medicine or management whatever, but will gradually, after some months or years, subside. The seat of such headaches is, I believe, in the scalp, and not in the inside of the cranium. They depend chiefly for their cause upon the state of the stomach and bowels, or upon an irritable state of some of the nerves of the scalp. In most headaches of severity, it is right to make one or two trials of the effect of topical bleeding; but not to persevere in the repetition of this measure for many months, as is often done, even though it produce no benefit.

'The cutting the hair of the scalp very short, and the application of cold, by a large sponge wrung out of cold water and applied to the upper part of the head, will often give great temporary relief when the skin has been previously hot.'

Apoplexy. — After remarking that blood is poured out in

* 'During the period of Dr. Baillie's attendance at Windsor, he resided for one summer at Hanger Hill, near Acton.'

apoplexy more frequently in the medullary substance near one of the lateral ventricles, but that it may occur in any part of the brain, Dr. Baillie states, that —

'The milder forms of apoplexy depend upon a distension of some of the vessels of the brain, from an undue accumulation of blood in them. I have known, however, one instance of fatal apoplexy where many of the blood-vessels were found, upon examination after death, to be much distended with blood, but no blood had been extravasated in any part of the brain.

'The chief remedy in apoplexy is large bleeding, to be repeated according to circumstances. Topical bleeding by cupping and leeches is likewise often of use. The next remedies in importance are purgative medicines of considerable power, and acrid glysters. The head should be kept high or elevated, and cold may be applied with advantage to the top of the head. If the patient should recover by these means, the best plan of management, in order to escape from another attack, is to live almost entirely throughout future life upon vegetable food, and to abstain from wine, spirits, and malt liquor. It will be of considerable advantage to avoid any strong or long-continued exertion of the mind. In a few instances, when the full state of the vessels of the brain had for some time subsided, I have derived considerable advantage from the moderate use of tonic medicines, and more especially of steel.

'*Hydrocephalus.* — I have known in my own experience but one instance of this disease being cured, when fully formed. In this case all the symptoms were well marked, and the disease had made such progress that squinting and an irregular pulse had taken place. There had been no peculiar treatment, except that mercurial ointment was applied daily to a considerable sore on the upper part of the head, which had been produced there by a blister. The individual is now alive, and is a young lady of good talents, which she has highly cultivated.

'I have seen a few cases, in which there appeared to be a strong threatening of hydrocephalus, that got well by the application of leeches and blisters to the head, and brisk mercurial purges; but I cannot determine whether these cases, if less actively treated, would have terminated in true hydrocephalus or not.

'*Epilepsy.* — This disease appears to me to have become much more frequent within the last twenty years than formerly. If this remark be generally true, it may, perhaps, be accounted for by the progress of luxury, which must render the nervous system more irritable. I have known very few instances of epilepsy radically cured; but a considerable number of cases in which the intervals between the attacks have been rendered much longer. The medicines which have appeared to me to have most influence in removing or retarding the attacks of epilepsy, have been the argentum nitratum, viscus quercinus, and the oleum succini. Of these, the first is the most powerful; but, when it has been used for a good many months, it tinges the skin of some individuals of a dark colour. I

have known two instances of this effect from it in my own experience. The bowels, too, should always be kept open, and the effect of brisk purgatives should be tried in the beginning of the disease.

'It is of great use, in the treatment of epilepsy, that the patient should live very temperately, and should avoid every thing which may tend suddenly to excite or to harass the mind. Patients should eat animal food sparingly, and should abstain from wine, ale, and porter altogether. The hair should be cut short, and cold applications should be applied to the head whenever the skin of it feels hot. This management is often of much use in rendering the attacks both less frequent and less violent. The causes producing epilepsy are various; but I believe that in this disease there is constantly a tendency to a greater accumulation of blood than is natural in the vessels of the brain.

'*The Tic Douloureux.* — The tic douloureux seems to me likewise to have become more common of late years, and I think it is more frequent among men than women. I do not recollect to have seen any instance in which it has been permanently cured, either by internal medicines or by an operation. I have known some instances of its being cured for a time, (that is, for several months, or even a year,) by medicines; and those which have appeared to me of most use are Peruvian bark and arsenic. The operation of dividing the nerve has in some instances prevented a return of the disease for one or two years, but has not, as far as I know, prevented it permanently. The courage and patience under suffering in this complaint, displayed by some individuals, have been truly astonishing.'

Of some Diseases of the Neck. — Respecting the *swelling of the lymphatic* glands which is frequently observed in young persons of delicate constitutions and fair complexions, Dr. Baillie observes: —

'It is always a very tedious disease, and is seldom much benefited by medicine. The remedies which I have found of most use have been sarsaparilla combined with soda, Peruvian bark combined with soda, and some form of steel. These medicines will, however, often have but a very imperfect influence upon the complaint. Sea-air and tepid sea-water bathing are often beneficial; but I think that the air and waters of Malvern are more useful than any other remedy. I have known a good many cases which had been but little improved by the common remedies, and by a residence upon the sea-coast, with all its advantages, which have afterwards got quite well, by the patients residing three or four months at Malvern.

'*Bronchocele.* — This disease is not very uncommon in this country: it is more frequent among women than men, and much more so among young than old persons. It is not often much benefited by medicine, but will frequently disappear of itself. Sometimes the swelling grows, even in this country, to an enormous size; and I have known one or two cases in which the patient was de-

stroyed by the swelling compressing the trachea and the œsophagus. The medicines which I have found of most use have been burnt sponge, soda, and mercury, used externally, either as an ointment or in the form of plaster.

'*Chronic Inflammation of the Larynx and Trachea.* — This disease occurs frequently in this country, and, upon the whole, I think is more common among men than women. It is often confined to the inner membrane of the larynx and the upper part of the trachea; but frequently it spreads downwards, even to the inner membrane of the bronchia. This disease always continues several months, and often, with short intervals of amendment, for years. Not unfrequently it lays the foundation of future phthisis. Remedies generally produce only a very gradual influence upon the disease, and sometimes none at all. Benefit is not unfrequently derived in some degree from the repeated application, at short intervals, of leeches to the fore part of the neck, or the skin covering the upper bone of the sternum. The frequent application of small blisters to the same parts will occasionally be of use; but, perhaps, the most useful remedy is a small seton inserted under the skin of the side of the neck, very near the larynx. Internal medicines often produce very little good effect; but the medicine which I have found, upon the whole, to be the most beneficial, has been the extractum conii. I have sometimes directed five grains of it to be taken three times a-day for many weeks together, with manifest advantage.

'*Of the Quinsy.* — I have but one observation to make with regard to this disease, which is of some little importance. It is usual to endeavour, throughout the course of it, to prevent suppuration from taking place, by the repeated application of leeches under the angles of the lower jaw. It is certainly very desirable that suppuration should be prevented, and that inflammation of the tonsils should gradually subside by resolution. I have found, however, by experience, that suppuration is by such means very often not prevented, but only that inflammation proceeds more slowly to this issue. Hence the patient suffers for a considerably longer time; and the suffering in this disease is often very great. If, therefore, one or two applications of leeches do not lessen materially the inflammation of the tonsils and velum pendulum palati, I should recommend the progress of the inflammation to be encouraged by the inhaling of warm vapour into the mouth, and the application of poultices to the external fauces. In this way the disease will go through its progress more quickly, and the patient will suffer much less.'

Of some Diseases of the Chest. — *Pneumonia.* — After stating that the earlier blood is taken away from the arm in pleurisy and peripneumony, the sooner will the disease be subdued, and that 'all other remedies are insignificant in comparison of the abstracting of blood from the system,' Dr. Baillie proceeds to observe: —

'When this remedy has not been applied early enough, nor in sufficient quantity, and an abscess has been formed in the lungs, which has burst, patients have, in the greater number of instances that I have seen, recovered but very slowly. Under these circumstances, the medical attendant has little to do but avoid mischief. The constitution should be moderately supported, without being too much stimulated. Moderate doses of myrrh, decoction of bark, or infusion of some bitter, are sometimes of use. Light animal diet, and even a little wine, are sometimes useful in such cases; but great care should be taken that no new inflammation be excited.

'In the course of my experience throughout many years, I have known a few instances of abscess being formed in the lungs without any previous pain in the chest, or difficulty of breathing, or observable fever. Such patients, upon some exertion of the body, or even without any exertion, have suddenly coughed up a considerable quantity (perhaps half a pint or more) of pus; and this has been to the patient the first intimation of disease. In such cases the inflammation of the lungs must have proceeded so slowly as to have produced little or no pain in the chest, and not to have alarmed the constitution so as to excite fever.

'*Of Phthisis Pulmonalis.* — In the course of my medical experience, I have known one or two cases of patients who recovered from phthisis which was apparently fully formed. It is probable, however, that with regard to these cases I may have been mistaken; and that, if I had inquired with sufficient accuracy into their history, I should have found that they were small abscesses of the lungs, of a common, and not of a strumous nature.

'I have known a good many instances in which persons threatened with consumption have recovered by going into mild climates, or even into Devonshire or Cornwall; but I do not recollect a single instance in which they recovered when the disease had decidedly been formed. Change of air should be adopted very early, in order to give it the best chance of success. Such a variety of accounts have been given by patients, and even by medical gentlemen, of the comparative advantage of one place over another abroad, that I have found it impossible to decide which is to be preferred. I am disposed, however, to think that Madeira, the Hyeres, some parts of Portugal, Malaga, Nice, and Naples, are the best. It is very possible that different places may suit better with the constitutions of different individuals; and this conjecture, if well founded, may explain the cause of there being such a variety of opinions upon the subject. A patient should, if possible, spend two or three successive winters abroad, in order to give the best chance of the disposition to the disease being subdued.

'When no active inflammation is going on in the chest in phthisis, I have sometimes found advantage from patients being allowed to take a little white fish or light animal food at dinner. In a very few instances, I have found benefit derived from their

taking one, or even two, glasses of wine, diluted with water, after dinner; but wine is generally improper.

'I have known of no medicine which has been of permanent and substantial use in phthisis; but I have sometimes found a good deal of temporary advantage derived from myrrh, from ammonia, and from light bitters united to the acetic acid. The frequent repetition of blisters, or a seton inserted under the skin in some part of the chest, are occasionally of considerable use.

'*Of Hydrothorax.*—When dropsy of the chest does not depend upon any diseased structure of the heart or lungs, I have found it much more readily affected by medicine than ascites or dropsy of the ovarium. Not unfrequently, under these circumstances, I have known water of the chest relieved, or for a time cured, by medicine.

'The medicine which I have found most beneficial, has been mercury combined with squills and digitalis. Five grains of the pilula hydrargyri, combined with one grain of the dried powder of squills, and half a grain of the dried powder of digitalis, given twice or thrice a-day, have, in many cases under my care, either very much mitigated or for a time removed the disease. There has been some advantage from the mercury affecting slightly the salivary glands. Squills and digitalis are by themselves much less efficacious than when combined with mercury.

'I do not recollect one instance of hydrothorax being permanently cured, although I remember a good many cases in which the symptoms were repeatedly removed by the same means in the same patient.

'Where the difficulty of breathing has been very great, and the legs and thighs have been much swelled from anasarca, I have known much relief afforded by a scarificator and small cupping-glass being applied above the inner and outer ankle of each leg; and I do not remember any mortification attacking these small sores. The difficulty of breathing in such cases probably depended in part upon the water accumulated in the cellular membrane of some parts within the chest, and this was gradually emptied through the small openings made in the skin of the legs.

'Of Palpitation of the Heart.—Palpitation of the heart may take place at any period of life; but it is more common at an early period than any other,—as, for instance, from fifteen to twenty-five years of age. Perhaps, too, it may be more common in females than in males; but of this I am not very certain. At an early period of life, it does not, in general, depend upon any diseased structure of the heart, but either on a morbid irritability of the nerves of this organ, or upon some imperfect state of digestion. When it takes place from either of these causes, it always continues for a long time, (often, more or less, for two or three years,) but at length generally subsides. Rest of body and quietness of mind are two of the chief means which contribute to remove this disease. All quick motion of the body, and more especially walking up ascents, increases the complaint, and should as much as possible be

avoided. Every thing which tends to excite or harass the mind has the same effect, and should be shunned whenever it is possible. To rest of body and mind should be joined very temperate diet; and, when this general plan of management has been continued for many months, or perhaps for a year or two, the disease usually subsides. Digitalis has sometimes been useful in mitigating this complaint, but frequently it produces no good effect.

'Where the palpitation depends, either altogether or chiefly, upon the state of the stomach, it is gradually removed by temperance, by improving the condition of the stomach, and by keeping the bowels free from costiveness. I remember one case in which palpitation of the heart had taken place, and had continued for six months, in consequence of gout having attacked this organ. In this case the palpitation ceased suddenly and entirely, when the gout attacked one of the feet in a full and decided form. This person is now alive, and has continued generally in good health, although it be nearly twenty years since the attack of palpitation.

'In some young persons, palpitation depends upon an enlargement of the several cavities of the heart, produced not unfrequently by rheumatism attacking this organ. This cause of enlargement of the heart was overlooked by the physicians of this country, till it was discovered by the sagacity of my esteemed friend, the late Dr. David Pitcairn. The enlargement, in general, goes on increasing till life is destroyed; but I have known two cases where the enlargement stopped at a certain point, the increased action of the heart in a great measure subsided, and the patients acquired a tolerable share of health. They are both now alive, and they have the prospect of living, with care, to the ordinary term of life. Such a fortunate issue is very rare; but the disease may be generally retarded in its progress by much rest of body, quietness of mind, and a very temperate mode of living. Wine and every other fermented liquor should be avoided; and the patients, under such circumstances, should live almost entirely upon vegetable food.

'At the middle and more advanced periods of life, palpitation of the heart often depends upon a diseased structure of some of its valves. This condition of the heart does not admit of any remedy, but must gradually become worse, until life be extinguished. But the symptoms may be mitigated, and the progress of the disease retarded, by little exertion of the body, by great temperance, and by a few ounces of blood being occasionally taken from the arm.

'*Angina Pectoris.* — This distressing disease almost constantly depends upon an ossification of the coronary arteries of the heart, and admits of no effectual relief from medicine. I have met with two cases, however, in the course of my medical experience, in which symptoms exactly resembling those of angina pectoris depended upon an imperfect digestion; and the patients ultimately recovered entirely, by correcting the disordered condition of the stomach.

'Of Diseases in the Cavity of the Abdomen.—*Ascites.*— With respect to this disease I have very little to say. When it

depends upon a morbid state of any of the abdominal viscera, — as, for instance, the liver or the spleen, — it is never permanently removed, and very seldom even relieved, till the morbid condition of these viscera is cured, if this event should fortunately take place. Even where the viscera in the abdomen are sound, or at least cannot be discovered by an accurate examination to be otherwise, ascites is rarely, according to my experience, cured by medicine. The ordinary diuretic medicines, as squills and digitalis, have commonly very little effect upon it. The medicines which I think, upon the whole, to have most influence upon this species of dropsy, are supertartrate of potash and small doses of elaterium. In two, or perhaps three cases, during my medical experience, ascites has gradually got well without medicine, after the common remedies had been sufficiently tried and had failed. I can entertain no doubt, from some late publications, that taking away blood from the arm will often be a valuable remedy in ascites, where there has been too much arterial action, or even some degree of inflammation, in the early part of the disease: but of this remedy I have not had sufficient personal experience to enable me to appreciate its value.

'*Inflammation of the Peritoneum.* — Where this disease has not been connected with any peculiarity of season, or any epidemical complaint, I have found it to be cured by bleeding and purging, like other inflammations. Upon the whole, however, I think that it has been more relieved by repeated applications of leeches, than by general bleeding. I do not wish it to be understood that general bleeding is of no advantage in peritonitis, for sometimes it produces the greatest benefit. I think, however, that, in most cases, more benefit will be derived from the repeated application of leeches, according to circumstances, than from a repetition of the general bleeding. The purgative medicines which have appeared to me to be of most value, are calomel and the neutral salts.

'*Of some Affections of the Stomach.* — There is no complaint more common in this country than an imperfect condition of the functions of the stomach. This generally shews itself by more or less of flatulence, by acidity, by a bitter taste occasionally felt in the mouth, and often by some degree of costiveness. This condition of the stomach generally arises from something wrong in the quantity or quality of the food, — from anxiety of mind, — and from a due degree of exercise not being regularly taken. It makes its progress very gradually, continues always for some months, and often even, more or less, for years.

'The first object of attention should be to remove, as far as possible, the causes which produce it. Every kind of food should be avoided which the patients may have found, from their own experience, to have disagreed with their stomach. Most commonly, animal food that is very fat, or much salted or fried, is difficult of digestion, and should either be eaten very sparingly, or should be altogether avoided. Young and white animal food is in general more difficult of digestion than what is brown and of middle age.

The vegetables which are eaten should be very well boiled, and should be taken sparingly by such persons as are subject to flatulence or acidity. The waxy potato is almost constantly very difficult of digestion, and in general should be avoided altogether. There should never be so much food taken at a time as to give the feeling of fulness or distension in the stomach; and, except under very particular circumstances, there is no advantage in eating oftener than three or four times in twenty-four hours. The best common beverage in disordered conditions of the stomach is water, or toast and water; and three or four glasses of wine may be taken at or after dinner, according to the habits of the patient, or other circumstances. That wine is to be preferred which agrees best with the stomach, of which he is himself the most competent judge. Daily exercise is almost constantly necessary in order to preserve good digestion. Riding on horseback is, upon the whole, the best, for it gives a motion to the abdominal viscera which no other exercise is capable of; but walking is also very useful. A combination of the two is preferable to either; for riding on horseback chiefly exercises the abdominal viscera, and walking chiefly exercises the limbs and the thoracic viscera. Anxiety of mind should be avoided, whenever it can fairly be done; but it is often impossible to take advantage of this remedy.

'With respect to medicines, there are none for this complaint which can be called specific. The most beneficial, however, which I have known, are rhubarb, and some form of bitter medicine combined with alkalies. Eight grains of rhubarb formed into pills with soap, taken every night at bed-time, and some bitter, as, infusion of cascarilla, calumba, quassia, or gentian, with some grains of soda or potassa dissolved in it, taken in the morning and before dinner, will often be very useful in this kind of disordered stomach. These remedies should be continued for five or six weeks at a time, should be omitted for two or three weeks, and occasionally resumed. If the alvine evacuations should be considerably lighter in their colour, or much darker than natural, mercury, given in moderate doses, and not for so long a time as to injure the constitution, will often be of great use. The large and indiscriminate employment of mercury in complaints of the stomach has, I think, been often very hurtful. Where acidity has been particularly prevalent in the stomach, I have sometimes found it more effectually corrected by the diluted mineral acids than by alkalies. Ten or twelve drops of the diluted sulphuric or diluted nitric acid, mixed with an infusion of some bitter, and taken twice a-day, will sometimes be very beneficial in this condition of the stomach.

'There is an affection of the stomach in which the digestion is very imperfect, and in which considerable quantities of a transparent viscid mucus is formed. This often produces nausea, and is occasionally brought up by vomiting. According to my experience, this condition of the stomach has been frequently little benefited by medicine; but sometimes I have found the tinctura benzoës composita of considerable use. A drachm of it may be

taken, mixed with water and some mucilage of gum acacia, three times a-day.

'There is another affection of the stomach, less common than the former, but far more serious, — viz. where the stomach throws up in large quantity a fluid like cocoa. A quart of this fluid will often be thrown up at a time; and this will frequently be repeated for many days together. This condition of the stomach is sometimes connected with a diseased state of the liver, but sometimes it is independent of it, there being, at least apparently, no disease in this latter organ. In several instances it has proved fatal; but in others, and especially in two cases which I recollect, the complaint subsided for several months at a time, and the persons enjoyed in the intervals tolerable health. This state continued many years, and the patients are still alive. In one case I had an opportunity of examining the condition of the stomach after death. It was very capacious, and was half-filled with this brown fluid, but did not appear to be at all diseased in its structure. The neighbouring viscera, as the liver and spleen, were (as far as I recollect) perfectly sound. The fluid would appear to be formed by a diseased secretion of the inner membrane of the stomach, without any apparent morbid structure.

'This disease, according to my experience, is but very little influenced by medicine or by diet. In two or three cases, some benefit seemed to be derived from astringent medicines combined with moderate doses of opium, — as, for instance, from tincture of kino, or tincture of catechu, with a few drops of laudanum, taken three or four times a-day. The bowels should be at the same time kept free from costiveness.

'In some cases the stomach will lose almost entirely the power of digestion; the patients will become pale and emaciated, and appear as if they were affected by some fatal visceral disease: at the same time no morbid structure in the region of the stomach or liver can be detected, by the most attentive examination. In some of these cases, the patients have been completely restored to health by a course of the Bath waters.

'Of Inflammation of the Bowels.—Of this very formidable disease I have very little to observe. Where the symptoms had been fully formed, the greater number of cases which I have seen have terminated fatally. One case, however, in which the vomiting was of stercoraceous matter, recovered. The chief remedy in this very dangerous disease is bleeding largely, both from the system and topically by leeches. It is very desirable that the inflammation should be subdued, or at least be much lessened, before any active purgative be administered. A purgative during the violence of the inflammation will rarely produce any evacuation, and may even do some injury, by stimulating a part still highly inflamed. Fomentations have been very commonly applied to the belly, and they give some temporary relief. I am inclined to think that cold applications may be useful in assisting to subdue the inflammation; but this I have not hitherto tried. The tobacco glyster, and cold water

thrown upon the lower limbs, have in some cases excited the bowels to action, when very powerful purgatives had failed.

'*Of Dysentery.*—In this disease, opiate and astringent medicines have sometimes appeared to me to be administered too early. Mild purgative medicines (of which I think castor-oil, upon the whole, the best,) should be administered till the alvine evacuations have become free from mucus and blood, and have recovered in a considerable degree the appearance of a natural fluid motion. Astringent medicines, with opium, may then be directed with much advantage. As there is always an inflammatory condition of the bowels in this disease, leeches may be applied to the seat of the sigmoid flexure of the colon, and the upper extremity of the rectum, with a considerable chance of benefit.

'Of some Affections of the Liver.—There may be, and often is, a deficiency in the quantity of bile mixed with the alvine evacuations, without any disease in the structure of the liver. The fæces are more or less pale; but there is no hardness or fulness in the region of the liver. Every thing there, upon the most attentive examination, is discovered to be soft, and perfectly natural to the feeling. Mild purgative medicines, with small doses of the pilula hydrargyri, are commonly very useful in such cases. Four or five grains of the pilula hydrargyri should be given every night for some time, and the purgative every morning, or every other morning. The mercurial medicines should not be carried so far as to make any impression upon the constitution, if this can be avoided; it is only intended to stimulate the ducts of the liver. The best purgative medicine, upon the whole, is the sulphate of magnesia in moderate doses, so as to produce two or three evacuations daily. When the alvine discharges have for some little time resumed their natural colour, the pilula hydrargyri should be given up.

'Sometimes the bile discharged from the liver is of a dark colour, and the motions become darker than usual. The intensity of the colour differs very much in different individuals, and occasionally, it is nearly as black as ink. The liver at the same time may be, and commonly is, quite sound in its structure. The treatment should in this case be in a great measure similar to that in the former, but a little more active. Small doses of calomel may be used instead of the pilula hydrargyri, and the purgative medicines may be a little more powerful. When the colour of the motions has for a short time (eight or ten days) become natural, the calomel may be given up; but the purgative medicines may be continued longer, at somewhat greater intervals, as, for instance, every third day. Where the motions are very green in their colour, magnesia or some alkali may be mixed with the purgatives. In the above cases, the Cheltenham and Leamington waters have been often very useful; but I think that many practitioners of the present day have erred in administering mercury too long, and in too liberal doses. When mercury is carried beyond the point that is necessary, it often injures the constitution by weakening it, and by rendering the nervous system very irritable.

'There is sometimes a greater fulness and greater sense of resistance over the whole region of the liver than natural, with more or less of tenderness upon pressure. This arises from some chronic inflammation of the substance of the liver. In such a case, the repeated application of leeches to the seat of the liver, and the occasional application of a blister, are often of the greatest use. A mild course of mercury should be recommended, so as in some degree to affect the constitution; and this should be administered both externally and internally. It should not, however, be carried beyond the necessity. Long and repeated salivations will seldom be required, and often have done much and permanent injury to the constitution. When the liver has become soft, has lost its tenderness, and resumed its natural size, the mercury may be given up. If the liver shall not have returned altogether to its natural state, and the constitution appears to be suffering from the course of mercury, a seton may be inserted under the skin in the region of the liver, and the mercury may be given up or suspended. In some cases I have found a fulness of the liver which had eluded the effect of mercury, to be removed by a seton. The administration of purgatives is of great advantage in all such cases, and the Cheltenham waters are often highly beneficial.

'*Of Abscess in the Liver.* — Inflammation of the liver will occasionally terminate by forming an abscess. The abscess will in time break externally, or it will communicate with the lungs, with the stomach, or with both of these viscera. When the abscess breaks externally, the part gradually heals, unless there be something very unfavourable in the constitution, and the patient recovers entirely. When the abscess communicates with the lungs, the matter is brought up by coughing, and the patient, if prudent in the management of himself, and possessed of a tolerably good constitution, will sometimes at last entirely recover. When the abscess communicates with the stomach, the matter is sometimes discharged by vomiting, and sometimes by the bowels. In this case, too, the patient will not unfrequently recover; and the same observation may be extended to an abscess of the liver which communicates both with the stomach and the lungs, although the circumstances are more unfavourable in this than in the other two cases. In these various cases little benefit is produced by medicine, but great injury may be done by imprudent or unskilful management. The bowels should be kept always free from costiveness: if there be any considerable feverishness, it may be lessened by saline draughts; or if the constitution be weak, it may be strengthened by the prudent use of tonic medicines. The diet should be light and nourishing, and in general wine should be avoided. The exercise, if the weather be favourable, should be gentle, but it should not be taken at all if the weather be ungenial, or if it be attended with pain or much fatigue. A stimulating diet, too much or too violent exercise, and exposure to a cold atmosphere, may do much mischief, or even lead on to a fatal event.

'*Of Tubercles in the Liver.*—Tubercles of different kinds are formed not unfrequently in the liver at a middle or more advanced

age. They are often connected with an intemperate mode of living, but they will sometimes occur in persons who have passed a uniformly temperate life. They are frequently the cause of ascites, but sometimes they do not produce this effect. No medicines, as far as I have seen, are attended with any permanent benefit in this state of disease. By temperate living, by gentle exercise, and by the bowels being kept rather open, patients will not unfrequently live for some years with such complaints; but I do not recollect any instance of a patient actually recovering from them.

'*Of Hydatids in the Liver.*—I have known only two instances of this disease in the living body. The one was in an old lady who had been subject from time to time, for many years, to symptoms very much resembling those of gallstones. At length, after a more severe attack than usual, the constitution gradually sunk, and she died. Cysts containing hydatids were discovered upon examination of the body after death.

'The other case was that of a young lady who had suffered, occasionally, a good deal of pain in the region of the liver, and at length passed some hydatids by stool. She for the time recovered, but what became of her afterwards I have never learned. It is obvious that the formation of hydatids in the liver, even when the existence of this disease can be perfectly ascertained in the living body, can receive no essential benefit from medicine. If inflammation should take place in the progress of this disease, it may be removed or lessened by taking away blood from the arm, or topically; and if at any time violent pain should occur, it may be mitigated by opium and the warm bath. The bowels should be kept rather open; and there will always be some advantage in patients affected with this disease living temperately. Patients may live many years with this complaint; but if it be gradually making progress, even though slowly, it must in almost every instance have ultimately a fatal termination.

'*Of Gallstones.*—The formation of gallstones in the ducts of the liver, or in the gall-bladder, is not a rare disease, and I have known many instances of it. The paroxysms of this complaint are generally attended with exquisite pain; but I have known a few cases where the pain has been moderate. Some cases I have likewise known, where patients have been subject to symptoms of indigestion for many months, without paleness of the stools, yellowness of the skin, or any other symptoms which denote the existence of gallstones; yet this condition of the stomach has ultimately led on to the symptoms of gallstones being formed in the most distinct manner. It is obvious that no solvent can be successfully applied to a gallstone within the living body. While the symptoms of gallstone exist, it must either be in some duct of the liver, or in the cystic duct, or in the *ductus communis choledochus*. But a solvent introduced into the stomach cannot come in contact with a gallstone in any of these situations. As soon as a gallstone drops into the duodenum, where a solvent might reach it, all symptoms belonging to gallstones immediately cease, and for the time the patient becomes quite well. In the treatment of gallstones, therefore, the symptoms can only be

mitigated by medicine. If any inflammatory symptoms have been produced, which is sometimes the case, they can be removed or lessened by general and topical bleeding. The exquisite pain which is commonly felt during a paroxysm of gallstones, can be generally mitigated by large doses of opium, by fomentations, and by the warm bath. Purgative medicines should be given, of sufficient power to counteract the effects of the opium. Mercury appears to me to have no power over a pure case of gallstones, unmixed with any fulness or hardness of the liver; and the Cheltenham or Leamington waters are of much less advantage than in the more ordinary cases, where the functions of the liver are merely deranged. No particular mode of life will protect a patient against the recurrence of gallstones; but there is always some advantage in such persons living temperately, and keeping their bowels free from costiveness.

'Of some Diseases of the Pancreas.—The pancreas is, upon the whole, less liable to disease than any other important gland in the body. I do not recollect that in private practice I have met with one case in which there was satisfactory evidence of the pancreas being diseased; and I have only known of a solitary example of it during the thirteen years in which I was a physician of St. George's Hospital. This case was under the care of another physician,* and the pancreas was not known to be diseased till the patient's body was examined after death. The pain in the epigastric region, sickness, uneasiness or pain in the loins, which belong to inflammation and enlargement of the pancreas, belong also to other diseases, and therefore do not particularly indicate a disease in this important viscus. Were the enlargement so great that it could be ascertained by an attentive examination of the living body, no difficulty would remain in ascertaining the disease. This, however, will very seldom happen; for I have not found a single instance in all the dead bodies which I have examined, of the pancreas being so large that it could have been ascertained by the most careful examination in the living body. If the pancreas were to be much increased in size, and the patient much emaciated, so as to ascertain this disease while the patient was alive, it would probably be in general too late to receive any substantial benefit from medicine.

'Calculi formed in the ducts of the pancreas, constitute a still rarer disease than the inflammation or enlargement of this gland. I have not myself met with any instance of it in the living body, nor do I remember to have heard any physician say that he has seen this disease. While the calculi remain within the ducts of the pancreas, it is evident that no solvent could reach them; and if they should be discharged into the duodenum, there would be a cessation of the disease for a time.

'Of some Diseases of the Spleen.—The spleen is much less subject to inflammation than many other of the abdominal viscera. I do not recollect a strongly marked instance of it in my practice, and I have never met with an abscess in the spleen in all the dead bodies which I have examined. The peritoneum is not

* 'Dr. Heberden, junior.'

uncommonly inflamed in that quarter, and the coat of the spleen is more or less involved in the inflammation. I am not aware that inflammation of the spleen would require a different treatment from that of other viscera.

'I have met with several examples of enlargement of the spleen. The enlargement has been very different in different patients. In some the spleen has not been more than twice its natural size, and in others it has been so large as to occupy nearly all the left side of the abdomen, extending from the diaphragm to the pelvis. When the enlargement is so considerable that the lower end of the spleen can be felt under the margin of the ribs upon the left side, there can be no doubt with respect to the disease. The spleen, when enlarged, is always felt to be harder than in a natural state, but pressure upon it with the hand seldom produces pain. An enlargement of the spleen is sometimes followed by ascites; but there will frequently be no dropsy of the abdomen, even where the spleen has been for a long time much enlarged. Where enlargement of the spleen has been connected with ague, it more frequently subsides than in any other case: where the enlargement has taken place independently of this cause, it hardly ever subsides of itself, or is materially diminished by medicine. According to my experience, mercury, administered both externally and internally, produces very seldom any good effect: I have seen, I think, more advantage from a seton inserted under the skin which covers the spleen. In some cases it has appeared to be diminished in size by this remedy, and to be rendered softer; but I do not recollect a single instance, except after ague, in which it has been reduced to nearly its natural size. Temperate living, abstaining from violent exercise, and keeping the bowels open, must be, to a certain degree, useful in retarding the progress of the disease.

'I have not met with any case of hydatids being formed in the spleen; but such a disease now and then occurs. A patient may live very long with this complaint: but it can receive no cure, nor even amendment, from medicine.

'Of some Affections of the Kidneys. — The kidneys are more liable to disease than most other glands of the body, and are more frequently diseased in men than in women. This may arise from greater intemperance in the former than in the latter sex, and likewise, from the more violent bodily exertions which men are often called upon to make. I have known a few instances in which the two kidneys entirely lost the action of separating urine, and this has been chiefly in persons advanced in life. The patients soon became very comatose, and died in the course of two or three days: no medicine was of the least advantage, and every case, as far I recollect, terminated fatally. There is a great difference, in the hazard of a patient's situation, whether the kidneys separate a little urine or none at all. In the first case they generally recover, and in the second, very rarely. It is curious that life should terminate so soon, when the functions of the kidneys have become totally suspended. A person who receives no nourishment whatever into the stomach, or by any other means, will live much longer.

'*Of Abscesses in the Kidneys.*—When inflammation of the kidney has not been removed by the usual means, an abscess takes place in it. The pus which is formed is sometimes of a common kind, but is often of a strumous nature. It comes away along with the urine, in greater or less quantity; and this circumstance, together with the history of the case, ascertains in the most satisfactory manner, the nature of the disease. The kidney, in such cases, is sometimes nearly of its natural size, but is often much enlarged; and this circumstance can be ascertained by an examination in the living body. Patients will continue to live with this complaint for many months, and even for several years. The formation of matter will sometimes be suspended for several months, and patients will recover, in a considerable degree, their general health. The disease will return either from imprudence in diet or exercise, or without any known cause, and the patient will become as ill as ever. It very rarely happens that a patient permanently recovers from this disease, and I do not at present recollect an instance of it. Medicines, as far as my experience has reached, do not produce any great or permanent good effect. A seton inserted in the loins, or in the flank of that side where the diseased kidney is situated, is sometimes of considerable use. The uva ursi, and the tinctura benzoës composita, have sometimes been serviceable as internal medicines. The same observations may extend to cooling and mucilaginous remedies. Great quiet of body, and uniform temperate living, are useful in mitigating symptoms, and retarding the progress of the disease. A patient labouring under this complaint, should live almost entirely upon vegetable food, and should abstain from wine and other fermented liquors.

'*Of Hydatids in the Kidneys.*—This is a very rare disease, but I have known two or three instances of it. Its existence cannot be ascertained in the living body, unless an hydatid should occasionally be discharged along with the urine through the urethra. A patient may live very long, perhaps a good many years, with this disease; but it cannot receive any advantage from medicine.

'*Of Calculi in the Kidneys.*—One of the most common diseases of the kidneys, is the formation of calculous matter in them. This may either be in the form of sand, producing in the kidneys temporary irritation; or in the form of a calculus, which may either produce temporary irritation, or a permanent and fatal disease. When the calculus is small and of a favourable shape, it may pass by one of the ureters into the bladder, and be altogether discharged from the body by the urethra. When the bulk of the calculus is considerable, and more especially if it be of an arborescent form, it cannot pass into the bladder, but must remain in the kidney, or in the pelvis of the ureter, very near the kidney, producing there more or less irritation, frequently some degree of inflammation, and not unfrequently an abscess. The existence of a calculus in the kidneys may be guessed at with high probability from the symptoms; but it can only be perfectly ascertained when sand or small fragments of calculous matter are occasionally discharged through the urethra. In the treatment of this formidable complaint, symptoms of inflamma-

tion, when present, should always be promptly removed by general and topical bleeding, by cooling and mucilaginous medicines, and by mild purgatives. When the inflammation is removed, the proper medicines should be determined by the nature of the calculus, where this can be ascertained. If the calculus be of the common kind, (consisting chiefly of lithic acid,) magnesia and alkaline medicines should be given, and be continued for a great length of time. If the calculus should consist of the triple phosphate, moderate doses of some of the mineral acids, properly diluted, should be given; and of these, the muriatic acid is perhaps the best. I do not recollect any instance in which patients have, by these medicines, been permanently cured; but I have not unfrequently known the symptoms very much mitigated by them, and even for a time suspended.

'Patients labouring under this complaint should live with great temperance, but should adopt chiefly a light animal diet, because, if acid be formed in the primæ viæ in considerable quantity from vegetable food, the symptoms of the complaint will probably be aggravated.

'*Of Hæmorrhage from the Kidneys.*—I have known a few cases in which blood has been discharged from the kidney, and has passed out of the body along with the urine. In most of these cases the quantity of blood has been large, amounting often to nearly a pint at a time, so that the mixture of urine with the blood hardly appeared to dilute it. The recurrence of the bleeding is commonly very frequent, and the disease will often continue with intermissions for several weeks. The loss of blood must arise from one or more considerable vessels being ruptured, in one or both kidneys; but I believe, that generally, only one kidney is affected. The blood-vessels of the kidney may be so distended with blood, that one or more of them may burst; or the sharp edge of a calculus may cut through one or more of them, and in this way occasion the hæmorrhage. Whether the hæmorrhage has been produced in the one way or the other, can generally be determined by an accurate attention to the history of the case.

'General and topical bleeding, but more especially the latter, are sometimes of great use in mitigating the disease. Cold applications to the loins and belly are also very serviceable. As internal medicines—nitre, the diluted sulphuric acid, and the tincture of muriated iron, have often produced great benefit. The last medicine has, I think, upon the whole, been the most useful.

'The patient should be kept perfectly quiet, the chamber cool, and the diet for a time, should consist entirely of vegetable substances. I do not recollect any instance in which the patient has not recovered from this complaint, when it has not been connected with an abscess, or some other formidable disease of the kidney.

'*Of Diabetes.*—I have in the course of my medical life seen a good many instances of this formidable disease. Of late years a considerable proportion of such cases have got well under my care, or have had the symptoms very much mitigated. The most successful plan of treatment has been, to give considerable doses of opium combined with rhubarb or some other bitter: fifty drops of laudanum, for

instance, may be given three or four times a day, mixed with some infusion of rhubarb, or infusion of calumba. The rhubarb may also be given separately in the form of pills. Under this treatment the disease will often gradually subside, and at length cease altogether. It is, however, very apt to recur, and therefore, this plan of treatment, in more moderate doses, should be continued for some months after the patient is apparently well. Bleeding from the system generally, and topical bleeding from the loins, are often useful; for the blood-vessels of the kidneys in this disease, are generally more or less distended with blood. The diet should be temperate, and should consist chiefly of animal food; and the best kind of drink is, upon the whole, Bristol water.

'*Of a loose Tumour in the Region of the Kidney.*—In four or five instances I have felt a loose tumour in the situation of one of the kidneys, which could be easily moved up and down with a slight pressure from the hand. The tumour is of considerable firmness, and has a good deal the shape and size of the kidney. It is attended with very little uneasiness to the patient, and the general health is very little, if at all, affected by it. When felt in women, it has been mistaken for an enlarged ovarium; but it has neither the shape of an enlarged ovarium, nor is it in the situation in which an enlarged ovarium is commonly found. I have not had an opportunity of examining this disease in the dead body; I am therefore not certain about its nature, but I am rather disposed to think, that it is a kidney more loosely attached than usual to the subjacent and surrounding parts.

'Of some Diseased Affections of the Urinary Bladder. —It is not unusual for the urinary bladder to become for a certain time paralytic, and to lose its power of expelling the urine. This is more apt to occur in young women than in any other persons, and for the following reason. The complaint is generally produced by the calls to evacuate the urine being resisted, so that the muscular coat of the bladder becomes very much stretched in consequence of the accumulation of the urine. By the stretching of the muscular coat, its power of acting as a muscle is for a considerable time lost, and is only gradually recovered. Young women, from being long in a carriage, or long in company, and from their natural modesty, often resist the desire to evacuate the urine for such a length of time, as to induce a paralytic state of the muscular coat of the bladder. Older women manage this function more wisely; and men are not much exposed to the causes which induce them to resist the desire of evacuating the urine. When this disease has taken place, and is not accompanied with any morbid change of structure in the bladder, the bladder gradually recovers its power by the water being regularly drawn off twice or thrice in twenty-four hours, for some weeks. Women may soon be taught to draw off the water themselves, so that they may avoid the very distressing assistance of a surgeon, as well as have an opportunity of relieving themselves whenever there is the least painful distension of the bladder. Internal medicine is of no use in this complaint, but the diet should be temperate, and drink should be taken sparingly.

'The bladder will sometimes have only its sphincter muscle paralytic, while the muscular coat of the bladder shall retain its natural power. This complaint prevents the water from being properly retained; and when there is a certain accumulation of urine in the bladder, it passes off involuntarily. This species of complaint is more common in persons advanced in life than in young persons, and more common in men than in women. The sphincter muscles generally throughout the body become more weak at an advanced period of life; and the bladder of men is more exposed through life to the causes which impair its powers, than that of women. When this disease has taken place, it is seldom entirely cured. It is occasionally benefited by small blisters being applied to the perineum or near the neck of the bladder. Tonic medicines of different kinds, and proper doses of the tinctura lyttæ, are sometimes attended with advantage.

'*Of a Diseased Secretion from the Bladder.*—The inner membrane of the bladder, more especially near its neck, has the power of secreting the mucus, and is always secreting it in a small quantity, in order to protect the internal surface of the bladder against the stimulus of the urine. This secretion is sometimes very much increased in persons at a middle or advanced age, and it is a good deal altered in its properties. Instead of being in a great degree transparent and void of colour, it becomes opaque and yellow, so as very much to resemble pus. It becomes what is now generally called purulent mucus, and will often be nearly equal in quantity to the urine itself. When the urine has been evacuated, and has been allowed to rest in a vessel for a little time, the purulent mucus subsides from the urine, and often adheres with considerable tenacity to the sides of the vessel. This mucus is often formed, without there being any morbid structure in the bladder, or any substance contained in the bladder which produces irritation; but it almost constantly attends more or less the presence of a calculus there.

'When this complaint is independent of calculus, it commonly receives but little benefit from medicine. The balsam of copaiba, the uva ursi, and soda, sometimes appear to be useful, but they very seldom produce any considerable or permanent good. When the existence of a calculus in the bladder is the cause of the disease, the removal of the calculus will effectually cure it.

'Of a Calculus in the Bladder. — When a calculus is in the bladder, the disease can in general be ascertained by an accurate attention to the symptoms; but it can always, or almost always, be ascertained in a satisfactory manner by a sound or catheter being introduced into the bladder by an experienced surgeon. I have known a good many instances in which this disease has been alleviated by medicines, but none in which it has been cured. Mucilaginous substances, fomentations, opiates, magnesia, and alkaline remedies, are sometimes of considerable use in lessening the symptoms. Where the calculus has been ascertained, by portions of it, or by gravel which may have been occasionally discharged with the urine, to consist of the triple phosphate, much advantage has some-

times been derived from taking moderate doses of the muriatic acid properly diluted.

'*Of a Communication by Ulcer between the Bladder and the Rectum.*—I have known two cases of this kind; one of which was in a man, and the other in a woman. They both lived between two and three years, but they died from the consequences of the disease. Both sometimes suffered considerable pain in the very lower part of the abdomen, but they were both often quite free from pain for many hours together. The pulse was sometimes of a natural frequency, and sometimes was accelerated. It hardly ever happened that urine escaped from the bladder into the rectum, but very often air escaped from the rectum through the urethra, and frequently more or less of fæces was discharged by the same channel. Whenever feculent matter was discharged by the urethra, great pain was felt about the neck of the bladder. It is very obvious, that medicine could be of no substantial use in those cases. Opiates, fomentations, and mild purgatives, sometimes produced an alleviation of the symptoms, but the constitution became at length very much exhausted, and the scene was then soon closed.

'Of some Diseased Affections of the Womb.—One of the most common diseases of the womb is prolapsus uteri. It is in very different degrees in different individuals. In some, the womb is only a little lower in its situation than it ought to be, but the mouth of the womb is still considerably within the vagina. In others, the neck of the uterus shall be at the external opening of the vagina; and in a few, a considerable portion of the womb shall be without the body.

'According to my experience, this disease, when in a considerable degree, is often very imperfectly relieved. When the degree of it is slight, and the vagina not very relaxed, the complaint may sometimes be removed by a horizontal posture being continued throughout the greater part of the day for several months, by the judicious use of tonic medicines, and by astringent fluids being injected into the vagina twice a day. In a moderate degree of the prolapsus, pregnancy taking place has often proved the means of curing the disease.

'When the prolapsus is in a great degree, both internal and external remedies have generally been of little use. The inconveniencies, however, of the disease may in a great measure be prevented by a pessary being constantly worn in the vagina. When the pessary is well adapted to the circumstances, it does not produce pain, and in time the patient is hardly sensible of its presence. I need not say that the pessary should be removed for a few minutes every two or three days, in order that it may be cleaned, and not produce irritation.

'*Of Polypus of the Womb.*—This disease, although by no means so common as the former, is not very rare, and I have not unfrequently been consulted about it. If the symptoms be not inquired into with some attention, it may be confounded with the malignant ulcer, or what is usually called cancer of the womb; but a minute inquiry into the symptoms will enable the practitioner in

most instances to distinguish between the two diseases. When an examination has been made *per vaginam*, no doubt can remain; and therefore, before an opinion is decidedly given, an examination should always be made.

'In this disease no permanent advantage is gained by medicine. The strength of the constitution may be a little kept up by tonic and astringent medicines, and the profuse discharges of mucus and blood may be moderated by the application of cold and astringent fluids; but the disease can only be removed by an operation, which consists in tying the neck of the polypus by a ligature. This can be done safely, and with great dexterity, by many practitioners in midwifery. In a few days after the operation, the polypus drops off, and the patient gradually recovers her usual health. In many instances the polypus does not return; but a new polypus is occasionally formed, which in due time may be removed by a similar operation.

'*Of Cancer of the Womb.*—This disease is not uncommon, more especially at the middle and more advanced periods of life, and I have frequently been consulted respecting it. I have never known any medicine produce the least real amendment of the disease. Opium and other sedatives will not unfrequently relieve the greater attacks of pain; and in that way will prevent the constitution from being so soon worn down by the disease. It is to be observed, however, that different women suffer naturally very different degrees of pain in this fatal disease, and that its progress is much more slow in one woman than another. The diet should always be very temperate, consisting chiefly of vegetable substances, and the patient should abstain from wine and other fermented liquors.

'*Of an Enlargement of the Womb.*—This disease is not uncommon, although by no means so frequent as cancer of the womb. It is more apt to occur at or near the middle period of life than at any other, and may be distinguished by a moderate attention to the circumstances of the case. There are considerable mucous discharges by the vagina, as in some other diseases of the womb, and the monthly evacuations are profuse. When the disease has made some progress, a tumour of a pyramidal shape and of considerable hardness may be felt immediately above the pubes. The neck of the uterus is likewise found to be enlarged, by an examination *per vaginam*. These circumstances sufficiently characterise the disease. It generally continues for many years, and the general health is often not much affected by it. In the course of my experience, I have known three cases of this disease cured by medicine. Five or six grains of the pilula hydrargyri were directed to be given every night for many weeks, from half a pint to a pint of decoction of sarsaparilla was ordered to be drank daily, and a large mercurial plaster was applied over the tumour and the whole lower part of the abdomen. The disease in these instances gradually subsided, and at length disappeared altogether. One of these patients, who was about thirty-five years of age, afterwards became pregnant, and bore a very healthy child.

'Of some Diseased Affections of the Ovarium.—The

most common disease of the ovarium is that of its being dropsical. It may take place at almost any period of life. It is not unusual in young women, and often occurs about the middle age. This disease may in general be readily distinguished from ascites by an examination of the swelling, which is almost constantly more or less uneven upon its surface, and often more or less hard in different parts of it. Sometimes, however, in dropsy of the ovarium, when the disease is of considerable standing, the swelling is uniform, and a sense of fluctuation is felt upon striking the tumour with the hand, almost as distinctly as in ascites. Under such circumstances, the two diseases will be distinguished from each other by inquiring accurately into the history of the case.

'I do not recollect any instance in which dropsy of the ovarium has been materially diminished by medicine. I have long, therefore, given up the trial of active remedies in this disease, which I have found to be ineffectual, and sometimes injurious to the constitution. I have contented myself with keeping the bowels regular, and with directing such diuretic medicines as would not impair the general health. I have not found mercury, even when continued for several months together, and having its full influence upon the constitution, produce a cure, or any material change in this disease. The disease will sometimes remain stationary for a good many years, and the general health will be very little impaired by it. In one instance, after it had existed for nearly thirty years, the disease disappeared spontaneously, and the lady, who is still alive, remained afterwards in good health. In three cases where the women were young, and the dropsy confined to one large cyst in the ovarium, I have known them to be effectually relieved by tapping, and the disease not to return for several years. In one of these, the dropsy did not return for ten years. When the patient is young, and dropsy of the ovarium under favourable circumstances, it is always worth while to make a trial of this remedy. When the dropsy of the ovarium is composed of several cysts, the disease may be partially relieved by tapping; but it almost constantly returns, and after a certain time very rapidly, so that there is only a short interval between the operations. Still, however, some relief is afforded by each operation; and patients will be ready to undergo the operation for this relief every two or three months for several years.

'A firm swelling, about the size of the fist or a large orange, is sometimes to be felt in the situation of the ovarium, either upon the right or the left side of the abdomen. It will sometimes remain stationary, will sometimes go on enlarging to a much greater size, and is not, as far as I have seen, suppressed by any remedy. This solid structure of the ovarium is found not uncommonly blended with the dropsical cysts which have been lately mentioned.

'Of my Experience in Fevers.—While I was a physician of St. George's Hospital, which was during a period of thirteen years, I saw a good many cases of typhous fever. There were generally three or four cases of such fevers under my care at a time. Since I have ceased being a physician to that hospital, and more especially

since my patients have been chiefly in the upper ranks of society, I have not seen more than three or four of such fevers in a twelvemonth. With respect to the contagious nature of these fevers, I am convinced that it is in general not considerable. I do not recollect an instance in which a patient in that hospital communicated the infection to a patient lying in the next bed. When patients are crowded together, and the apartments are ill ventilated, I entertain no doubt of this species of fever being capable of being communicated readily from one individual to another.

'These fevers are sometimes without any symptoms which denote a local affection of a vital organ, but very frequently there are symptoms which indicate an inflammatory action of some of the viscera in the chest or belly, or of the brain.

'In these fevers I have met with no remedies which possess any specific powers of cure, or which are capable of shortening in any material degree their duration. Before they are fully formed they are sometimes cut short by an emetic, by active purgatives, by profuse perspiration, or by cold effusion; but when they are quite established, I do not recollect that I have seen any instance in which they have been shortened by these means. The most successful method of treating these fevers, as far as I have seen, is to remove or mitigate the symptoms as they arise. The symptoms denoting an affection of the brain should be relieved as speedily as possible by cupping, leeches, and the application of cold to the head. Cloths dipped in iced water, and kept almost constantly applied to the shaved scalp, have appeared to me more effectual in removing delirium than any other remedy.

'When there is pain in any part of the chest or difficulty of breathing, these symptoms should be relieved as soon as possible by cupping or leeches, or blisters, and by saline medicines.

'If there be any pain in the abdomen, or any symptoms denoting an affection of the liver, the stomach, and the bowels, these are to be relieved by their appropriate remedies.

'If there be too vigorous a circulation over the body, without any apparent local affection, it may be corrected by a very cautious bleeding from the arm, by purging, and by saline medicines. If the actions of the constitution be feeble, they may be strengthened by tonic and stimulating remedies, the best of which I believe to be wine in suitable doses. By this mode of treatment, fevers will often terminate favourably, which otherwise would have been fatal.

'During the greater part of the time in which I have practised medicine, physicians in general, and myself among that number, have, I believe, been too sparing in taking away blood in typhous fever. It was hardly ever directed to be taken away from the arm, and not often locally, except by the application of leeches to the head. Of late years, many physicians have gone into the opposite extreme, and have taken away blood too profusely. In the course of a few years, this remedy, like every other, will find its proper level. During the course of a fever, patients require but little nourishment, and this should in a great measure consist of farinaceous matter. Even when the fever has entirely subsided, animal food should be

taken for some time very cautiously and sparingly. I have known some instances of the most serious relapses of fever from patients having taken animal food too soon and in too large quantity; and I am disposed to think that the greater number of relapses arise from this cause.

'*Of Intermittent Fevers.* — I have always practised in London, and have therefore not had many cases of intermittent fever under my care. While I was a physician of St. George's Hospital, I perhaps saw five or six cases of it in a year; and this chiefly occurred among the poor Irish who lived or lodged in St. Giles's. In some of these cases the origin of the disease could be clearly traced to marshy effluvia; but in others this cause could not be traced, as the patients reported that they had lived in St. Giles's for several years, and had always been employed as labourers in London. They may, however, have been exposed to marshy effluvia in the neighbourhood of London, without knowing or recollecting it.

'I have known a good many cases in which bark alone would not cure an ague. In all of these cases, as far as I now recollect, when a grain of calomel was given every night for eight or ten nights, bark cured the ague in the course of a few days. This practice I learnt from my friend Dr. David Pitcairn. The powder of bark I consider as a more efficious remedy for agues than the extract of bark.

'According to my experience, arsenic cures agues in general sooner than bark, and produces no bad effect if it be given in proper doses, and be not continued too long. When the ague has been stopped for three or four days, the arsenic should be given up, and half a drachm of bark, in powder, should be given three or four times a day, for perhaps a week.

'I have known some cases of ague cured by the powder of calamus aromaticus, and I have understood that it is not an uncommon remedy among the lower orders of the people in Sussex.'

PART II.

ORIGINAL COMMUNICATIONS.

I. *Clinical Report on the Treatment of Scrofulous Diseases, and on the Efficacy of the Mercurial Iodides, and the Hydriodates of Iron and Zinc.* By Robert Venables, M.D., Physician to the Henley Dispensary.

It is not my intention on the present occasion to enter upon the general history of scrofula, but merely to report upon the efficacy of the combinations of mercury and iodine in the treatment of its different forms. Scrofula may be defined to be a state of constitution in which there prevails a deficiency of excitability in the lymphatic

system, generally accompanied with preternatural sensibility of the nervous and vascular systems. Asthenia, or an impaired constitutional vigour, generally, though not universally, characterises the scrofulous habit. The effects of scrofula, however, are seldom manifested throughout the whole system. The morbid manifestations are commonly confined to particular parts and organs; and the glandular structure seems to be more frequently the seat of the disease. There is no part, however, wholly exempt; for the skin, the bones, and even the delicate structure of the eye, are each occasionally invaded in the progress of this most formidable of human maladies.

A disease so formidable in its character, so various in its seat, but, above all, so loathsome in the public estimation, as to influence, and frequently to mar the most important and beneficial pursuits of human life, it may be readily imagined, has been invariably an object of no trifling interest to the physician. Happy, indeed, would it be for mankind, if I could assert that the labour and research bestowed upon its history had been crowned by any thing like an adequate success in the development of its nature, and of a successful mode of treatment. The efficient treatment of scrofula still continues the opprobrium, as well as the desideratum medicorum. Hence it is that every incident — every fact in the therapeia, whether successful or unsuccessful — of the disease, becomes an object of the utmost importance to the physician. If the treatment has proved successful, it forms a guide for our future direction; if unsuccessful, it serves as a beacon to warn us of the danger. But a perfect history of unsuccessful treatment may be productive of still greater advantages. The cause of failure may be developed, and may lead to a more powerful and more effectual adjustment of our means. The history of medicine would furnish abundant examples of the truth of this proposition;—but this is not my present object.

Scrofula having been defined a deficient excitability of the lymphatic system, with preternatural sensibility of the nervous and vascular systems, it follows that the indications of cure are:— 1st, To restore tone and excitability to the lymphatics; 2d, to diminish the preternatural sensibility of the nervous and vascular systems.

Asthenia, or a generally impaired vigour of the constitution, is frequently, though not invariably, an attendant. In our application of the means suited to fulfil the second indication, we must, in a great measure, be guided in their extent and activity by the prevailing diathesis. If the diathesis be well-marked sthenia, antiphlogistic measures, in the most full and perfect acceptation of the word, should be instituted. If asthenia, however, form the character, we must endeavour to restore the vigour of the constitution, by the cautious adoption of invigorating measures. We must, however, be extremely prudent in their selection, and particularly attentive to their effects. In illustration, I need only remark, that the unguarded exhibition of tonics and stimulants is frequently a means of undermining the health and destroying the structure of

vital parts, at the very moment when, from the temporary exhilaration which they induce, the unsuspecting practitioner and unconscious patient vainly imagine that such remedies are doing wonders towards his recovery.

The principles of treatment, however, would scarcely be consistent with the objects of this paper, and would far exceed the limits which I have assigned to it. I shall, therefore, at once proceed to the immediate purpose of this report — the clinical history of several of the modifications of scrofulous disease.

In the following report, I shall observe the order of parts rather than that of their susceptibility. This naturally leads me to the eye,* and the treatment of the scrofulous diseases to which its structure is liable.

Case I.

John Perkins, aged six, a stout lad, florid complexion, scrofulous appearance, family scrofulous, brother affected with white swelling of the knee-joint.

November 21st, 1823. — Applied, with sore eyes, the conjunctiva completely suffused with red vessels, and which traversed different parts of the transparent cornea. The cornea studded in different parts with small ulcers; the eyelids much inflamed, and thickly beset with minute granulations, readily discernible by the aid of the microscope. A considerable discharge of purulent matter, which glued the eyelids together, especially towards morning. Pulse frequent and irritable; tongue white; abdomen hard and tumid; secretions from the bowels unhealthy in appearance; skin harsh, rough, and dry.

℞ Hyd. Protiod. †
Sulph. Ant. præcipit. utriusq. gr. xij.
Gum. Guaiaci in pulv. gr. xxiv.
Confect. Aromatici q. s.
Ut ft. massa in pil. no. xij. dividend; st. j. singulis noctibus.
Admov. hirud. no. iij. sing. temporibus.

The eyelids were also anointed night and morning with the ointment of white precipitate.

28th. — Being extremely poor, the mother was unable to procure the leeches, and, consequently, they were not applied. The appearance of the child, however, is improved; the tumefaction of the bowels diminished, but they are rather confined.

℞ Infusi Sennæ ℥j.
Tart. Pot. ʒj.
Syrupi Rhamni ʒss. M.
Ft. haustus statim sumend. Perstet usu pilularum.

* It is not my intention to touch upon hydrocephalus nor the diseases peculiar to the nervous system.

† For the preparation and chemical history of these combinations, see the Appendix to the Clinical Report on Dropsies.

This plan was pursued till the 3d December, when it was reported that the boy was suffering for the last two or three days from severe cough. He was now much distressed by the cough and dyspnœa; the pulse hard and frequent, with other febrile symptoms. The eye, however, seemed much better. The eyelids were touched with sulphate of copper to destroy the granular elevations on the internal surface, and which seemed to be a constant source of irritation to the eye itself. The mercurial iodide was now suspended.

Admov. hirud. no. vj. sterno.
℞ Sulph. Sodæ ℥ss.
Tart. Emetic. gr. j.
Aquæ font. 0j. M.
St. coch. ij. amp. tertiis horis.

5th. — The leeches bled freely, and the febrile and pectoral symptoms are much relieved. The small ulcers on the cornea were now touched with a fine pencil of lunar caustic; and a solution, in the proportion of six grains to the ounce of distilled water, directed to be dropped into the eye night and morning.

℞ Hyd. Protiod. gr. vj.
Pulv. Ant. gr. xij. M.
Divide in pulv. no. xij. æquales; st. j. bis in die.

The patient persevered steadily in the above plan for three weeks, the exhibition of the mercurial iodide being occasionally suspended, when it seemed to bring on febrile or inflammatory symptoms, and on their subsidence it was again resumed. The granulations on the eyelids were destroyed by the occasional application of sulphate of copper; and the small ulcers on the transparent cornea were gradually healed under the application of the nitrate of silver.

By the 2d of January all appearance of inflammation had subsided; the ulcers of the cornea had healed; and that cloudy or milky appearance which destroys the transparency, and which so frequently attends the scrofulous ophthalmia, had completely vanished. As the health seemed to have been reduced by the means adopted, he was now put upon an invigorating, but not stimulating, tonic plan. The following was the form of medicine used: —

℞ Ext. Gent.
—— Cinchonæ, āā ʒj. M.
Ft. pil. no. xxiv.; st. j. ter in die.
℞ Sulph. Ferri gr. x.
Hydriodat. Potassæ gr. viij.
Aquæ Cinnamomi ℥ij.
—— distillat. ℥vj. M.
St. coch. j. amp. ter in die.

The above mode of treatment was continued for about three

weeks, when, being wholly free from every symptom of disease, he was discharged from medical treatment.

Observations. — It may be readily perceived from the history of this case, that although the remedy was successful in the treatment of the disease for which it was administered — probably by its specific effects in exciting the lymphatic system of the diseased organ — yet, from the general excitement which these remedies frequently occasion, an inflammatory affection of the chest was threatened. Had the exhibition of the remedy been persevered in, or had not sufficient antiphlogistic measures been instituted to counteract the inflammatory tendency, it is highly probable that fatal bronchitis would have been the consequence. But having reduced the inflammatory action of this tissue, by leeches, nauseating doses of an antimonial, but, above all, by suspending the exhibition of the exciting remedy, the incipient action was subdued, and the urgent symptoms soon subsided.

It may, perhaps, be supposed that any other preparation of mercury would have effected as much. I can only reply that this patient had been under the care of different medical gentlemen, who prescribed calomel and other mercurial preparations in alterative doses; notwithstanding which, and other modes of treatment, the disease gained ground, and the structure of the eye was manifestly endangered from the progress of the disease. I am not, however, very sanguine in my expectations that this will prove a permanent cure. Inveterate scrofula prevails in the family — the grandfather has lost an eye from scrofulous inflammation, the brother is afflicted with white swelling, and the mother,* grandmother, and, indeed, the whole family, have the scrofulous diathesis strongly marked in their appearance.

The poverty of the family precludes the possibility of that attention, especially in the prophylactic treatment, which is essential to preservation from relapse, if, indeed, preservation be attainable under such unfavourable circumstances.

Case II.

Jeremiah Beadham, aged thirty-eight, married, weaver, scrofulous appearance; has a family; children scrofulous. Dispensary.

November 26th, 1823. — This man was attacked with severe ophthalmia, the sclerotic being a complete tissue of vessels, and presenting an appearance like flesh. The inflammation had spread to the transparent cornea, which had assumed a cloudy appearance, with one or two small ulcers of its substance. There was a glairy discharge from the eye, with intolerance of light, and an insufferable deep-seated pain in the head. High fever; foul tongue; thirst; pulse 130, full and hard; respiration natural; bowels free.

* With regard to the children, the scrofula seems to be hereditary on the mother's side. Nothing is known about the father. The mother is an unfortunate girl, who had the misfortune to have these two children out of wedlock, by different men.

Mitt. sanguis ad ℥xiv.

℞ Hyd. Period.* gr. xij.
Sulph. Ant. præcipit. gr. xx.
Gum. Guaiac. ʒss.
Confect. Aromat. q. s.

Ut ft. pil. xvj.; st. j. nocte maneque.

℞ Infusi Sennæ ℥viij.
Sulph. Mag. ℥j.
Tinct. Jalap. ʒj. M.

St. coch. ij. amp. 2dis horis ad effect.

28th.—Medicine purged violently; symptoms unabated.

V.S. ad ℥x. Addatur pulv. kino gr. j. sing. pilulis.

℞ Sulph. Sodæ ℥j.
Tart. Emetic. gr. j.
Aquæ Oct. M.

St. cyath. j. 2dis horis. Lotio refrigerans oculo.

December 1st. — Symptoms but little, if at all, relieved: the other eye has now become inflamed, and is as much affected as the first.

V.S. ad ℥xvj. Admov. hirud. no. vj. sing. temporibus. Perstet usu medicamentorum.

5th. — The red appearance of the eyes has at length abated, and the febrile symptoms have been reduced. The lucid cornea, however, still cloudy, and beset with small ulcers.

Cont. med.; admov. emplast. vesicantia ponè aures.

A solution of six or eight grains of the nitrate of silver to the ounce of distilled water was dropped, by means of a pen, night and morning, into the eye, and allowed to expand over the cornea, after which the eye was bathed in warm water.

8th. — The symptoms very much relieved. The cloudy appearance of the cornea gradually subsiding, and the ulcers healing. — Perstet.

17th. — All appearance of inflammation in the eye has vanished; but he seems much reduced and weakened by the activity of the means instituted for his relief. The following medicine was now prescribed: —

℞ Sulph. Zinci ℈j.
Hydriodat. Potassæ gr. xvj.
Ext. Cinchon. ʒj.
—— Gent. ʒss. M.

Ft. pil. xxiv.; st. j. ter in die superbibendo cyatho misturæ insequentis.

℞ Infusi Cascarillæ ℥viij.
—— Sennæ ℥jss.
Tinct. Card. comp. ℥ss. M.

* I now seldom resort to this combination; it is highly acrid and corrosive; and I am not satisfied that it is locally innocent. Smearing the skin with a dilute ointment of this preparation produces a diffuse efflorescence, extremely painful, and in many cases followed by painful desquamation. The protiodide is therefore more suited to internal use.

This plan was persevered in for about three weeks; when, feeling tolerably well, and all appearance of disease having subsided, he was supplied with a few aperient pills to regulate the bowels, and discharged the institution.*

Observations. — This I consider a case of ophthalmitis supervening to ophthalmia membranarum in a scrofulous habit. He had been always subject to weak eyes, but which weakness was a scrofulous or languid inflammation of the membranes of the eye. His appearance, as well as that of his children, is decidedly scrofulous. One of the children is affected with a scrofulous enlargement of the glands of the neck. The subacute degree of inflammation under which this patient habitually laboured was, by some sudden exposure to cold, converted into the acute form, which, from the constitutional diathesis and local tendencies, was disposed to terminate very speedily in structural derangement of the organ. It was to correct this local state that I resolved to persevere in the exhibition of the mercurial iodide, to secure its uninterrupted effects upon the diseased part, though at the expense of the general health. If I had discontinued the use of the mercurial iodide, I think it highly probable that the constitutional symptoms would not have risen to such a height; but it is, at the same time, probable, that the structure of the eye would have been much injured, and possibly the destruction of the organ might have ensued.

The supervention of acute inflammation in the other eye during active antiphlogistic treatment, is rather a singular circumstance. It arose most likely from the increase of the febrile excitement, the structure of the eye being naturally weak, was unable to partake of the constitutional activity in a sufficient degree to preserve its healthy state. However, it is rather curious that the habitual inflammation of the eye, to which he was so frequently subject, has been entirely subdued. For a considerable time after his discharge, I had frequent opportunities of seeing him, and witnessing his perfect convalescence. He himself told me that he had never before enjoyed such perfect health, as previously his health had been very indifferent, being constantly subject to febrile attacks, with ophthalmic inflammation, upon the slightest exposure to cold; but now he feels so strong that he thinks nothing could hurt him.

Case III.—William Compton, aged forty-five, chairmaker; strumous habit. Dispensary.

December 22d, 1823.—Fever, with a high degree of excitement; thirst; pain in the head; hot dry skin; foul tongue, covered with a yellowish crust; pulse hard, full, and frequent, 89—94; bowels confined; respiration natural; urine plentiful, but high-coloured: eyes much inflamed and prominent, a yellowish thick discharge agglutinating the eyelids; the cornea lucida traversed by red vessels; transparency becoming affected; with incipient ulceration. Blood was drawn to the extent of 24 oz.; and some aperient pills,

* The blood did not buff in any instance.

consisting of ext. of colocynth and soap, were directed every four hours, to open the bowels. Tartar emetic and sulphate of soda were also given every two hours, so as to keep up a nauseating effect.

On the 24th, he was bled again from both arms, and fainted during the operation; but not before a sufficient quantity of blood—upwards of twenty ounces—had been obtained. By these measures the febrile symptoms were much abated, and the vascularity of the globe of the eye much reduced. The iodide of mercury was now administered under the following formula: —

℞ Protiod. Hydrarg.
Sulph. Ant. præcip. āā gr. xx.
Guaiaci in pulv. ʒss.
Syrupi simp. q. s.
Ut ft. pil. xx.; sumat ij. sing. noctibus.

26th. — The vascularity of the eye had almost completely subsided, but the ulcers of the cornea remained unaffected. The solution of nitrate of silver was therefore used night and morning.

On the 29th, it was observed that the ulcers were contracting in size and were healing.

On the 5th January, most of the urgent symptoms were completely relieved.

9th. — A febrile accession occurred; the pills were therefore omitted, and the nauseating mixture continued.

12th. — The febrile attack had subsided, and the pills were resumed.

On the 14th, the ulcers appearing nearly stationary for the last three or four days, the strength of the solution was increased six grains.

21st.—The ulcers were evidently healing; but in consequence of the diseased appearance of the eyelids, especially at the roots of the hairs, they were anointed with the diluted citrine ointment night and morning.

February 11th. — All appearance of ulceration had left the cornea, and the globe had assumed its natural appearance. The eye, however, continued extremely irritable, tears flowing upon exposure to the light. A feverish heat of skin, which felt dry and harsh to the touch, was now present, and frequently set in without any obvious cause. In consequence of the febrile diathesis, I directed him Dover's with antimonial powders.

The constitutional strength having seemingly suffered much from the severe discipline to which he had been subjected, cinchona, with carbonate of soda, was prescribed on the 16th.

20th. — The ophthalmia returning, with severe cephalea, the bark was therefore suspended, the cupping glasses applied, and about ten ounces of blood drawn off, and the hydriodate of potass dissolved in mint water directed.

25th. — He stated that he felt much better from the loss of blood by cupping. The hydriodate of potass continued.

March 1st.—He complained that the solution disagreed with

him, and made him extremely irritable. Six grains of the hydriodate were combined with a scruple of ext. of hyoscyamus, and divided into six pills, of which he took one twice a-day. In this form the medicine agreed with him much better, but he did not derive a great deal of benefit from its use. On the 8th, the dose was doubled.

17th. — He complained of torpor of the bowels; in other respects he was nearly as before. A mass of colocynth, camboge, and soap, were formed into moderate-sized pills, which he was directed to take according to circumstances.

April 2d. — He discontinued the pills of hydriodate of potass; but the eyes still continue tender and weak, and on the slightest exposure to cold, or on becoming feverish, they inflame. I now directed him infusion of bark with muriatic acid.

14th. — He reported that the acidulated infusion of bark last prescribed agreed with him better than any thing he had previously taken.

May 7th. — The eyes weak and extremely irritable, readily inflaming. He used the vinous tincture of opium, and many other anti-inflammatory drops, but gave a decided preference to the solution of lunar caustic.

℞ Ferri Sulph.
Hydroid. Potassæ, āā gr. xij.
Ext. Cinchonæ,
—— Gent. āā ℈ij.
Ft. pil. xxiv.; st. j. ter quaterve in die.

17th. — He states that the pills prescribed at last report he found remarkably serviceable. The eyes look clear and healthy, and there is a manifest improvement. The pills were repeated.

June 4th. — The eyes again seemed unhealthy, owing to exposure to cold. He was desired to continue, but to be more attentive, and not expose himself.

This man continued under my care for a considerable period, but no treatment seemed capable of wholly subduing the strumous tendencies; and, consequently, he frequently experienced relapses, particularly upon exposures to cold, or upon any indulgence. Sulphate of quina, sarsaparilla, narcotics, as opium, belladonna, lactucarium, hyoscyamus, &c. were all freely tried; but notwithstanding there was an evident amendment, he could not by any means be considered as restored to health and vigour. He even now occasionally suffers from ophthalmic inflammation.

Could this man have gone to the sea-coast, and perhaps to a warmer climate, I am strongly inclined to think that the medicines might have ultimately effected a perfect cure, if aided by temperance and a proper regimen. These were auxiliaries, which, however necessary, his means could not command.

Case IV.—Edward Gibbs, aged six years, orphan; sanguineous temperament; strumous appearance. Dispensary.

January 16th, 1824. — Eyes very weak and irritable, becoming suffused with red vessels, and an abundant flow of tears succeeding

the mere exposure to light necessary for examining them. The lining membranes of the eyelids turgid with blood. Small ulcers on the cornea lucida. General health out of order; abdomen tumid; bowels irregular; alvine evacuations unnatural in appearance; glandular swellings of the neck. Slight febrile accessions at night; respiration natural; pulse frequent and irritable; acid eructations, and sour odour of the breath, as well as of the intestinal evacuations.

℞ Protiod. Hyd. gr. iv.
Cretæ præp. gr. viij.
Pulv. Rhei ℈j. M.
Ft. pulv. sex; st. j. bis in die.

19th. — Symptoms nearly as at last: acidity of stomach somewhat relieved.—Perstet.

26th.—General health much improved; abdominal intumescence diminished; digestion more healthy, and the bowels more regular in their action; tenderness and irritability of the eyes very much reduced. Medicine acts gently on the bowels, but without any violent or unpleasant effect. The ulcers of the cornea diminish. They were touched this day with a finely pointed pencil of lunar caustic.—Perstet usu pulverum.

February 9th. — One ulcer has entirely healed; the other doing well. Small granulations were this day perceived by the aid of the microscope upon the internal surface of the eyelids. These were rubbed over with sulphate of copper. The application of the nitrate of silver continued. The powders as before.

18th. — There was little or no appearance of disease in the eye. The bowels constipated.

℞ Pulv. Jalap. comp. ℈j.
Ft. pulv. no. iv.; st. j. singulis bihoriis ad affect.
Omitt. pulv. hyd. protiod.

March 3d. — Ulcers all healed; no cicatrices nor any interruption of vision. General health much improved; abdomen natural. The hydriodate of iron in half-grain doses was now given twice a day; and on the 5th April he was discharged perfectly cured, and has remained well ever since.

Observations. — This was rather a tractable case; although the boy had been under medical treatment, and benefited upon these occasions, the cure was not permanent. Application was luckily made before those serious changes in the health, and in the organisation of the diseased parts, which characterise the inveterate forms of scrofula, and but too frequently baffle the best conceived and most judiciously directed principles of practice, had supervened. This boy's appearance when he first applied strongly indicated the strumous habit; and many members of his family are afflicted with scrofulous affections; but his appearance now is perfectly healthy.

Case V.—James Stanbrook, aged seven years; strumous appearance. Dispensary.

January 20th, 1824. — Eyes extremely tender and irritable; conjunctiva suffused with red vessels, so as to resemble a piece of raw beef; several ulcers on the cornea lucida, which is traversed by red vessels shooting in from the cornea opaca. The lucid cornea cloudy or milky in its appearance; vision indistinct. Frequent febrile accessions, with hot and dry skin; pulse frequent, 98—104; respiration natural; thirst; foul tongue; abdomen remarkably tumid; bowels irregular; urine free, and healthy.

Admov. hirud. no. iv. sing. temporibus.
℞ Calomel. gr. vj.
Pulv. Ant. gr. xij.
Ext. Hyoscyami gr. vj. M.
Ft. pil. no. viij.; st. j. bis in die.

He was also directed a solution of sulphate of soda and tartar emetic, to be taken in small doses, and repeated at short intervals; and the solution of nitrate of silver, in the proportion of six grains to the ounce, was dropped from a pen into the eye night and morning.

26th. — The redness of the eyes was somewhat diminished, the bowels more healthy, and a more healthy appearance of the evacuations. The fever was in some degree abated; but there was a purulent discharge from the eyes, gluing the eyelids together in the morning. The medicine was continued, and the diluted citrine ointment directed to be smeared on the eyelids.

30th. — The febrile symptoms much abated; pulse moderate; bowels regular, but occasionally inclined to be costive — arising probably from irregularities in diet; tumefaction of the abdomen very much reduced; tongue cleaner; and a very manifest improvement in the general health. The ophthalmic symptoms, however, with the exception of a slight reduction in the vascularity, have undergone but little change. The ulcerations of the cornea render vision still indistinct; and the milky opacity of the cornea almost completely interrupts the passage of the rays of light. He now began with the mercurial iodide.

℞ Hyd. Protiod.
Sulph. Ant. præcipit. āā gr. xij.
Gum. Guaiaci pulv. gr. xx.
Confect. Aromatic. q. s.
Ut ft. pil. no. viij.; st. j. sing. noctibus.

℞ Infusi Sennæ ℥viij.
Sulph. Magnesiæ ʒvj.
Tinct. Card. comp. ʒj. M.
St. coch. ij. ampla quotidie mane.

The use of the nitrate of silver in solution continued: leeches were also directed to be applied every other night.

February 6th. — Disease yielding; ulcers healing; globe of the eye nearly free from red vessels; milky opacity of the cornea very much diminished. The ulcers were touched with a pencil of lunar caustic, and the palpebræ were touched with the sulphate of copper. The mixture and pills continued.

13th. — Improving. Medicine repeated.

25th. — Transparency of cornea perfectly restored, and every vestige of morbid vascularity has disappeared. There is, however, a very small speck on each cornea. The pills and mixture, which have been discontinued for some days, repeated, and the solution of nitrate of silver continued.

On the 12th of April, the health had very much improved, and the specks had nearly disappeared from each cornea. The hydriodate of zinc, as a discutient tonic — if I may venture to use such an expression—was now directed in a mixture in the proportion of half a grain, gradually increased to a grain, three times a day. This plan of treatment, with occasional interruptions, rendered necessary by the state of the bowels, or some slight febrile accession, was pursued till the 31st May, when all the symptoms having disappeared, for a considerable time, he ceased attending the Dispensary, although the small specks, however very much diminished in size, still remained on the cornea just below the edge of the iris, even when the pupil was most dilated; consequently they offered no obstruction to the passage of the rays of light. I have not heard of him lately.

Observations.—This patient I had seen two or three months previous to the date of the foregoing report, and had put him upon an alterative mercurial and tonic plan, but from which he derived very little benefit. The bowels and general health improved; but that was all. The parents being in narrow circumstances, they were unable to continue purchasing medicines, and therefore applied for admission to the Dispensary. Here, again, I tried the alterative plan, but without much success. That attending the other mode pursued, is already before the reader.

Case VI.—Eliza Bishop, aged nine months; strumous appearance; glandular enlargements of the neck; mother, scrofulous habit. Dispensary.

February 11th, 1824.—Left eye very much swelled and protruded; globe covered entirely with red vessels, some of which traverse the lucid cornea. The cornea dull and clouded with several ulcers. Purulent discharge agglutinating the eyelids. Fever, thirst, with constant seeking for the breast; abdomen hard, tense, and tumefied; bowels irregular; evacuations discoloured and unhealthy.

Admov. Hirud. no. iij.; temp. sinistro.
℞ Hyd. Protiod. gr. vj.
Cretæ præp. gr. xiv.
Rhei ʒss. M. ft. pulv. no. xij. æquales; st. j. ter in die.

A febrifuge mixture, consisting of liq. ammon. acet. ℥j.; vin. ant. ʒj. aquæ font. ℥iv. was likewise directed, and a dessert-spoonful given every two hours. On the 16th, the vascularity of the eye was somewhat reduced, and it was reported that the medicine made the child sick. The purulent discharge, however, continued, producing a great deal of inconvenience.

℞ Argent. nitrat. gr. iij.
Aquæ distill. ʒvj. M.

A drop of this solution from a pen was allowed to fall into the eye night and morning. The powders continued.

On the 20th, the appearance of the eye was much improved. The swelling of the eye itself, and the tumefaction of the palpebræ, were much diminished. The bowels rather confined.

℞ Sulph. Potassæ ʒj.
Ipecacuanhæ gr. vj.
Rhei gr. xij. M.; st. j. ter in die.
Cont. Pulv. Hyd. Protiod.

March 1st.—No fever; eye much more natural in appearance; swelling perfectly reduced. Small ulcer on the cornea. Bowels costive; stools deficient in bile.

℞ Jalap ʒss.
Calomel gr. viij.
Ipecacuanhæ gr. iv. M. et divide in pulv. no. x. æquales; st. pro ut necesse sit.
Omitt. Hyd. Protiod.

March 3d.—I was absent from the Dispensary when this woman attended; but it was reported to me that the child was better. The mother herself now became a patient.

27th.—She attended for medicines for herself, and reported that the child was doing well, but very susceptible of the effects of cold, and therefore she did not bring it. The glandular enlargements of the neck have entirely subsided. She attended again on the 5th, 19th, and 28th April, but did not bring the child, stating that it was so well she did not think it necessary to bring it.

May 5th.—She again attended, and reported that during the interval the child had been attacked severely with measles. The ophthalmic symptoms returned on the appearance of the exanthematous fever, with all their former severity. The glands of the neck have also again become enlarged. She did not bring the child, as it was visited by the parish apothecary. On the 21st May, however, the child was brought to the Dispensary. There was a considerable tumefaction of the eyelids, the conjunctiva, however, was tolerably free from morbid vascularity. There was a slight speck upon the cornea, but this was of very small extent. The mother states that, since the measles, the eye inflames, becoming red, swelled, and painful, with intolerance of light upon exposure to cold. The glandular swellings in the neck are red and tender; and when fever prevails, there is considerable throbbing. The bowels constipated. Leeches were directed to be applied to the neck, and the bowels to be emptied by the compound powder of jalap, followed by enemas.

31st.—Child so ill it could not be brought to the Dispensary; the colour of the alvine evacuations dark green. She was directed to persevere in the plan stated above.

June 9th.—Eye looks tolerably well; there is, however, con-

siderable fever, with foul tongue, thirst, hot dry skin, pulse wiry, small, and frequent, respiration hurried, bowels constipated, stools yellow, and ejected with considerable force; coma.

℞ Calomel gr. ij.
Sacchari gr. iij.
Pulv. Cretæ cum Opio gr. iv. M.
Ft. pulvis, tertiis noctibus sumendus. Sumat. pulv. jalap comp. gr. viij. quotidie mane.

Leeches to the temple, and a small blister to the pit of the stomach.*

11th. — Symptoms very much improved. Perstet.

16th. — A feverish attack, with irregular, greenish motions; eyes well, but the enlargement of the cervical glands quite indolent and stationary. The protiodide of mercury in combination with prepared chalk was now directed. A saline febrifuge mixture was also prescribed, and the bowels directed to be kept soluble by laxative enemas.

25th. — All the symptoms relieved; the tumefaction and hardness had left the glands of the neck, and the eye has become perfectly clear and healthy-looking, with the exception of a very minute speck upon the transparent cornea. A papular eruption also broke out upon the ears. The medicine was continued, and the diluted ointment of white precipitate rubbed on the parts affected with the eruption.

July 14th. — Every trace of the disease had disappeared, with the exception of the slight speck on the cornea. This, however, seemed to be diminishing. The papular eruption now appeared on the chin, and was treated with the ointment of white precipitate, under the use of which it gradually disappeared.

The health and strength was ultimately and permanently restored by the hydriodate of iron and sarsaparilla.

Observations.—This case I think interesting, more as shewing the pernicious influence of the exanthemata in cachectic habits. These diseases are fully adequate to vitiate the constitution, even when previously the patient was perfectly healthy. I have seen numerous examples of this fact, and have adduced some illustrations in the *Treatise on Diabetes and Tabes Diuretica.*† The constitutional disease certainly became more intractable after the appearance of the measles. However, the constitution not being too far vitiated, the consecutive diseases were ultimately, and I have every reason to presume, effectually and permanently subdued.

The power which the mercurial iodide seemed to exert, in exciting the action of the torpid absorbents of the cervical glands, is a matter of some interest in the history of this case. Perhaps the abstract

* Leeches to the temple and a blister to the stomach is often useful in the comatose affections of children. In obstinate cases, attended with vomiting, reversing and alternating these applications prove effectual when every other means have failed.

† See Appendix of Cases, &c.

nature or the essence of scrofula is a deficient action of the absorbents. All the phenomena seem to confirm this opinion, and it was this view which first induced me to try the mercurial iodides in the treatment of scrofulous diseases.

Such is a faithful history of the strumous ophthalmia, and of the treatment by the metallic combinations of iodine. I must confess that I think these combinations seem to me to exert greater influence over scrofulous diseases than any other remedies with which I am acquainted. That any remedy should prove, unassisted, adequate to the cure of disease, or that its exhibition can always be admissible, and suited to the circumstances of the case, no one acquainted with pathology or therapeutics can venture to assert. Remedies must be suited to the circumstances of the case, and the influence of medicinal agents seems to be confined to immediate exigencies rather than to ultimate objects. When the severity of disease has abated, when the urgent symptoms have been subdued, then the cure is to be perfected, and vigour restored to the system, by regimen, in the most comprehensive meaning of the term.

II. *Remarks on the Pulp of Adansonia Digitata, by* JOHN FROST, F.L.S., Member of the Royal Institution, and Director of the Medico-Botanical Society of London, &c.

THE object of the present communication is to inform the profession of a new medicine, which I have just received from a gentleman, who states, that he has found it prove useful in that troublesome cough which prevails in phthisis. We ought not to extol or discard any medicine on the mere ground of its novelty. Probably a short account of the Adansonia* digitata, or sour gourd tree, may not be uninteresting. The fruit is a large woody capsule, containing a great many seeds, which are enveloped in a friable pulp, which has a pleasant subacid mucilaginous taste, with a degree of sweetness. The powdered pulp formed into a linctus, by means of distilled water, will, I have no doubt, be found very useful in allaying tickling coughs, hoarseness, &c.

The fruit can be obtained at a very low price, and in great abundance, as the tree grows plentifully throughout the coast of Africa. The facility with which it can be procured, and the elegant and pleasant linctus which it forms, have induced me to submit it to the consideration of the readers of the REPOSITORY. The tree is well known, and much celebrated on account of the very great age which it attains—indeed, it is said, to outlive the cedar of Lebanon. It is remarkable also for the thickness of its trunk near the root, which will appear by the following quotation from Miller's *Gardener's Dictionary*, edited by the late Professor Martyn, who, under the name Adansonia, observes, that ' the account

* Named Adansonia, in honour of M. Adanson, a French surgeon, who resided for many years at Senegal.

which Monsieur Adanson gives of the trees which he saw at Senegal and other parts of Africa, in regard to the size of them, is amazing; he measured several from 65 to 78 feet in circumference, but their height was not extraordinary. The trunks were from 12 to 15 feet high, before they divided into many horizontal branches, which touched the ground at their extremities: these were from 45 to 50 feet long, and were so large that each branch was equal to a monstrous tree; and where the water of a neighbouring river had washed away the earth, so as to leave the roots of one of these trees bare and open to sight, they measured 110 feet long, without including those parts of the roots which remained covered.'

It may be remarked, that the fruit should not be gathered till ripe, and then kept in a dry place, otherwise the pulp will be liable to spoil.

Of the genus Adansonia, there is only one species, which is the one in question, which is named 'digitata,' from the shape of its leaves. It belongs to the 16th class Monadelphia, and order 5 Polyandria of Linnæus, and to the natural order Malvaceæ of Jussieu.

Generic Character, from Linn. Gen. Plant.

1126. Andansonia.

Calyx.—Perianthium monophyllum semiquinquifididum, cyathiforme, laciniis revolutis; deciduum.

Corolla.—Petala quinque, subrotunda, nervosa, revoluta, unguibus tubo staminum innata.

Stamina.—Filamenta numerosa, infernè in tubo coalita, ipsumque coronantia horozontaliter patentia: Antheræ reniformes incumbentes.

Pistillum.—Germen ovatum, stylus longissimus tubulosus, variè intortus, stigmata plura (10) prismatica, villosa radiato-patentia.

Pericarpium.—Capsula ovalis, lignosa, non dehiscens, decemlocularis, pulpa farinacea, dessepimentis membranaceis.

Semina.—Numerosa, reniformia, subossea, pulpâ friabili involuta.

There are plants of Adansonia digitata in several of the stoves of the nurserymen round the metropolis, but they seldom attain a greater altitude than 3 or 4 feet, and therefore they do not flower.

A figure of the fruit will be found in Gartner's work, *De Semenibus*, vol. ii. Tab. 135.

I have made some experiments on the infusion of the pulp, which appears to consist of gum, sugar, fæcula, and an acid, probably malic and tartaric combined, which is in less abundance than in tamarinds. The pulp not only forms an agreeable electuary, but by gradually adding a sufficient quantity of distilled water, a very pleasant draught or mixture may be formed. It may be here proper to notice, that tartar emetic is incompatible with any of the above.

London, Nov. 12th, 1825.

PART III.

COLLECTION OF MEDICAL FACTS AND OBSERVATIONS.

SECTION I. — BRITISH.

I. CALOMEL—*Of the Influence of, on the Secretions of the Intestinal Canal, and those of the Liver and Pancreas.*

MR. ANNESLEY, in his interesting work on the Diseases of India,* gives us the following remarks on the operation of calomel on the intestinal secretions, as deduced from his experiments and observations:—

'The immediate influence of calomel upon the secretions lining the mucous surface of the intestinal canal, seems to be peculiar, and of a nature which deserves more attention than has been directed to it. It appears to me that this preparation produces a chemical action on these secretions, and that, in consequence of this action, their mechanical properties and appearances become greatly altered. I have often tried its effects upon the dead subject, and have always observed that the tenacious secretion which is frequently found covering the mucous coat, is completely changed by the admixture of a small quantity of calomel with it, *in situ*: this secretion assumes a dark grey colour, becomes more fluid, much less tenacious, and is easily detached from the mucous surface. It is singular, that the colour of the mucous secretion is nearly that produced by a combination of calomel and ammonia. It seems to me probable, that this secretion occasions a partial decomposition of the calomel, and that a portion of the mercury is left in a state of a dark grey oxide, and imparts its colour to the secretion with which it is mixed.

'The dark grey appearance communicated by the calomel to the secretion covering the mucous coat of the intestines, is only remarked when there is no admixture of the biliary secretions; and it is remarkable, that this appearance is precisely the same with that which the alvine dejections assume immediately after the administration of a full dose of calomel, in the acute diseases of India, and before the biliary secretions appear in the stools; thus shewing the effect of the calomel upon the mucous secretions, in conjunction

* Sketches of the most prevalent Diseases of India: comprising, a Treatise on the Epidemic Cholera of the East; Statistical and Topographical Reports of the Diseases in the different Divisions of the Army under the Madras Presidency; embracing also, the Annual Rate of Mortality, and Practical Observations on the Effects of Calomel on the Alimentary Canal, and on the Diseases most prevalent in India. By JAMES ANNESLEY, Esq., lately in charge of the General Hospital, Madras, and Garrison Surgeon of Fort St. George. London, 1825.

with its purgative operation, before it has succeeded in procuring the flow of bile either from the gall-bladder, or immediately from the liver itself.

'If, then, it thus separates the tenacious matter covering the mucous coat of the intestines, may not its operation upon this secretion in the duodenum be the means of removing such obstruction from the common duct, as the presence of this secretion may be considered as occasioning; and thus it may effect a discharge of bile into the intestine, which was only prevented by the mechanical obstruction placed in the way? In this case, the dose of calomel may be considered as acting chemically upon the mucous secretion, and mechanically as respects the duct. But this is only one mode of operation, as respects the biliary secretions, which we may reasonably bestow upon this remedy. Having shewn that the first operation of calomel is upon the mucous secretions of the intestines; that it attenuates, changes, and detaches them from the surfaces to which they adhere, it seems not unreasonable to infer, that these surfaces are thus left more exposed to the influence of such other doses as may be subsequently administered, particularly when the secretions, which have been acted upon by the previous dose, have been more completely carried off by a cathartic draught, by which the first dose of calomel ought to be followed. These effects having been produced, the influence of the subsequent doses will be more immediately exerted upon the mucous surfaces of the canal, and this influence more readily propagated along the ducts, to the gall-bladder, and to the liver itself; and hence, according to the state of the duodenum, and of the biliary apparatus at the period of employing the remedy, will its effects upon the biliary secretions be more or less immediate. The same explanation will hold equally with respect to the pancreatic secretions, and will satisfactorily account for the immediate and overpowering flow of bile which often follows a single dose of the medicine, as well as for the frequent exhibition of the remedy before the desired effects are produced by it. * * *

'Distension of the gall-bladder, from the accumulation of bile, is a frequent occurrence, but it is more often met with as a result merely of inactivity of the organ, and want of tone and energy of the duodenum and neighbouring viscera, of viscidity of the bile itself, or of the tenacity of the mucous secretion occluding the opening of the common duct, and intercepting the action of the calomel upon its mouth, than obstruction of a more permanent nature.

'When a loaded state of the gall-bladder is inferred from the presence of weight and oppression at the epigastrium, with a sense of coldness at the stomach, and various dyspeptic symptoms, then the purgative operation of calomel will succeed in procuring the discharge of the bile, unless there be a total obliteration of the canal through which it has to pass; and this and other purgatives ought to be employed until dark or dark green motions are procured—a colour which indicates that the flow of bile has taken place; as shewn by several trials I have made of the appearance which the

matters contained in the intestines of recently dead subjects assume, when the tenacious mucous secretion of the intestines, and a small quantity of calomel are mixed up with them, *in situ*, and the bile lodged in the gall-bladder is poured upon the whole. In the first instance, as already pointed out, the admixture of calomel with this tenacious mucous secretion, and the feculent matter, produces a dark grey and pultaceous compound, similar to the first dejections proceeding from the exhibition of calomel, before the flow of bile has taken place; in the second instance, a dark green and more fluid compound is formed, similar to the character of the motions when the biliary evacuation is occasioned by the use of this remedy.

'When, therefore, we perceive a change from black grey—the colour which calomel alone gives the mucous secretion—to dark green taking place, we may rest satisfied that the ducts are being emulged, and that the calomel and cystic bile are acting conjointly upon the bowels. The propriety of continuing this remedy till healthy action be produced, will appear evident from this.

'I consider the viscid secretion, already described as covering the mucous surface of the digestive canal, to be morbidly increased during many acute derangements, and particularly during those prevalent in India; and I believe, that in some of them it is not only thrown out from the mucous coat in increased quantity, but also in a deranged or altered condition from that which characterises it in health. When this is more particularly the case, the intestines, viewed externally, upon dissection of fatal cases of disease, seem thickened in their coats, and they communicate a pultaceous and doughy sensation to the touch. In some cases, this is even evident during the life of the patient, upon a careful examination of the denuded abdomen. Upon laying open the intestines, the quantity of this tenacious secretion seems often surprisingly great, and it is chiefly observed in those wherein active purgation had been neglected during the treatment. It is upon this morbid and accumulated secretion, that the action of calomel is particularly manifested. This medicine prepares it to be acted upon by other purgatives, renders it more fluid, and less adherent to the contiguous surface; and thus leaves the mucous surface in a cleaner and more suitable condition for the influence of whatever remedies may be subsequently administered, and the functions of exhalation, secretion, absorption, &c. unobstructed by the thick coating which lined the surface in which these functions take place.

'The experiments shew, that, in addition to these effects upon the mucous and other secretions, the full doses of calomel tend to render the mucous surface of the stomach less vascular, whilst it seems to excite the arterial capillaries in the mucous coats of the colon. These effects should be kept in recollection, and should have an important influence in regulating the indications, with which calomel ought to be prescribed, with the pathological condition existing at the time of prescribing it. These experiments, it is hoped, may serve to explain several phenomena hitherto imperfectly understood, and may, it is hoped, lead to further research.'

II. *On the* CROTON TIGLIUM.—*New Preparation of this Drug proposed.*

IT is now some years since the *expressed oil* of the *croton tiglium* was re-introduced into Europe as a purgative medicine; since which time its effects have undergone considerable investigation, both in this country and elsewhere, the general result of which has been so satisfactory, as to obtain for it a place in the last edition of the London Pharmacopœia.

The article commonly in sale, however, under the name of *croton-oil* is a highly drastic purgative, and withal, so hot and pungent on being swallowed, as often to produce great pain and irritation in the fauces, and sometimes even nausea and vomiting. These unpleasant effects, however, there is reason to believe, arise in a great measure, if not entirely, from the improper mode of preparing the oil; which has hitherto been obtained by subjecting the *entire seeds* to pressure, instead of the *medulla* simply: for *Mr. Pope* states* he had ascertained by numerous experiments, that the husk or shell of the seed, and more especially the epidermis or coat immediately enveloping the kernel, contain the acrid and irritating property above alluded to;† while from the *medulla* alone of the seed, a perfectly safe and efficacious purgative oil may be obtained.

It further appears from these experiments, that the common croton-oil gives out all its purgative virtues to *alcohol;* which at the same time exerts scarcely any action upon the part in which the acrid properties reside.‡ An alcoholic solution of this article therefore, as long since proposed by Dr. Nimmo, ‖ will furnish us at once with a safe, active, and convenient purgative.

It will, however, be better for many reasons to adopt, as Mr. Pope has proposed, an alcoholic tincture of the seeds themselves; for the preparation of which therefore we subjoin the following *formula,* which comes recommended to us by the authority of the same gentleman.

Take of, The Seeds of the Croton Tiglium, carefully deprived of the husk and epidermis, two ounces;
Alcohol, (Sp. gr. 836*) twelve ounces;*
Digest for six days, and strain.

Of this tincture, the dose for an adult is stated to be about *twenty minims;*§ and if experience should confirm the character given of it

* The late Mr. Pope of Oxford Street, in a paper published in the last volume of the Medico-Chirurgical Transactions of London.

† It is worthy of remark, that the same is true of the seeds of the *ricinus communis,* the *cortical* parts of which are possessed of properties, acrid and drastic to a great degree.

‡ The *acrid* properties are taken up readily, Mr. Pope states, by olive oil and oil of turpentine, especially if assisted by heat.

‖ Vide Lon. Journal of Science, April 1822.

§ It would be better, we think, to prepare this tincture with *two ounces* of the seeds to *one pint* of spirits; which would bring the dose for an adult to about half a drachm, and render the exhibition of the medicine also to children more convenient.

by Mr. Pope for mildness and activity, it will soon, no doubt, supersede the common oil in practice — for it is a preparation not only more manageable and more economical, but it is one much less exposed to fraudulent adulteration.

III. *Lithotomy.—High Operation successfully performed.—Case, &c.*

We mentioned in our Number for August, (p. 199,) that the high operation for the stone had been shortly before performed by Mr. Copland Hutchinson at Sheerness, and with complete success. To this operation the following details relate, which we have extracted from a long, and rather a rambling letter, addressed by Mr. Hutchinson to Sir Everard Home, and communicated by that gentleman to the Editor of the London Journal of Science, for publication in his last Number.

Mr. C. aged twenty, the son of an officer of Sheerness dock-yard, had laboured under symptoms of stone in the bladder from his earliest infancy; and to such a degree, that he never had been able to retain his urine for more than half an hour during this period, by day or by night. At times also the pains were so severe, and the difficulty of passing his urine so great, that life had, in a manner, become a burden to him.*

Under these circumstances, he some months since (in May last) consulted Mr. Hutchinson; who, upon *sounding*, discovered a stone in the bladder, which he determined to remove by the high operation—induced thereto by the consideration that the stone was probably very large, and nearly filled the bladder, which never had been fully distended by urine. In consequence of this determination the patient was placed upon low diet for a month, during which period his bowels were frequently acted on by purgative medicines, and the *staff* frequently introduced, so as to accustom the bladder to its presence. These precautions taken, the operation was performed by Mr. Hutchinson, on the 18th June, in the presence of several professional friends, and in the following manner.

The patient being placed upon a table of the ordinary height, with a mattress under him, the pelvis raised considerably higher than the shoulders, and the feet resting on chairs;† the operator standing on his right side, made an incision in the line of the linea alba, through the integuments, and nearly four inches in length from the pubes. This incision was then carried deeper towards the bladder, and between the pyramidal muscles, so as to make an opening through the linea alba of about three inches in length. This tense membranous band, (the linea alba), and some fibres of the pyramidal muscles were then divided *transversely* at the symphysis pubis, so as to afford a more free and convenient access to the bladder; which

* Before the act of micturition could be effected in childhood, it was sometimes necessary, we are told, to place the boy *on his head.*

† The pelvis was thus raised higher than the shoulders, with the view of removing the *peritoneum*, as far as possible, from the parts to be cut in the course of the operation.

was now clearly seen, at the bottom of this deep wound, very much contracted, and covered with fat.

The handle of a silver *staff*,* previously introduced into the bladder, was now depressed, so as to raise the anterior part of the fundus of this viscus towards the external wound; when it was pierced with a straight, sharp-pointed bistoury, which was received into a groove in the concave part of the staff.† An opening into the bladder was thus made sufficiently large to admit the fore finger, for the purpose of ascertaining the probable size of the calculus; which done, this opening was enlarged accordingly towards the cervix. Notwithstanding the freedom of the incisions, some difficulty was now met with in attempting to extract the stone; which was so firmly grasped by the bladder, or so impacted in its situation, as to create a momentary apprehension of adhesions having taken place.‡ By introducing a finger however into the rectum, the stone was turned and dislodged; and was then easily, as it appears, extracted by means of the finger and thumb.‖

After the operation the wound was dressed with slips of lint, dipped in oil, with slips of adhesive plaster, and with a flannel roller, passed three or four times round the body. A gum-elastic catheter also was introduced into the bladder, and an opiate administered.§

The night was passed easily; but the following day some febrile symptoms arose, which yielded, however, readily to one free bleeding, and other common remedies. After this, no unpleasant symptoms of any kind occurred, and the wound gradually closed until the 31st July, (the 44th day,) when it was completely healed, and the urine passed in a full stream through the urethra.¶

Thus terminated this successful case; and the patient's recovery, Mr. Hutchinson adds, he is strongly inclined to believe, would have been still more speedy, had the *catheter* been sooner withdrawn altogether from the bladder — an opinion in which we are strongly

* Mr. Hutchinson has not explained why a staff of *silver* was employed, in preference to the more common one of steel.

† The coats of the bladder, at the place where it was laid open, were, we are told, fully *a quarter of an inch* in thickness; a circumstance which added, of course, not a little to the danger and the difficulty of the operation.

‡ Mr. Hutchinson has omitted to mention the exact *position* of the stone in the bladder; that is, the direction in which its longer and shorter axes were disposed, and permanently fixed, as it would appear.

‖ One small cuticular artery, divided at the first incision, and immediately secured, appears to have been the only vessel divided during the operation, which required any attention.

§ These *slips of lint* were introduced into the wound, but not so far as to enter *the bladder*. We entertain doubts as to their utility; and still stronger doubts with respect to that of the *long roller*, passed three or four times round the body. We are not even quite satisfied as to the propriety of introducing the catheter, and *securing it in its place*, even for a single day; for the presence of a small quantity of urine in the bladder, for a short interval, could not have been productive of so much irritation to the parts engaged in the operation, as the permanent presence of a catheter in the urethra.

¶ On the first night, and for about five weeks after the operation, the *urine* we are told, was discharged partly through the wound, and partly through the urethra.

inclined to concur: for this instrument appears to have been almost constantly retained in the bladder for about three weeks, where, during this period, it must, in a greater or in a less degree, have proved a source of continual irritation.

The *stone* weighed eleven drachms, two scruples, and four grains. It was two inches long, and one inch and a half in width — and consisted principally of the *lithate of ammonia*, mixed with some *oxalate of lime*, (and probably, a little *carbonate* of lime) of the phosphates, (of *lime, magnesia,* and *ammonia?*) and some animal matter.*

The exterior laminæ, it may be observed, were composed chiefly of the *mixed* phosphates, (that is, as we are partly given to understand, of the phosphate of *lime*, *magnesia*, and *ammonia;*) but two or three small fragments, detached from the surface, were found to consist chiefly of the *simple* phosphate of lime — a circumstance which seems to have particularly attracted Dr. Prout's attention, as he never before had known, he says, of this salt being *deposited alone* from the urine; and hence had been led to believe, that calculi composed entirely of it were not of urinary origin, but formed in a manner analogous to those met with in the prostate gland.

IV. *False Membranes in the Stomach.—Cases, &c.*

In a female subject, apparently aged about twenty-five years, extremely emaciated, and presenting proofs of extensive pulmonic disease,† the following singular appearance is stated to have been met with by Dr. Godman,‡ of Philadelphia.

The internal surface of the stomach was lined with a thick investment of mucus, so tenacious and dense as to appear like an additional coat. In attempting the removal of this, the stomach was inverted, and washed, first in cold, and then in warm water, but ineffectually,—it was then washed with soap and water, with ut any notable quantity being separated; and finally was rubbed between the hands, as in washing clothes, by which means a few flakes were detached, but the greater parts still remained adherent. The stomach contained a considerable quantity of *æther*, mixed with other fluids.

Observations.—In the last Number of the Repository, (p. 408,) the case of a child is noticed, who died of drinking boiling water;‖ and whose stomach on examination after death exhibited an appearance very similar to that described in the preceding account.

* For the *chemical analysis* of the stone, Mr. Hutchinson was, it appears, indebted to Dr. Prout.

† The *left* cavity of the thorax was nearly empty, containing merely some floculent matter, and a brownish puriform half-coagulated substance where the root of the lung should have been;—the *right* lung was natural in appearance.

‡ Dr. Godman is one of the editors of the Philadelphia Medical Journal, from the *May* Number of which (1825, p. 93,) we have extracted the particulars of this case. No date is given, but the case seems to have been met with in 1823 or 1824.

‖ From Mr. Howship's work on Indigestion, &c.

Dr. Godman also (*loco citato*) mentions a case, probably of a similar nature, which occurred in the practice of one of his friends; the patient was a female, reduced to a state of great debility from inanition, in consequence of a want of healthy action of the stomach; which was apparently so torpid, as to be insensible, it would appear, to an ordinary emetic. At length a more powerful emetic produced, after violent efforts, 'the discharge of a thick mucous substance, resembling an entire coat of the stomach, broken into large flakes;' after which an immediate improvement in her health took place.

These cases should render us cautious in attributing want of action in the stomach, to mere *nervous torpor*, as is too generally, perhaps, the practice.

V. *On the Action of* POISONS *on the* VEGETABLE *Kingdom.*

(*Continued and concluded from our last Number, p.* 470.)

IN our last Number we gave some account of the experiments made on *vegetables*, by M. F. Marcet, of Geneva, with *metallic* and other *mineral* substances of a poisonous nature; and shall now proceed to notice those performed with substances drawn from the *vegetable* kingdom itself, and with certain of the *gases*.

In conducting these experiments, it is to be observed, that the plants employed were carefully taken from the earth, and immersed by the *roots* in the solutions, &c. under trial. It had been previously ascertained, that plants so withdrawn, and placed in pure water, would remain in health for six or eight days, and even continue to vegetate as if in the earth. As, however, some of the substances on trial rendered the water in which they were dissolved *viscid*, a comparative experiment was also made with water, in which a quantity of *gum* had been dissolved, sufficient to render it as viscid as any of the solutions, &c. employed; and in this fluid it was found that plants remained fresh and healthy for five or six days.

III. *Experiments with Vegetable Poisons.*

I. ALCOHOL.—1. The roots of a bean-plant were placed in a mixture of alcohol and water, equal parts — at the end of twelve hours the leaves were soft and faded, and the plant was dead.*

2. When weak alcohol was used, containing six grains of camphor in the ounce, the plant died, as before, in twelve hours; and in addition to the leaves being faded, &c. the *leaf-stalks* were bent as if broken in the middle.† *No dates given.*

II. BELLADONNA.‡—A solution, containing five grains of the aqueous *extract* in one ounce of water, was used.—*May 9th.* On

* The *bean-plants* employed in these experiments were, as in the former, all of the same kind, viz. the *phaseolus vulgaris*.

† *Alcohol.*—The *sp. gr.* of this fluid is not mentioned, so that no correct idea can be formed with respect to the strength of the mixtures employed.

‡ *Atropa Belladonna.*—To *animals* this plant is an intense poison; an over-dose producing quickly delirium, stupor, convulsions, and death.

the next day the lower leaves of the plant (*bean-plant*) immersed in this were in a drooping state—on the third day the other leaves were all drooping, and some had begun to change colour—on the fifth day (13*th May*) the plant was quite dead.

III. *Coculus Menispermis.**—Ten grains of the aqueous *extract* of the seeds, were dissolved in two ounces of water; and in this the roots of a bean-plant were placed. In a few moments some of the leaves began to curl up—after some hours these leaves were drooping, but stiff—in some time more they became flabby—and in twenty-four hours the plant was quite dead. The leaf-stalks were all bent in the middle, as if broken, and the leaves all withered.—*No date given.*

IV. *Conium.*†—Five grains of the aqueous *extract* were dissolved in one ounce of water, *May* 14*th*. In this a bean-plant was placed. In a few minutes some of the lower leaves began to curl up—on the third day (16th) the plant was quite dead; the leaves were dry and withered, but retained their natural colour, except two of the lower ones, which had become yellow.

V. *Digitalis Purpurea.*‡—A solution, containing six grains of this substance, (of the *extract* we presume) in one ounce of water, was employed. In this, *May* 10*th*, the roots of a bean-plant were placed. In a few minutes some of the leaves began to curl—in the evening some were withered, and in twenty-four hours the whole plant was dead.

VI. *Laurel water*‖ *and Prussic acid.*§—1. The roots of a bean-plant were placed in some distilled laurel-water—*May* 8*th*. In a few minutes some of the leaves became crisp, and began to curl up—in about half an hour this action had ceased, and they became flabby—and in six or seven hours the plant was dead.

N.B.—This experiment was repeated several times, and always with the same final result; but the *drying up* of the leaves varied much, and sometimes did not take place at all.

* *Coculus Menispermis.*—With *animals* this poison is supposed to act particularly on the spinal marrow; producing first tetanic convulsions, and then death.

† *Conium maculatum.*—This we presume is the article intended by the word *hemlock*, the term employed by our authorities, the *Lon.* and *Edin.* Journals of Science. With *animals* conium acts as a powerful narcotic, producing, when taken in excess, apopletic stupor and death.

‡ *Digitalis.*—Although when given to *animals* in sufficient quantity, this drug seems to act particularly on the *heart* and *arteries*, reducing their action, as it were, by some direct operation; yet there are good grounds for believing that these effects are merely the result of its more immediate action on the *nervous system*. In an over-dose it produces nausea and vomiting, purging, low delirium, faintings, and death.

‖ *Laurel water.*—Water distilled from the leaves, &c. of the prunus lauro-cerasus; the activity of which arises, as is well known, from the *prussic-acid* which it contains.

§ With respect to *animals*, prussic-acid is one of the most virulent poisons known; producing death with a degree of rapidity, which renders it difficult to form any opinion as to its mode of action.

2. *Prussic-acid.*—The roots of a bean-plant were placed in a solution of this acid, *May 12th*—(the strength is not mentioned). In a few hours the leaf-stalks began to bend in the middle—in about twelve they were all bent, as if broken, and the plant was dead.

3. One or two drops of the concentrated acid were placed on the extremity of a leaf of the *sensitive-plant*, (*Mimosa pudica.*) In a few seconds all the leaflets closed; some of them appear to have been killed, and the others did not recover their sensibility for some hours.

4. Even the *vapours* of this acid seemed to produce the same effects upon the *sensitive* plant; the leaflets closing instantly, on a little being held under them in a spoon or open phial, and not regaining their sensibility for some hours.

VII. *Nux Vomica.**—1. Five grains of the aqueous *extract* were dissolved in one ounce of water. In this solution, *May 9th, at 9 A. M.*, a bean-plant was placed—at the end of an hour the plant looked unhealthy—at one o'clock the leaf-stalks were all bent, as if broken—and in the evening the plant was dead.

2. Fifteen grains of the *extract*, moistened with water, were introduced into a small wound, made in the stem of a lilac-tree, of about one inch in diameter—this was on the *15th July*, and the wound penetrated to the pith. On the 28th the leaves of the two branches nearest the wound began to dry—on the *3d August* these leaves were quite dry—and in the course of the autumn the other leaves shared the same fate.

VIII. *Opium.*†—Five or six grains of opium were dissolved in an ounce of water, and in this a bean-plant was placed, *May 10th.* In the evening the leaves began to droop—next day, about noon, they were quite withered, (but without change of colour,) and the whole plant was dead.

IX. *Oxalic acid.*‡—1. Five grains of this acid were dissolved in an ounce of water, *April 12th.* Into this solution a branch of a rose-tree, with a flower at its extremity, was introduced. Next day the petals of the flower began to change colour, and the leaves to fade—in about forty-eight hours the whole branch was dead.—On examination, it appeared that one-tenth of a grain only of the acid had been absorbed.

2. A bean-plant, placed in a similar solution, died in about twenty-four hours.

* *Strychnos Nux Vomica.*—With *animals* this drug is supposed to act particularly on the *spinal marrow;* producing, when given in excess, tetanic convulsions and death.

† *Opium.*—This, on the contrary, as is well known, is supposed to exert its fatal influence on the *brain* of animals; in whom an over-dose produces apopletic stupor and death.

‡ *Oxalic-acid.*—This article, when administered to animals in large quantities, acts like the mineral acids, destroying the tissue of the stomach, &c. It kills, however, very quickly, also, when given in small quantities, and then seems to act more particularly on the nervous system.

IV. *Experiments with some of the Gases.*

Five similar bean-plants were selected, and were so fixed, that the *roots* of each were in a receiver placed over water, whilst the *leaves* were exposed to the open air. Different gases were thus introduced into the receivers, and the following results were obtained.—*No dates given.*

1. *Atmospheric air.*—The plant remained healthy for forty-eight hours, and then gradually faded.

2. *Carbonic acid gas.*—The plant began to fade in two hours, and was dead in eight or ten.

3. *Hydrogen gas.*—The plant began to fade in five or six hours, and was dead in fourteen or sixteen.

4. *Nitric oxide.*—The leaves began to bend in about six hours, and the entire plant was dead in about twelve.

5. *Nitrogen gas.*—The leaves began to droop almost immediately, and in five hours they were all faded, and the plant quite dead.

Observation.—From the whole of the preceding experiments, M. Marcet draws some general conclusions, which we here annex; without at the same time, however, wishing, in the present stage of the investigation, to be considered as fully assenting to the doctrines they contain.

From the preceding experiments, it appears, 1st, That *metallic* poisons act upon *vegetables* nearly as they do upon *animals;* being absorbed and carried into different parts of the plant, the vessels of which they alter and destroy by their corrosive powers.

2d, That *vegetable* poisons, especially those which prove destructive to animals by their action on the *nervous* system, do cause the death also of plants.

3d, But as it cannot be supposed, that poisons which do not attack the organic structure of animals, should effect that of vegetables, so as to prove fatal to them in a few hours; it seems probable, that there exists in the latter (*plants*) a system of organs, susceptible of being acted upon by poisons, nearly as the *nervous* system is in *animals.*

VI. *Tetanus—Traumatic Tetanus in a Horse, successfully treated by Tobacco.—Case, &c.*

Tetanus, it is well known, is one of those complaints which are common to man and to certain of the brute creation. The origin, also, the symptoms, and the progress of the disease, are very similar in both these classes, and in both the termination is, in general, equally fatal. This close analogy naturally led to the conclusion, that the same mode of treatment would probably be found equally beneficial or injurious in both classes of animals, and experience has confirmed the conjecture. Of this, the following case may be considered as an interesting and instructive example; for the mode of treatment successfully adopted in it had previously been tried on man, and found beneficial—whilst, at the same time, it is still in a manner new to the profession, and still requires the

aid of practical illustration to establish its claim to superior efficacy in this complaint.

We are aware, however, that when a case of tetanus has been protracted to the fifth day, the chances of recovery are so much increased, that the efficacy of any particular remedy subsequently employed may, in general, justly be doubted, should the case terminate favourably. But no such doubts can, we think, arise on the present occasion; for it will be seen, that the *tetanic* symptoms were mitigated and suspended on the fifth and sixth days of the disease, when the TOBACCO was first employed; that they returned with aggravated violence when its use was interrupted; and were again mitigated, arrested, and finally removed, under its administration; no other remedy being, at the same time, made use of.

It is this, we think, which gives a peculiar value to the following case, for which we are indebted to a gentleman, whose long services in a regiment of cavalry, abroad as well as at home, have afforded him the most ample opportunities for acquiring an accurate knowledge of the disease under consideration, both in man and horses.*

For this reason, before proceeding to particular details, we are induced to give the following summary of the symptoms of tetanus in the horse, as drawn up by the same gentleman from personal observation: —

Symptoms of Tetanus in the Horse. — Rigidity, permanent fixation, and involuntary contraction of nearly all the voluntary muscles, especially those of the throat, jaws, neck, and abdomen; tail tremulous, or shaking violently, and in a horizontal position; ears generally erect and pricked forward; eyes, at the commencement of the disease, wild and fiery. The animal at this period exhibits a highly interesting, eager, animated countenance. These symptoms gradually become more aggravated; and difficult mastication, and subsequently difficult deglutition are observed. The jaws, at length, become nearly or altogether permanently closed; the eyes are occasionally contorted; the *retractor* muscles of these organs become affected with spasm; the membrana nictitans is in consequence pushed forwards, and covers one half of the globe, which is often, also, during the height of the paroxysm, drawn back to the bottom of the orbit.

The legs are placed at a considerable distance from each other; the joints become stiff and rigid; sluggishness, or an inaptitude to locomotion, is observed; the abdominal muscles are drawn up; the fæces are obstinately retained; the urine is voided with great difficulty; cold perspirations frequently supervene; and the animal is greatly disturbed and alarmed at the slightest noise.

The appetite, however, is not in the least impaired; and many fruitless, tantalising efforts are made to indulge it. The pulse, also, is scarcely affected, except during the paroxysms, or immediately after locomotion; at which periods, or when the animal is disturbed or alarmed, it becomes quick, hurried, and irregular.

The respiration, though not much affected at the commencement,

* Mr. P. Egan, late of the 12th Royal Lancers, now Surgeon 66th Foot.

becomes in time laborious; the paroxysms also become more frequent, violent, and continued; and the animal, at length, quite exhausted from inanition and by the disease, falls to the ground, and dies convulsed.

*Case of Traumatic Tetanus in a Horse, &c.**—The subject of the present case is a half-bred horse, courageous and spirited, but by no means irritable or sulky in his disposition. At the time of the accident about to be mentioned, he was five years old, had been six months from pasture, was in good but not hard condition, and his skin at the time, as it is at present, was partially covered with a crop of warts, particularly on the legs and abdomen.

On the morning of the 10th April, 1824, a rough rider rode this horse over a small but awkward leap (a stone wall), off the high road. In leaping back the animal lacerated and tore off a large wart, situated on the abdomen near the umbilicus; and, at the same time, the stifle (*patella*) joint of the near hind leg was contused, and a small portion of the skin was abraded. The appearance of this wound, however, was of very trifling import, and the beast, though somewhat stiff in his action immediately after the accident, did not walk lame. A purgative ball was administered that night to obviate inflammation; and in three days the horse was as sound, and apparently in as good health, as before the accident. After this he was daily exercised as usual, and manifested no symptom of disease until the 28th April, eighteen days after the accident had occurred.

On the evening of that day (the 28th), it was observed that the animal, although in good condition, appeared as if he had had no drink for twenty-four hours, his abdomen being very much tucked up; he had, however, taken his usual allowance of water four hours previously, and was then engaged in eating his corn, which he finished before morning—his tail, also, at this time, was thought to shake a little.†

The next day (29th), it was observed, in the morning, that he masticated his food with difficulty, and that his tail shook very much. Partial *trismus* and rigidity of the muscles generally soon succeeded; and about one, P.M., a complete paroxysm of *tetanus* took place, in consequence of the alarm produced by a discharge of artillery and small arms, although the animal had been well accustomed to fire. Soon after this the *trismus* became complete.

In the course of this day six quarts of blood were taken away; the entire of the spine, also, the jaws, throat, and stifle joint injured on the 10th, were blistered; and several purgative enemata were administered, which, however, produced no effect on the bowels.

On the following day (30th), the tetanic symptoms appeared

* In the original article, (Lon. Med. Journ., Sept., p. 197,) Mr. Egan enters into an interesting minuteness of detail, which we necessarily have been obliged to avoid; without, however, we trust, omitting any of the important features of the case.

† The *shaking of the tail*, extended horizontally, is an early and very constant symptom of tetanus in the horse.

rather less acute at first; but they were all subsequently aggravated by the employment of the *cold affusion*, to which Mr. Egan had reluctantly consented, he having on a former similar occasion conceived it had done no good.

On the 1st May, half an ounce of crude *opium* was placed as a suppository in the rectum, which was next day removed, it appearing to produce no effect. On the 3d, therefore, the case being now considered as hopeless, Mr. Egan determined to try the effects of TOBACCO, which he had once seen successfully employed in a case of tetanus, by Dr. O'Beirne, of Dublin.*

Accordingly, two tobacco enemata were administered that day, and as many on the following (the 4th), and with evident good effects,† a considerable discharge of dark, fluid, fæcal matter being thereby produced from the rectum, and the tetanic paroxysms becoming shorter, milder, and less frequent.

On the 5th and 6th there were no tetanic paroxysms, and the jaws could be moved a little; the tobacco enemata were therefore discontinued. But on the 7th May complete *trismus* had again taken place, the entire body, also, had become hard and rigid as if made of wood, and severe tetanic paroxysms again supervened. The *tobacco* enemata were in consequence immediately resumed, and with the same effects as before,‡ viz. a discharge of fluid, fæcal matter from the rectum, and a mitigation of all the *tetanic* symptoms.

After this day (the 7th May) there was no return of the paroxysms, and all the other symptoms of the disease gradually subsided, so that, on the 20th, the horse was in a manner convalescent, and by the end of the month perfectly restored to health. The tobacco enemata, however, were not discontinued when the paroxysms ceased, but were administered daily until the 16th, when a purgative was for the first time exhibited by the mouth.

During the progress of the disease, the *tobacco* enemata generally produced considerable debility and nausea, and uniformly a discharge of fæcal matter from the intestines; the common purgative enemata, on the contrary, which were daily administered when the tobacco enemata were not, never seemed to produce any effect whatsoever.

During the first ten days of the disease, the only sustenance taken was oatmeal-water, a small quantity of which the poor animal gene-

* Vide a case of traumatic tetanus in a boy, successfully treated by *tobacco*, &c., by James O'Beirne, M.D., Surgeon Extraordinary to the King, in Dublin Hospital Reports, Vol. III.

† The two enemata, on the first of these days, were prepared each by infusing *one* ounce of leaf-tobacco in *one* quart of boiling water: on the second day, *eight* ounces of tobacco were boiled for ten minutes in *two* quarts of water for the first enema; and in four hours after the same tobacco was again boiled in a similar quantity of water for the second.

‡ The enemata on this and the following days were prepared by boiling or infusing *four* ounces of leaf-tobacco in a sufficient quantity of water for the day; and at night, on the 7th, 8th, 9th, and 10th, the tobacco so used was made up into a suppository, and placed in the rectum.

rally contrived to suck in through his teeth, and with much difficulty to swallow; after this, fresh hay, grass, and mashed bran, were made use of.

As a proof of his perfect recovery, Mr. Egan states, that the horse was sold nearly a year after the accident to a brother officer, who was therefore well acquainted with his case, for sixty guineas.*

VII. *On Tic Douloureux.—Cases, &c.*

The following cases of tic douloureux are interesting, inasmuch as they serve, when thus placed in juxtaposition, to illustrate each other, and to enlarge our views with respect to the pathology of the disease — for in all, the diagnostic symptoms were very nearly similar; whilst the *cause* of these symptoms, that is, the essence of the disease, and the means of relief, were in each very different.

Thus, in the first case, we have a peculiar painful affection suddenly produced by exposure to *cold;* and yielding, at length, to *arsenic* and *zinc*, after various other remedies had been employed in vain.

In the second, a similar affection manifestly arises from the presence of *teniæ* in the intestinal canal; and yields, after having resisted the remedies successfully employed in the former case, and a great variety of others, to a few doses of *turpentine.*

Whilst in the third, the same nominal disease is evidently produced by an organic affection of the *uterus;* and is accordingly relieved by a preparation of *iron*, which seems to check the progress of this complaint.

These facts should render us cautious in drawing general conclusions, with respect to the efficacy of any particular mode of treatment in this disease; and, above all, in proposing or performing surgical operations, from which permanent inconvenience or deformity may arise.

Cases of Tic Douloureux.†

Case 1*st.* — A clergyman, aged about forty, of a thin habit of body, and free from organic disease, was seized, on exposure to the external air, when heated and fatigued by the exertion of preaching in a close and crowded chapel, with a very violent pain affecting

* It cannot be otherwise than proper to state, that, in one case, we have found idiopathic tetanus, in the human subject, yield to oil of turpentine and the croton oil. In the case to which we allude, an ounce of the former was got down, and three drops of the latter given at the end of an hour. Copious offensive motions were procured by these means, which were repeated the following morning, and the patient rapidly recovered from that time. This practice, to say the least of it, certainly deserves a farther trial.

† Cases, &c. Extracted from an article by Mr. C. Blackett, Surgeon, Royal Navy, &c. in the London Medical Journal for October, p. 288.

We may here remark, that in extracting these cases we have, as usual, taken no notice of the idle details and speculations by which they are accompanied — the plain matter of fact, and its practical application, being all we trouble ourselves with in this place.

the second branch of the fifth, and portio dura of the seventh pair of nerves.

At first, the complaint was treated as a rheumatic affection: but the symptoms becoming more distinctly marked, it was pronounced to be *tic douloureux;* and various remedies, both internal and external, were in vain employed for its relief.

At length, the *arsenical solution* was had recourse to, and was continued for six or seven weeks with much benefit; when it disagreed with the bowels, and was in consequence given up. In its place, however, full doses of the *sulphate of zinc* were substituted, which in a few weeks more completely conquered the disorder.

N.B.—There is no *date* to this case in the original.*

Case 2*d.*—A widow lady, aged about forty-five, became affected, towards the autumn of 1815, with violent pain in the left side of the face; a pain which came on in short and frequent paroxysms; which was increased on pressure being applied to the infra-orbital nerve; and which, on such occasions, spread over the forehead to the back part of the head.

In the relief of this pain, the bark and opium were first exhibited; then sulphate of zinc and copper; then arsenic, conium, hyoscyamus, belladonna, and aconitum; but all in vain.

It was then proposed to divide the nerve, and a day was fixed for the operation; when, on the morning before it was to have taken place, the patient passed by stool a piece of a *tape-worm*, about seven inches long. This led to a suspicion that the existence of the pain in the face was connected with the presence of one or more of these animals in the intestinal canal. The oleum terebinthinæ was in consequence exhibited, in doses of two drachms three times a day, with occasional purgatives; under which treatment two more pieces, and three small perfect *teniæ*, were in the course of a few days expelled;† and the pains, at the same time, completely and permanently removed.

Case 3*d.* — A married woman, aged sixty-three, had for several years been afflicted with severe and acute attacks of rheumatism on both sides of the face, and especially on the left. When first seen by the reporter in October 1816, she complained of pain in this side of the face more darting than usual; and the part, on examination, was found so tender, as to excite, on being touched, the most piercing cries and violent contortions.

In a few days an attack of erysipelatous inflammation came on, which lasted about a week; and, at the same time, the other side

* The omission of *dates* is a frequent occurrence in medical cases, &c. and is always to be regretted, tending, as it does, to affect their authenticity, and mislead us with respect to the result. For *time* and *place*, as well as other requisites, we may observe, are essential ingredients in every authentic record, and form part of the data upon which all reasonings with respect to matters of fact must be founded.

† One of these pieces is stated to have been about nine, and the other four and a half, inches long — and the lengths of the small teniæ respectively are stated to have been, eighteen and a half inches, eleven inches, and six and a quarter inches.

of the face began to be affected. Attacks of this kind continued for some time, coming on monthly, and being always accompanied by a disagreeable discharge from the vagina. This circumstance led, (after tonics, aperients, and opium, had been tried in vain,) to an examination per vaginam, when the *os uteri* was found enlarged and indurated, and so irritable that the whole frame became convulsed during the examination of this part.

The *carbonate of iron*, in doses of five grains every four hours, was now prescribed, with an opiate at bed-time, and occasional aperients. Under this plan, which was continued, it appears, for about two months, considerable benefit was received by the patient; the paroxysms of pain having in this time become much less severe and frequent, the discharge from the vagina having ceased, and the appetite, strength, and sleep, having much improved.

Note. — The final termination of this case is not given; but nothing, perhaps, beyond a partial and temporary relief was to be expected, in a woman of sixty-three, long affected, as she appears to have been, with organic disease of the uterus.

VIII. *Transfusion of Blood.—Recent Case, with Remarks.*

We gave in our last Number (p. 470) a case of transfusion, &c. which lately occurred in this city; and mentioned at the same time, that a second case of the same nature had still more recently taken place amongst us.

Of this second case the details, as we anticipated, have since been given to the public by Mr. Doubleday, the operator;* and serve to confirm the opinion we have already pronounced, with respect to the general inutility of this operation.

For this reason, we should content ourselves with thus simply noticing the circumstance, were it not that this case has given rise to some discussion, and has had a degree of importance attached to it, much greater in our opinion than it deserves. That all persons may judge for themselves, therefore, we subjoin an accurate abstract of the case, as given by Mr. Doubleday; followed, as usual, by a few observations of our own.

Case.—A woman, aged twenty-nine, and of a robust constitution, was delivered of a female child, Sept. 28th, 1825.

Nothing particular occurred during the birth; but about two hours afterwards an alarming hæmorrhage came on; and the *placenta*, which had hitherto been retained, was in consequence removed by the hand. Before, and during this operation, however, so much blood was lost, that the speedy dissolution of the patient was now apprehended—for the pulse could not be felt, the countenance was blanched, the lips pale, the nostrils pinched, the sight indistinct, the breathing hurried, and accompanied by frequent sighing and great restlessness, and the body covered with a cold clammy perspiration.

* In Lon. Med. Journ., November, p. 480.

Under these circumstances, *brandy*,* *laudanum*, and *ammonia*, (the carbonate), were had recourse to, and were persevered in *vigorously*, as we are told, for half an hour; when, no real advantage having been obtained, TRANSFUSION was determined on as the *only remedy left;* and the aid of Dr. Blundell was in consequence sought for, and obtained.

By the time, however, of his arrival, the patient, it would appear, had silently rallied her forces; for though still apparently in a hopeless state, she was able the moment an attempt was made to lay bare the median cephalic vein, to offer such an *astonishing degree* of resistance, that the doctor was speedily *induced to abandon* the scene of action, *leaving his syringe, &c.* behind him.

Recourse was now again had to the *brandy*, *laudanum*, and *ammonia;* to which were also added *eggs*, *beef-tea*, and *gruel;*† under the operation of which, it was, at the end of about six hours announced that the gallant patient was *sinking very fast*—in fact, upon proceeding to the spot, Mr. Doubleday found her as he states, *all but gone.*

No time was, therefore, now to be lost; the vein already exposed, was, therefore, immediately laid open, and *fourteen ounces* of warm blood, drawn from the husband, were in a little time happily deposited in the body of his wife; and all fears with respect to her safety as speedily removed.

Observations.—And thus, as it is asserted, this woman was suddenly rescued from the hand of death. Upon this point, however, there is some reason to fear that an *error in judgment* has been committed; or at least it must be allowed, that the evidence adduced does not sustain the assertions which have been made. On the contrary, the main *facts* of the case all tend to shew that the woman was not in a *dying* state when the operation was performed; whilst in opposition to these we have nothing but *opinions*, and *opinions* upon which, in the present instance, very little reliance, we venture to say, can be placed. For the opinions of Mr. Doubleday and his friend are not entitled to more weight, at 3 P.M. when the operation was performed, than can be claimed for them at 8 A.M. when it was fruitlessly attempted, and when, as the event proved, these *opinions* were erroneous.

On the other hand, the existence of the patient for so many hours after all hæmorrhage had ceased;‡ and the sudden, per-

* The first dose of brandy was, as we are told, a tea-cupful, containing about *six ounces;* which for a *dying* patient may to some perhaps seem rather too much.

† In about seven or eight hours the patient took, it appears, twenty ounces of *brandy*, one hundred and sixty drops of *laudanum*, a considerable quantity of *ammonia*, the yolks of three *eggs*, beaten up in brandy, some *beef-tea*, and some *gruel*—yet during all this time she was apparently, as we are given to understand, in a hopeless state.

‡ The woman was delivered, it appears, about 4 A.M.—about 6 A.M. the hæmorrhage came on—about 8 A.M. it ceased, and the operation seems to have been first attempted—and about 3 P.M. it was actually performed.

fect, and permanent recovery which took place,* indicate in the strongest manner that the state of *exhaustion* so much dwelt upon, was rather *apparent* than *real.*

In fine, this case of transfusion ultimately proves nothing, but that Dr. BLUNDELL himself, the patron of the art, may be deceived with respect to the *necessity* of performing the operation.

SECTION II.—FOREIGN.

I. *Action of the Cyanuret of Iodine upon the Animal Economy.*

M. LASSAIGNE has published in the same Number, an account of two experiments made upon dogs, with the compound of cyanogen with iodine.

A small dog was compelled to swallow a decigramme, or rather more than a grain and a half of cyanuret of iodine, dissolved in half an ounce of distilled water. In a few minutes the animal attempted to vomit, but was prevented by keeping the head raised, and the mouth closed. Ten minutes after the hinder limbs appeared stiff and slightly paralysed. When left to himself, he tottered and struck his head against the chairs and tables, which he did not appear to perceive. Fresh attempts to vomit succeeded, which were prevented in the same manner as before. His pupil was dilated, and the pulse much increased. He continued to walk about for some minutes, till, no longer able to support himself on his feet, he fell on his left side, moaning piteously. His limbs became stiff and insensible, and he vainly tried to rise. He continued for some minutes in this position; then rubbed his belly strongly against the ground, howling and exhibiting symptoms of severest pain. In this state he remained about fifteen minutes, when he died.

The body was opened immediately. There was intense inflammation in the stomach, with an ulceration at the cardiac extremity. The upper part of the duodenum, to the extent of five or six inches, was also red. The internal membrane of the stomach exhibited a slight odour of the cyanuret of iodine.

In the second experiment the dog was permitted to vomit, and would probably have entirely recovered, but was killed with strichnine. The stomach, as in the former case, was highly inflamed. — *Journal de Chimie Médicale, Oct.* 1825.

II. *Opium.*

M. Robinet has been trying a new mode of analysing this drug by means of saline solutions. As for example, the muriate

* When only *six* ounces of blood had been injected, the patient, who a few minutes before had been *all but gone*, was *so much recovered* (we use Mr. Doubleday's words) as to exclaim, that she was *as strong as a bull!*—in about one hour after the operation *she sat up*, and *assisted the nurse, as if nothing had occurred beyond what is observed in ordinary cases!!*—and on the seventh day afterwards she was *quite well!!!*

of soda being mixed with a solution of the extract of opium—the different parts are precipitated, on account of their less solubility, and first of all the resinous matter. Analysed in this manner, M. Robinet obtained a salt of morphine, which is not, as was supposed, a meconnate of morphine, but a salt formed by an acid named codeic by M. Robinet, and consequently a codeate of morphine. This salt has the property of becoming blue with the peroxides of iron. The resin, according to the same author, is not caoutchouc.—*Bib. Neuv. Med. Sep.* 1810.

M. N. Orfila and Ollivier have made several experiments upon dogs with this preparation. They injected six grains dissolved and distilled into a jugular vein of a small dog. The animal moaned repeatedly at the time of the injection, and was much agitated. In a few minutes he became torpid, and remained in the same state for nearly two hours. He could, however, be easily roused for a moment. When compelled to walk, his gait was unsteady and tottering; his respiration tranquil and easy. He remained in this state till the evening. The next morning he was perfectly restored. The solution was next injected into the cellular substance, in the quantities of twelve, eighteen, thirty-six, and forty-five grains. In the three first experiments the animals recovered, having had, in addition to the symptoms above enumerated, slight convulsive actions. In the last experiment the animal died; the following symptoms having preceded death: the solution was injected into the thigh of a small dog. In two minutes the animal lay upon his side; the body is shaken by convulsive movements similar to those produced by hiccup; the posterior part of the body and limbs are paralized. The animal attempted to raise himself, but ineffectually. The tranquillity was not observable in this as in the other experiments. The pupils were strongly contracted. The whole body is agitated by convulsions, which are renewed at intervals. He tries to walk, but is unable. The respiration is accelerated. Though he cannot use the hinder limbs for progression, he used one of the hinder feet several times to rub his head with. These symptoms gradually increased, and two hours and eighteen minutes from the injection, the animal died. The only remarkable appearance was, the distension of the heart and larger arteries and veins with blood. The lungs were sound, crepitating, and contained very little blood.—*Journal de Chimie et Pharmacie, &c. Oct.* 1825.

III. *Structure of the Internal Membrane of the Stomach and Intestines, and Description of a Change peculiar to its Villosities.* By M. Leuret.

"There is no new thing," says the wise Solomon, "under the sun;" and certainly never did any science more frequently evince the truth of this assertion, than that of medicine. Our new theories are but old opinions in new apparel — our discoveries are, many of them, little more than the recognition of old and formerly established facts. But a few years since, and Bichat reigned despotically over the schools of France, and his dogmas, as utterly incontrovertible, were echoed and re-echoed from one end of Europe to the other.

Now, however, there seems to be what in professional language we may be permitted to call a reaction, and, as it happened to the medical theorists of the last century, every writer detracts a little. His general correctness is allowed, but in one point he has certainly erred; and so they proceed, till like Jack in the Tale of the Tub, they have taken 'off the whole piece, cloth and all, and flung it into the kennel.' Perhaps, however, this is as it should be, and eventually 'from this stripping, pulling, tearing, renting,' we may find some ground to rest upon. In the mean time, nevertheless, we must rest in glorious uncertainty. The internal membrane of the stomach was, for a long period, distinguished under the name of nervous, and then villous. Then Bichat came, shewed a general analogy in the membranes secreting mucus, and that lining the intestinal canal, and gave one name to the whole; and now comes M. Leuret, who tells us we are all wrong, and that the membrane is again a villous membrane. M. Leuret, however, says not this without some reason, though, as it seems to us, he makes somewhat too much of it. He justly observes, that the office of the mucous membranes and that of the gastro-intestinal membrane are different — that the former produces secretions to preserve their moisture, and to enable them to support the contact of foreign bodies — but that the latter has a much more important office. 'For of what use would be the secretion of fluids effecting the production of chyle, if no vessel should carry it into the circulation — no orifice should absorb it. To effect digestion then, there should be a peculiar apparatus, a peculiar system, in a word, villosities; and these villosities should exist only in the internal membrane of the stomach and intestines.'

'This membrane is indeed provided with cryptæ destined to facilitate the passage of aliment and fæces; but these cryptæ are not sufficient to characterise the membrane upon which they are found; they are accessaries only to an innumerable quantity of villi, the use of which is far more important.'

With respect to the structure of the mucus membrane, M. Leuret notices the description given by Bichet, that it consists of three layers, the epidermis, papilli, and chorion, or true skin. Of these parts, however, the first has never been traced farther in man, than the cardiac orifice of the stomach, where it terminates abruptly; and Béclard, with whom most anatomists will probably be disposed to agree, does not admit its existence in the stomach and intestines. With respect to the villi, with which in Bichat's system the term 'le corps papillire' is synonymous, M. Leuret endeavours to prove a distinction between the two. Here are his statement and reasoning. 'Under the epidermis, the papillary body is placed, aud which is justly regarded as the seat of sensibility. The prominences, or papilli are very numerous, but so small that they cannot be perceived with the naked eye. On the internal surface of the stomach and intestines in the dead body, small white points are seen, which have been considered as papilli. As these parts were generally seen after death, it is not surprising that they were taken for papilli, but examination in the living animal shews how little the resemblance is in reality. The whole internal surface of the bowels is

then found covered with an innumerable quantity of prominent, red, contractile villi; very small in the stomach and great intestine, larger in the small intestines, and particularly evident in the duodeum, where they are a line and a half in length. After death they gradually diminish, and a few hours after the body has become cold, very minute examination is required to discover them. Now, if these are similar in structure and function to the papilli, they should be very sensitive; but they are not so, for they may be torn and pricked in the living animal, without any evidence of pain being produced.

Again, the chorion is a resisting membrane formed of thick and close laminous tissue. Does it exist in the gastro-intestinal canal? To determine this point, M. Leuret detached a portion of intestine, turned it, and distended it with air. The air penetrated very soon across the muscular and fibrous tunis, through the interval which was left between the two edges of the peritoneum, where it was cut off from the mesentery. It gradually separated the internal membrane, now become external, and rendered its structure evident. It is a pellicle of an extreme transparent thinness, under which are cells of different sizes, and the sides of which serve for the division of vessels. Can a membrane almost as thin as the arachnoid be considered as analogous to the chorion? M. Leuret answers in the negative. A single example will serve to shew the morbid alteration which M. Leuret announces.

An officer, thirty years of age, died after having for a month previously had copious liquid and fetid evacuations. The internal surface of the ileum was covered with black points. There was no other alteration in the digestive canal, and these points were the villi.

M. Leuret admits that black points were observed by M. Andral, but says that the latter erred in confounding them with the cryptæ. M. L. concludes by claiming the title of 'villous membrane' for the internal tunic, which, it must be acknowledged, is an exceedingly important matter, and well worthy the consideration of the Royal Colleges. We commend M. Leuret to their attention.

PART IV.

INTELLIGENCE RELATING TO MEDICINE AND THE MEDICAL SCIENCES,

FOREIGN AND DOMESTIC.

I. *Lachrymal Nerve,—important Anatomical Discovery relative thereto.*

At a late meeting of the *Académie de Médicine* in this city, (*Paris*) Mons. Amusat made known an important fact, relative to the

origin of the LACHRYMAL NERVE, which he, it seems, has discovered to be a branch of the *fourth*, or *pathetic* nerve; and not, as has hitherto been supposed, a branch of the *ophthalmic* portion of the *fifth*.

The accuracy of this statement has been confirmed by Mons. Richerand and others; and the fact itself was demonstrated to the members present at the meeting alluded to, on a preparation brought by Mons. Amusat for the purpose. Every anatomist, indeed, may satisfy himself upon this point; but in order to arrive at the truth, he must proceed from *before-backwards*, (*d'avant en arrière*) a course contrary to that usually pursued.—*Private Letter from Paris.*

This discovery, we may observe, is particularly interesting at this moment, on account of the speculations and inquiries recently set on foot by Mr. Charles Bell and others, relative to the uses of the *fifth* pair of nerves.

II. *FATAL HÆMORRHAGE into the STOMACH, without manifest RUPTURE of any BLOOD-VESSEL.—Case, &c.*

A PATIENT of Dr. Elliotson's, in St. Thomas's Hospital, whose lungs were somewhat diseased, was sitting up in his bed one morning, (some time in 1823,) not particularly ill, when he suddenly *vomited up some blood*, fell back, and in two or three minutes expired.

On examination, the stomach was found distended to the utmost, and filled by an immense coagulum of blood, forming, as it were, a beautiful mould of this organ. Yet, so small was the ruptured vessel, that Dr. Elliotson states he could not discover it, nor any other mark of disease in the stomach, than a trifling abrasion of the mucous membrane in one spot.—*Med. Chir. Trans.* 1825, *p.* 52.

Observations.—This case may be considered as an illustration of some remarks we had occasion to make in our last Number, (p. 396) relative to the large discharges of blood which may take place from the mucous membrane of the stomach, *without manifest organic lesion*, unless, indeed, the *trifling abrasion* discovered at one spot, is to be considered as the sole source of the hæmorrhage in this case.

It is to be regretted that Dr. Elliotson has not given us the *weight* of the 'immense coagulum of blood' found in the stomach, as this phrase is too indefinite to enable us to form even a probable conjecture, with respect to the quantity of blood lost by the patient.

III. *NATIVE OIL OF LAUREL, or Aceyte de Sassafras.*

THIS is an essential oil, highly esteemed as a medicine, it appears, by the Indians on the Oronooko, and lately extolled as a remedy for gout, rheumatism, and other disorders. Dr. TRAILL, of Liverpool, having received a quantity of it from a friend in the West Indies, was induced, in consequence, to make some trials with it, of which he gives the following account, in a letter to Dr. Duncan, Jun., and adds, he has no doubt of its proving a valuable addition to our Materia Medica.

'I took it myself,' Dr. Traill says, 'for six weeks, to the extent of

twenty drops, two or three times a day, in the hope of obtaining relief from a very painful *sciatica*, but without the least advantage. I found it by no means unpleasant to the stomach, in doses of from ten to fifteen drops, on a lump of a sugar; and it is a grateful and powerful *diuretic*. In several cases of general chronic rheumatism, however, I have prescribed it with *marked advantage*. In one instance it removed, in a short time, a chronic rheumatism of the limbs, which had for nearly two years afflicted the patient. In another case, after severe acute rheumatism, it had a marked influence in mitigating the distressing flying pains, which so often follow that painful disease.'

Dr. Traill also states, that he used it *externally* in rheumatism, but did not find it possessed of any advantage when thus employed, over the more common rubefacients, or stimulating liniments; and its high price, moreover, renders this an objectionable mode of employing it. It seems, he adds, a species of turpentine, and resembles the balsam of copaiba, in odour and taste, more than any other substance.—*Edin. Med. Journ., Oct., p.* 421.

IV. *Coroners' Inquests.*

Dr. Gordon Smith, in one of his recent lectures, introduced the subject of giving attendance on the coroner and his jury, as professional witnesses, — suggesting a course of procedure, the knowledge of which may not be unimportant to some of our readers.

It is not unfrequently matter of complaint, on the part of medical practictitioners, that their time is taken up by such calls, in a way that is on various accounts vexatious, and in some degree (according to Dr. Smith's view of the matter) *unjust*. On criminal trials, witnesses are not entitled to claim their expenses, and for attendance on inquests, which are the ordinary preliminaries to such trials, the gratuitous attendance of medical witnesses becomes a burden upon individuals, when often repeated. The common opinion has been, even among medical men themselves, that this gratuitous service to the state is a matter of duty, or debt, on their part, in return for certain immunities and privileges they enjoy, as to public burdens. Dr. Smith, having, in his work on Medical Evidence, contested the accuracy of this assumption, we shall not here repeat any of the arguments he has used for the purpose, but shall merely observe, that he carefully inculcates the claims of *individuals*, in a state of suffering, to our best services, without respect to remuneration, as perfectly distinct from those of the *public authorities* to aid the administration of justice, by the exercise of professional skill.

When called upon for this purpose, his view of the matter is, that medical men have *a right* to payment; but in the existing state both of law and custom this cannot be claimed. As far as the coroner's inquest goes, it would appear that we have the remedy of the evil in our own hands, and, if it can be remedied in that quarter, the heaviest part of the burden will be removed; as many an inquest is held to which no trial succeeds.

The remedy in question identifies itself with the due discharge of our duty on such occasions. It is notorious that bodies are very

seldom opened for the satisfaction of a coroner's jury—that the most frivolous pretext, even in very suspicious cases, will be adopted in order to supersede the performance of this duty—and that medical men are apt to encourage the omission. For the last perhaps there might be more than one reason assigned; but it arises frequently and generally from an anxiety to avoid as much trouble and delay as possible, when there is no reward to be looked for. Accordingly, professional opinions as to the cause of death are very often mere *conjectures*, which, where *certainty* is attainable, amounts to a mockery of justice.

But if practitioners were uniformily to decline giving any opinion, on the ground that they cannot swear to any cause of death without examining the body, Dr. S. conceives that matters would be every way amended. For, although the coroner can summon and examine us, gratuitously, and we must attend his subpœna, his power to compel to the performance of labour, on the same terms, may be disputed; and if, on such representation being made by a practitioner, he were to be ordered to perform the dissection, he would be warranted to stipulate for fair remuneration.

The observance of this course would lead to the alternative, either of treating the medical witness fairly as to compensation for time and attendance; or of inquests becoming (what they are already very often) *manifestly* a coroner's job; which would lead to some legislative measure to arrange the matter in a right way. These observations do not probably apply to parish surgeons, who in making their agreement are aware that they will have to attend on such occasions, and commonly receive a fee for so doing; but although they might be employed to perform the dissection, the presence of any other medical witness should be considered to entitle him to payment; for although the coroner can exact evidence without allowance to the witness, he cannot exact that he should go where he must become qualified to be a witness.

It is ridiculous to talk of our privilege in being exempted from sitting, in our turns, on juries, if we are to be ever and anon at their call, in the way now observed.

V. *Colica Pictonum.*

From the coincidence observed between certain states of the spinal marrow and of the intestinal canal, M. Serres has been led to entertain the idea that the spinal marrow may be the primitive seat of the painter's colic. In pursuance of this view of the disease, he has successfully employed the tincture of nux vomica by friction on the dorsal region of the spine, and has administered the same medicine internally.—*Arch. Gen.*

VI. *Clinical Remarks on the Diseases most prevalent during the preceding Month.*

November has worn its usual aspect, gloomy, damp, and stormy at the commencement—warmer, but still overclouded, towards the 20th of the month. The cold at the beginning was severe, with night frosts.

Fever has prevailed to a very considerable extent through the whole month, though not generally in an aggravated form, most

of the patients remaining up through the whole disorder, and even walking out. In one fatal case, which had been suffered to proceed for three weeks before any assistance was required, petecluæ formed extensively, and hæmorrhage took place, from the gums and bowels. On examination after death, the ileum, cæcum, and colon, were distended with coagulated blood, the lower part of the ileum, from about six inches above the colon, exhibited a varicose appearance of vessels, which contained firm coagula, and gave a feeling of hardness to the hand. In one spot there was a circular raised black band, very hard, and containing a similar black coagulum. The centre of this was depressed, and at first gave the idea of ulceration, but it was covered with mucous membrane. In some places were small ulcerations, with black edges, interspersed with orange-coloured patches, to which many small vessels could be traced. These appearances extended a short distance into the ascending colon. The man appeared to die from the exhaustion produced by the hæmorrhage. He had always been of an extremely costive habit. Catarrh, and its accompaniments, cough, pneumonia, and asthma, have prevailed, as might be expected, amidst the fogs and damp atmosphere of the month. The catarrh frequently ran on into slight, but continued fever, persisting for a week or ten days before any manifest improvement could be perceived. Pneumonia was almost exclusively confined to children. The asthmatic patient had for the most part been long subject to the disease, and most of them were peculiarly susceptible of the slightest change in the temperature of the air. It was somewhat curious to observe, that the earliest applicants were those whose labours rendered them subject to pneumonic affections. As bakers, millers, milkmen, out-door labourers, washerwomen, and those in whose shops there was much dust, as pearl-button makers, &c.

Rheumatism, principally in a chronic form, has frequently presented itself, and has generally been readily removed, by colchicum, or colchium, and cinchona bark, mixed. In instances where it was confined to a single muscle, as the deltoid, acupuncturation has been employed, and always with success.

We have met with two very remarkable instances of the effect of the argentum nitratum in suspending the attacks of epilepsy. In the first case, the patient was consumptive, and will unquestionably in no long time fall a victim to that disease. About two months since he was seized with a severe epileptic paroxysm, which returned regularly every day at 2 P.M., and continued nearly an hour. After these had continued for a fortnight, or perhaps more, he was ordered *five* grains of the argentum nitratum three times a day. The first day, after having taken two pills, he had a slight shivering at the usual time, but has had no attack since. We saw him in one of these attacks, so that we have no doubt as to its nature. In the other case, there was nothing peculiar, except its frequency, occurring three or four times a week. This patient, a boy, sixteen years of age, had had no attack for three weeks: care, in both instances, was taken to keep the bowels open.

Several examples of bronchocele, that have been cured by iodine, have occurred to our notice. The patients have continued the

tincture, in increasing doses, for half a year, in one instance; in all for four months. We have paid considerable attention to the effect of this drug in producing absorption of the mammæ. In one case this result has been unequivocal — the breasts are not half their former size. In the remainder, diminution of these glands has not yet been manifest.

VII. *Subject proposed by the Medical Society of Edinburgh for a Prize Essay.*

The Royal Medical Society of Edinburgh propose as the subject of their Prize Essay, the following questions:—

1st. — What is the respective agency of the veins, and the lymphatics, in the process of absorption?

2d.—By what means or mechanism do these vessels accomplish this process? What are the proofs which shew that the substances absorbed are taken up by open mouths or orifices, or pass through the coats in the manner of imbibition or transudation?

3d.—Is there any reason to believe that the individual animal tissues possess a distinct power of absorption, or that this process is influenced by the nature of the animal tissues?

The sum of twenty guineas, or a medal, or a set of books of that value, will be given to the author of the best dissertation on the subject proposed by the Society, for which all men of science are invited to compete.

The dissertations may be written in English, French, or Latin, and must be transmitted to the Secretary on or before the 1st of December, 1826; and the adjudication of the prize will take place in the last week of February following.

To each dissertation must be prefixed a motto, which must likewise be written on the outside of a sealed packet, containing the name and address of the author. No dissertation will be received without the author's name affixed; and all dissertations, except the successful one, will be returned, if desired, with the sealed packed unopened.—(Nicholson Bain, Secretary.)

VIII. *Society of Physicians of the United Kingdom.*

At a meeting of this Society the 2d of November, the following officers were elected for the ensuing year:—

President—Dr. Birkbeck.
Treasurer—Dr. Clutterbuck.
Secretary—Dr. Shearman.

Communications, whether from members or others, addressed to the Secretary, No. 30 Northampton Square, will be submitted to the consideration of the Society, and the most interesting and important of them be selected for publication, as soon as sufficient materials shall be collected to form a volume.

IX. *Prize Question for* 1826.

Proposed by the Academy of Sciences of Paris; the prize a gold medal, value 3000 francs—(about £120.)

Subject.—A general and comparative history of the circulation of the blood, in the four classes of sertchrated animals, before and after birth, and at different ages.

Memoirs to be received until Jan. 1, 1827.

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

1. A Manual of Anatomy: arranged so as to afford a concise and accurate Description of the different Parts of the Human Body. From the French of A. L. J. Bayle. Revised and improved by William Bennett, M.D. Edin. 1825. 12mo.

2. Additional Observations on the Treatment of certain Severe Forms of Hæmorrhoidal Excrescence: illustrated by Cases. With the History of a Case in which an Enlarged Parotid Gland was successfully removed. By John Kirby, A.B., lately President of the Royal College of Surgeons in Ireland; one of the Surgeons of the Coombe Hospital, and of the Charitable Infirmary, Lecturer in Surgery, &c. 8vo. Pp. 150. Dublin, 1825.

3. Elements of Physiology. By K. A. Rudelphi, M.D., Professor of Medicine, and Member of the Royal Academy of Sciences of Berlin. Translated from the German, by William Dunbar How, M.D. In three Volumes. Vol. I. 8vo. Longman. 1825.

4. Useful Hints to Travellers Going to, or already Arrived in, South America; and to Military Men, and Merchants, bound to the West Indies, India, or any other Tropical Climate. 12mo. Pp. 120. London, 1825.

5. Observations on the Transfusion of Blood; with an Account of two cases of Uterine Hæmorrhage, in which that Operation has been recently performed with success. By Charles Waller, M.R.C.S., and of the Hunterian Society, &c. 8vo. Pp. 36. London. 1825.

Quarterly Report of Prices of SUBSTANCES *employed in* PHARMACY.

		s.	d.
Acaciæ Gummi elect.	lb.	3	8
Acidum Citricum		20	0
——— Benzoicum	unc.	3	0
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Ammoniacum (Gutt.)		7	6
——— (Lump.)		3	9
Anthemidis Flores		3	0
Antimonii oxydum Ver.		6	0
——— sulphuretum præp.		3	6
——— sulphuretum præp.	unc.	0	6
Antimonium Tartarizatum	unc.	0	4
Arsenicum Alb. Sublim.	lb.	2	6
Assafœtidæ Gummi-resina	lb.	4	6
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Balsamum Peruvianum	lb.	20	0
——— Tolutanum		48	0
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Bismuthi Subnitras	unc.	1	0
Calamina præparata		0	6
Calcis Murias	unc.	0	3
——— Muriatis solutio	lb.	1	0
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Cambogia		7	6
Camphora		4	9
Canellæ Cortex elect.		2	6
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Castoreum	unc.	3	0
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Cera alba		3	4
——— flava		3	3
Cinchonæ cordifoliæ Cortex (yellow)		8	6
——— lancifoliæ Cortex (quilled)		12	0
——— oblongifoliæ Cortex (red)		12	0
Cinnamomi Cortex		14	0
Coccus (Coccinella)	unc.	2	6
Colocynthidis Pulpa Turk.	lb.	6	9
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Cupri sulphas	lb.	1	0
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Emplastrum Ammon. c. Hydrar.	lb.	6	6
——— Cantharidis		6	6
——— Hydrargyri		3	0
——— Opii		3	6
——— Resinæ		1	8
——— Saponis		1	8
Extractum Aconiti	unc.	0	10
——— Anthemidis	lb.	7	0
——— Belladonnæ	unc.	1	6
——— Cinchonæ		3	0
——— Cinchonæ resinosum		4	6
——— Colocynthidis		4	6
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——— Conii		0	6
——— Elaterii		35	0
——— Gentianæ		0	4
——— Glycyrrhizæ	lb.	7	0
——— Hæmatoxyli	unc.	0	5
——— Humuli		1	0
——— Hyoscyami		1	0
——— Jalapæ	1s. 6d. Res.	3	6
——— Lactucæ Sativæ	unc.	1	0
——— ——— Virosæ	unc.	1	0
——— Opii		4	6
——— Papaveris		0	9
——— Rhæi		2	0
——— Sarsaparillæ		2	0
——— Stramonii Sem.	unc.	5	0
——— Taraxaci		0	9
Ferri subcarbonas præcip.	lb.	3	6
——— sulphas		1	0
Ferrum ammoniatum		3	4
——— tartarizatum		3	4
Galbani Gummi-resina		14	0
Gentianæ Radix elect.		1	6

	s.	d.
Guaiaci resina	12	0
Hydrargyrum purificatum	5	6
——— præcipitatum album	8	0
——— cum creta	3	9
Hydrargyri Oxymurias ..... unc.	0	8
——— Submurias	0	8
——— Nitrico-Oxydum	0	8
——— Oxydum Cinereum	1	
——— Oxydum rubrum	4	6
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——— ——— rubrum	0	6
Hellebori nigri Radix ..... lb.	2	6
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Jalapæ Radix	6	0
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Kino	7	0
Liquor Plumbi subacetatis ..... P. lb.	0	9
—— Ammoniæ ..... 1 0 .. 2 6	5	3
—— Arsenicalis ..... lb.	3	0
—— Potassæ	1	4
Linimentum Æruginis ..... lb.	3	6
——— Camphoræ comp.	5	0
——— Saponis comp.	5	0
Lichen	2	0
Magnesia	7	0
Magnesiæ Subcarbonas 2 6	3	6
——— Sulphas	0	6
Manna	5	6
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Moschus pod, (32s.) ..... in gr. unc.	46	0
Mastiche ..... lb.	8	6
Myristicæ Nuclei	10	4
Myrrha	7	0
Olibanum	3	0
Opopanacis gummi resina	20	0
Opium (Turkey)	36	0
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——— ——— secundum	11	0
Papaveris Capsulæ ..... (per 100)	2	9
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Plumbi Acetas	1	6
——— Subcarbonas ..... lb.	0	8
——— Oxydum semi-vitreum	0	8
Potassa Fusa ..... unc.	0	6
——— cum Calce	0	2
Potassæ Nitras 0 6	1	0
——— Acetas	7	0
——— Carbonas	2	6

	s.	d.
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——— Sulphas	1	0
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——— Canadensis	6	0
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Tinct. Ferri muriatis	5	0
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Valerianæ Radix	1	4
Veratri Radix	1	10
Vinum Colchici	4	0
——— Ipecacuanhæ	4	6
——— Opii	8	0
Unguentum Hydrargyri fortius	4	0
——— ——— Nitratis	5	6
——— ——— Nitrico-oxydi	4	0
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From the 19th of OCTOBER to the 20th of NOVEMBER, 1825.

By Messrs. HARRIS and Co.

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October.	Moon.	Rain Guage.	Therm.			Barom.		De Luc's Hygrom.		Winds.		Atmo. Variation.		
			9 A. M.	Max.	Min.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	2 P. M.	10 P. M.
20			42	45	35	29 00	29 14	75	68	N	NW	Fine	Fine	Fine
21			40	44	38	29 30	29 52	66	65	NNW	NW	——	——	——
22			44	50	35	29 70	29 95	79	75	N	N	——	——	——
23			43	47	45	29 99	29 98	77	77	WSW	W	Fog.	——	——
24			47	53	40	29 84	29 74	78	75	W	NW	——	——	Rain
25		,06	45	48	33	29 78	29 85	77	80	WNW	WNW	Fine	——	Fine
26	●		39	47	42	29 98	29 85	72	84	NW	W	——	——	Clo.
27			44	46	41	29 93	29 93	82	77	NNE	W	——	——	——
28			52	57	45	29 87	29 93	85	77	W	WNW	Fog.	——	——
29			53	57	52	29 93	29 91	81	82	WSW	WNW	Fine	——	Clo.
30			44	55	45	29 85	29 71	79	77	WSWv	WNWv	——	——	Rain
31		,32	46	53	46	29 88	29 95	73	75	W	WNW	——	——	——
1			52	56	45	29 81	29 60	83	84	W	W	Rain	——	Rain
2		,29	46	52	51	29 69	29 52	75	81	WNW	SW	Fine	——	Sleet
3	☾		53	48	35	28 89	29 04	65	83	WSW	WNW	——	——	Rain
4		,23	41	45	34	29 44	29 70	75	75	WNW	N	——	——	——
5		,36	35	45	52	29 86	29 60	79	85	WNW	SW v	——	Rain	Sleet
6			56	56	38	29 08	29 15	80	76	W	W	——	Fine	Fine
7			40	43	34	29 41	29 25	72	75	WNW	W	——	——	Rain
8		,39	36	45	40	29 30	28 95	78	86	WSW	SW	——	——	——
9			43	45	37	29 01	29 68	75	75	WSW	WSW	——	——	Fog.
10	☾		41	43	36	28 76	28 85	96	90	Evar	NN Ev	Rain	Rain	Rain
11		,32	40	42	35	29 29	29 50	81	80	N	N	Clo.	Fine	Fine
12			36	39	30	29 72	29 93	71	71	NNW	NNE	Fine	——	——
13			31	36	36	29 84	29 80	78	71	NNW	NW	——	——	——
14			42	45	35	29 75	29 85	84	74	WNW	N	Fog.	——	——
15			39	43	32	29 97	30 08	78	75	N	WNW	Fine	——	——
16			35	40	38	30 08	30 10	77	85	NW	WNW	Fog.	——	——
17	☽		40	44	38	30 00	29 77	90	90	W	WNW	Fine	——	——
18		,13	41	51	40	29 87	29 67	87	87	WSW	WSW	——	Rain	Sleet
19			41	45	35	29 80	29 89	86	80	WNW	WNW	——	Fine	Fine

The quantity of rain fallen in October was 2 inches 70-100ths.

ERRATUM in last Journal,—for 2 inches 128-100ths, read 2 inches 28-100ths.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the EDITORS, to the care of Messrs. T. and G. UNDERWOOD, 32 Fleet Street.

Errata for the last Month's Repository.

Page 467, line 24, *for* practical, *read* partial.
— 469, — 12, *for* hack *read* bark.
— 482, — 19, *for* Bulborough, *read* Balbaugh.

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END OF THE FIRST VOLUME.—NEW SERIES.

LONDON:
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THE

LONDON MEDICAL

REPOSITORY

AND

REVIEW.

EDITED BY

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Quærere Verum. HORACE.

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THE LONDON MEDICAL

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No. 145. JANUARY 1, 1825. Vol. XXV.

No. VII.——NEW SERIES.——Vol. II.

PART I.

REVIEW.

I.

PATHOLOGICAL ANATOMY OF PHTHISIS.

Recherches Anatomico-Pathologiques sur la Phthisie. Par P. Ch. A. Louis, Docteur en Médecine des Facultés de Paris et de Saint-Petersbourg, &c. A Paris, chez Gabon et Compagnie. 8vo. 1825.

Anatomical and Pathological Researches concerning Phthisis. By P. Ch. A. Louis, M.D., of the Faculties of Paris and St. Petersbourgh, &c. Paris. Gabon and Co. 8vo. 1825.

This is unquestionably one of the most valuable works on the subject of consumption that has appeared for many years. Confirming in many particulars the results of MM. Bayle and Laennec's minute researches, it adds many particulars to both. The plan of the author seems to have been that very excellent, but very difficult, certainly not very common one, of attending as closely to all the circumstances of the disease treated of as if it had been a disease never observed before: and he has availed himself of peculiar opportunities with a zeal, a perseverance, and a patience of fatigue, of which the effects are visible in every page. Exclusively engaged in hospital practice since the year 1821, having then, and as it appears for this purpose, almost wholly declined private engagements, M. Louis has been in the habit of keeping accurate histories of all the patients admitted into M. Chomel's wards in the hospital La Charité, which accommodate forty-eight patients; twenty-four men, and the same number of female patients. The number of

these has amounted to 1960, including 358 fatal ca
which 127 were cases of phthisis, 40 more having tu
in the lungs. Every symptom and every accident
former life of these patients, which seemed of conse
towards elucidating the cases, was carefully and un
noted by him; and in the diligent comparison of th
cumstances with the appearances after death, negati
dence, which is doubtless often important in such r
was sought for with diligence, and apparently en
with caution. From the double source, therefore, of
investigation of the nature, order, duration, and comp
of symptoms, and of multiplied and deliberate observa
the derangements of structure connected with, or
panying these symptoms, it will readily be suppose
useful practical information must have been obtained
subject of phthisis — a subject which yields to r
interest.

We are informed, that during the period devoted t
labours, the author passed four or five hours of eve
in the hospital, an expenditure of time which ma
zealous enough to wish they could afford, but which
incompatible with the exertions generally called for
men have attained middle age; and which few are di
like M. Louis, to make afterwards. The youngest
tioners are frequently the most zealous observers,
course the least exact; and when experience has co
the errors of youthful observation, the love of obse
often exists no longer. In this point of view, the p
tion of M. Louis is almost as singular as it is valuable

The work is naturally divided into two parts; one
ing of the details of morbid anatomy; the other of de
symptoms, causes, and treatment. Any review of a
full of facts, and so judiciously sparing of theory, r
imperfect; but it shall be our care to convey to those
readers who have not access to the original, or who
acquainted with the language in which it is written, a
of its contents in a condensed form as is consistent wit
limits which it is incumbent on us to observe; follow
author's order, and commencing with the pathologic
tomy of the disease in question.

The Lungs.—M. Louis, rejecting the divisions of p
made by Bayle, as the granular, cancerous, melanos
agrees with Laennec in considering the existence of tu
in the lungs as the sole cause of the disorder; and
firms in several particulars the observations made
latter author; among the rest, that of granulations be

first degree of tubercular formation: he has always found them, like tubercles, more numerous in the upper part of the lungs, and often limited to that portion: they sometimes retained a small size when they had existed long; and at other times acquired their ordinary size, or that of a small pea, in the course of three or four weeks.

'In a certain stage there was a yellow opaque point in the centre of them, and this was largest in those seated nearest the upper part of the lungs; so that when the lungs were examined from below upwards, the order was found to be this: first, grey semi-transparent granulations; then granulations of which the interior was yellowish and turbid (*louche*); and, lastly, granulations which were of a yellowish white throughout, or completely tubercular. These last were, in general, the only granulations found at the upper part of the lungs. It was rarely found that there were tubercles in the lungs, without there being grey semi-transparent granulations also, and *vice versâ*.'—P. 3.

The grey semi-transparent matter was sometimes found in the form of an irregular mass; but whether in this form, or in that of granulations, it was equally found sooner or later converted into tubercular matter. Tubercles and cavities were, for the most part, found to exist equally on both sides of the thorax. When the cavities in the lungs were recent, they contained a thick yellowish matter, resembling pus; when of longer existence, and particularly when irregular and unprovided with a false membrane, they contained a greenish or greyish fluid, of a dirty disagreeable aspect, more or less consistent, sometimes more or less tinged with blood; the latter change appearing by the expectoration to take place a few hours before death. In one example, a portion of lung was found detached from the rest, and contained in a cavity, in the middle of the contained fluid. The bronchial mucous membrane was sometimes of its usual whiteness in the neighbourhood of the tubercular cavities, but more frequently of a lively red colour, rather thickened, and sometimes with small ulcerations. Recent inflammation of the parenchyma of the lungs and engorgement, or the first degree of peripneumony, were not rarely met with: the latter affection is remarked by M. Louis to occur in the last stage of other disorders of a chronic character, and not to depend particularly on the formation either of tubercles or of cavities in the lungs. We pass over the rest of the author's observations on the morbid anatomy of the lungs, on account of their being for the most part accordant with the result of M. Laennec's researches, with which few of our readers are, and none ought to be, unacquainted.

The Pleura.—The most common appearance was adhesion of various extent and firmness.

'There was a proportion between the adhesions and the mischief within. When there were no adhesions, or only feeble and small ones, there were generally no cavities, never large ones. When the adhesions were stronger, and of more or less extent, and when they were universal, there were always cavities; and in the majority of cases, of a considerable size.'—P. 40.

Inflammation of the pleura, like peripneumony, often occurred in the last days of the disorder; and by a comparison with what was found to have taken place in other chronic disorders, did not seem to have a more intimate connexion with it: the same observation was made concerning the sudden supervention of hydrothorax at the same period.

The Epiglottis, Larynx, and Trachea.—Availing himself of the same comparative evidence which we have just seen brought to bear upon the occurrence of peripneumony, pleuritis, and hydrothorax, in the course and towards the close of phthisis, M. Louis concludes, that ulcerations of these parts are peculiar to phthisis. Only three instances of ulceration of the larynx or trachea were found in one hundred and eighty patients who had died of chronic diseases distinct from phthisis; and in two of these three, tubercles existed in the lungs.

When the mucous membrane of the trachea was ulcerated, it was generally of a lively red colour: the largest ulcerations and redness were particularly observed in the lower half of the trachea, and were occasionally accompanied with slight thickening and softening of the membrane. When the ulcerations were small, they were generally found scattered indifferently over any part of the trachea; when they were larger, they were found in the fleshy portion—an effect which M. Louis is disposed in some measure to attribute to the passage and delay of the matter to be expectorated.

'In some subjects a certain number of the cartilaginous rings were entirely denudated, became thinner, and partly destroyed, or even presented a solution of continuity along their whole extent. The last effect was only observed once: but the complete destruction of the mucous membrane of the trachea, in nearly the whole length of its fleshy portion, occurred to us in five instances.'—P. 46.

Ulcerations of the larynx generally took place at the union of the vocal chords, one or more of which were sometimes destroyed. The larynx was less often affected with ulcers than the trachea, and scarcely ever alone: its ulcers differed

from those of the trachea in being deeper, more irregular, with harder edges, and with less affection of the mucous membrane. Ulceration of the epiglottis is not much less common; generally, but not always, occurring on its laryngeal surface, and in its lower half: the ulcers of this part are of variable depth, sometimes accompanied with alteration of the mucous membrane, and sometimes not: in some cases this membrane was destroyed along the whole laryngeal face of the epiglottis. Sometimes the epiglottis was partly destroyed in its circumference, and had a festooned appearance: in one instance the epiglottis was quite destroyed. As in none of the above cases were there found any tubercular granulations in the substance, or on the surface of the epiglottis, larynx, or trachea, M. Louis considers the ulcers generally to depend on inflammation. The proportion of the affection of these parts in 102 cases, was—of the epiglottis, 18—of the larynx, 23—and of the trachea, 31; and it would seem that it takes place more frequently in men than in women. The only other morbid appearance observed in these parts was a slight œdema of the glottis, occurring in one case only.

Although the parts above noticed constitute the seat of phthisis, yet the careful examination of the other organs of the body, in the subjects of the foregoing observations, presented so many interesting circumstances to the pathologist, that we cannot avoid pursuing our task of analysis still further.

The Heart and Pericardium.—M. Louis's experience is opposed to the belief of phthisis being a cause of aneurism of the heart. In the very few cases in which the heart was found enlarged (3 in 112), the left ventricle was the seat of the enlargement; a circumstance not well accounted for by any supposed obstruction to the pulmonary circulation. In several cases, the bulk of the heart was diminished, particularly in those in which the progress of the malady had been slow. No organic lesion of the heart was found in any case. Adhesion of the pericardium was very rare: indeed, none of the appearances under this division were found to be peculiar to phthisis. Diminution of the heart seemed particularly to accompany cancerous affections, especially of the stomach and uterus.

The Aorta.—Increased redness of the aorta was often found in patients whose age was between twenty and thirty: soft patches of a yellow colour, or white and cartilaginous patches, ulcerations, or portions of osseous matter, existed in some

cases, generally near the bifurcation of the aorta, and in patients of from thirty-six to sixty-five years of age. A decreased size of the aorta was observed to prevail in subjects dying of phthisis; but the same was observed when the patients had died of other chronic diseases, especially of cancer. The redness above noticed also was not confined to phthisical cases; and it seems doubtful, whether this appearance, and, indeed, all those noticed in the aorta, may not be the natural effect of different periods of life.

Pharynx and Œsophagus. — In a very small number of cases, these parts were affected with ulcerations. In three cases, the lower portion of the œsophagus was in a state of softening (*ramollissement*), and in these cases the stomach was similarly affected.

The Stomach. — In ninety-six subjects this organ was examined with great care, and nine examples were met with of increase of volume, with displacement: in six of these, the great curvature descended as low as the crest of the ilium; and there was in all an accompanying enlargement of the liver. These affections of the stomach seemed scarcely ever to occur, except in phthisical subjects. In most of the chronic cases, the stomach was found to be more or less affected; but, in the cases of phthisis, the most frequent appearances were *ramollissement* and tenuity of the mucous membrane,—effects which M. Louis is inclined to ascribe to inflammation; and as these were the least frequent effects of other chronic diseases, he concludes, that phthisis disposes to the severer forms of inflammation of the gastric mucous membrane. Several other states of the mucous membrane of the stomach were noticed,—as redness, with occasional thickening; greyness, with softening, and an appearance of being tuberculated; ulceration; softening, without redness or thickening; &c. &c.; all of which conditions are minutely described by the author, and most of which, when we come to speak of the second part of his work, will be found to have an intimate connexion with symptoms very commonly supervening on consumption of the lungs.

The Duodenum. — The lesions of this part of the intestine were so rare, both in the phthisical and in the other subjects examined by M. Louis, as somewhat to discountenance the importance which certain authors have been disposed to attribute to it. In sixty phthisical subjects, no more than three cases of ulceration were found; and in sixty-five, who had died of other disorders, only one example occurred of this state; nor

were changes of any other kind in the duodenum either frequent or important.

*The small Intestines.** —The changes found in the small intestines were of much higher interest; and although our ample notice of M. Billard (vide No. V. of the present Series) has recently led us to devote some space to considerations relating to the pathology of the interior of the intestinal canal, and although M. Louis acknowledges that there is much analogy between his remarks and those of that pathologist, yet as they are, unquestionably, no less the result of careful and repeated examinations, and as the particulars which have most connexion with the present subject have not been laid before the reader in a detailed manner, it will not be improper to notice some even of the minutiæ of the morbid anatomy of this part of the bowels, premising some remarks on its anatomy in a sound state; and in so doing we shall use the words of our author.

After speaking of the extreme tenuity and the transparency of the intestine in this situation, M. Louis proceeds to describe the mucous membrane.

'The mucous membrane is naturally white; and it is rather thicker in the jejunum than in the ileum. If an incision is made in it, and a portion taken hold of by the fingers or pincers, we can detach shreds of from five to six lines in length. This is a sufficient indication of the consistence of the membrane; and when it is impracticable, the part is more or less diseased.

'But the uniformity of this membrane is interrupted, at uncertain distances, by oval patches of very various dimensions. These are sometimes seen in the whole extent of the intestine, but commonly in the three last fourths of it. They are generally twenty or thirty, and sometimes more, in number; are situated opposite to the mesentery, are from one to four inches in length, and from eight to ten lines in width. They commonly become more numerous and larger near the cæcum, forming an inconsiderable projection, but sensible to sight and touch; their thickness is double, triple, or quadruple that of the surrounding mucous membrane; they are completely opaque, of a white or greyish colour, sometimes spotted with blue, and are destitute of the velvet aspect of the rest of the intestine. Their surface presents numerous grains, smaller than millet seed, and of a somewhat yellowish white colour: when they are detached in the manner above mentioned, the same little grains are observed on the adherent surface; and if one of these detached patches is placed between the eye and the light, the interstices between the grains appear thin and semi-transparent, nearly like the rest of the mucous membrane.

* Conformably to the arrangement of M. Louis, the duodenum has been spoken of separately, and the ileum and jejunum alone are comprehended under the term *small intestines*.

'This structure, which is not always equally apparent, becomes particularly evident in some morbid conditions, when the mucous membrane has a deep red colour; for instance, after diseases of the heart. In such cases, the little grains preserve their natural white or yellowish colour, and they are thrown into strong relief by the colour of the interstices, which is nearly as red as that of the surrounding mucous membrane: the patches then seem, what they really are, an agglomeration of minute grains, which are unquestionably glandular.'—P. 77.

The blue spots, or points, appear to be the orifices of the little grains just described. Occasional varieties occur in the patches: they are sometimes confluent; and they appear less prominent in the neighbourhood of the valvulæ conniventes. These patches are of considerable pathological importance; for although it has been mentioned in the above extract, that they do not always participate in the changes of the mucous membrane, yet they are often affected when the membrane is not; as in bad fevers, in which they become increased in thickness, their glandular grains undergo enlargement, their orifices become gaping, and their whole structure more evident.

'They soon become softened, and, whilst the subjacent cellular tissue becomes thicker every day, the patches ulcerate, and undergo complete destruction. It may thus be understood, why the patches and ulcerations observed in severe fevers have an oval or elliptic form, and are situated opposite the mesentery, and almost always in the last part of the ileum. The most common seat of the ulcerations which take place in the course of phthisis is also in these patches: sometimes, indeed, the ulcerations take place here exclusively, and the mucous membrane surrounding them is perfectly healthy. Lastly, it is in the middle of these patches that those perforations of the small intestines take place, which occur in acute diseases.'*—P. 80.

The changes observed by M. Louis in the small intestines, in the course of his examinations, were, softening, thickening, and redness of the mucous membrane; small submucous abscesses; semi-cartilaginous granulations; tubercular granulations, and ulcerations. The two last seem almost peculiar to phthisical subjects; and the semi-cartilaginous granulations were more common in phthisis than in other chronic affections. These (*the semi-cartilaginous*) were sometimes seated in the patches, but oftener in the spaces between them, equally in any part of the circumference of the intestine, always immediately under the mucous membrane, and

* There is a Memoir on Perforation of the Small Intestines, by M. Louis, in the *Arch. Gén. de Méd.*, 1er tome, 1er cahier; and in the London Medical Repository for June 1823, p. 503.

never in the interstices of the muscular fibres; a circumstance which induces M. Louis to regard them as nothing more than muciparous glands morbidly developed.

The *tubercular* granulations were found round ulcerations; in their centre; in the interstices of the fleshy fibres; between the peritoneum and corresponding muscular membrane; in the patches and in the intervals between them; and were almost always most frequent near the cæcum. They were never observed in the duodenum.

'To these granulations succeeded small ulcers, of which the mechanism was the same as that of tuberculous excavations in the lungs. The tubercular matter became soft, and when the softening was more or less complete, the mucous membrane was found red, thickened, and softened in the corresponding point; or else it was destroyed, and the abscess emptied on the surface of the intestine: so that the inflammation was the effect and not the cause of the tubercles.'—P. 83.

A yet more common appearance was that of ulcerations, which appeared not to be dependent upon either species of granulations. They were observed in five-sixths of the cases examined; a proportion greater than that mentioned by Bayle, which appears to be owing to the very scrupulous care with which the dissections were conducted by M. Louis. In a general way, the number, dimensions, and depth of the ulcerations were greater towards the cæcum. When they were not of great size, they were almost always situated opposite to the mesentery, in the part corresponding to the situation of the patches, which no longer existed. When larger, the ulcers occupied the whole of the circumference of the bowel. Their origin was generally indicated by their shape: succeeding to granulations, they were small and round: at other times, they were of somewhat greater extent, and preserved the elliptic form of the patches, of which they occupied the place; and this shape was the most common of any. They were sometimes annular, and more rarely linear. The colour of them was no less variable: the small ones were generally whitish; the larger were often grey mixed with red; and the long and narrow ulcerations were of a brownish or reddish-brown hue.

'The structure of the ulcerations varied according to their extent and duration. When they were small and recent, doubtless, the exposed sub-mucous cellular tissue was a little thickened, without inequalities; and the muscular tunic was not sensibly altered. The appearance of those which were more considerable was more varied. Some had an irregular surface, formed by the sub-mucous tissue more or less thickened, and by some remains of the mucous membrane. In others, there was no trace of the latter: the sub-

mucous tissue was alternately thickened and attenuated, destroyed in some parts, or even throughout, and the muscular tunic exposed. This tunic also, when thus exposed, became in turn more or less thickened; was unequal, greyish, or whitish coloured, and sprinkled with tubercular granulations. Together with this thickening, there was in most of the cases partial attenuation: more rarely, the destruction of the membrane was in some points complete. So that, as any one of the tissues constituting the intestine was exposed, it became first more or less thickened, and then ulcerated.'—P. 86.

Besides the lesions above described, small abscesses, not larger than a pea, were found in phthisical subjects, and scarcely in any other, formed in the sub-mucous cellular tissue, without ulcerations or tubercular granulations. When there were numerous ulcerations in the small intestines, there was found in that part of the intestinal canal, in the place of mucus, a turbid fluid of variable consistence, of a reddish or dull greyish colour, having the smell of animal matter subjected to maceration.

The Large Intestines.—The most frequent appearance in this part of the intestinal canal was that of softening, not only when the mucous membrane was redder and of greater thickness than natural, but when there was thickening without redness, and even when there was neither increased redness nor greater thickness; although these two latter states were seldom found without softening having also taken place. M. Louis observes, that our examination of the mucous membrane should not be limited to its colour, since its thickening is one of the most important circumstances; and he hesitates to ascribe softening *invariably* to inflammation; but thinks, that when this appearance is really the product of an inflammatory process, such process, like the peripneumony of the last stage of phthisis, takes place only a few days before death. Ulcerations were very common in the large intestines, but generally of small size: in some instances, however, very large ulcers were found in the colon and cæcum; those of the rectum were invariably smaller: the size of the former was sometimes eight or nine inches, that of the latter never more than an inch and a half or two inches. When the ulcers were not very numerous or very large, and were limited to the cæcum, or the commencement of the colon, the fæcal matter in that situation was often soft, of a dirty hue, or streaked with blood; but of a dark colour, or of a bright yellow in the rectum, affording no indication of what had taken place.

It is observed, that ulceration of the large intestines was occasionally found in subjects dying of other diseases. Out

of seven of such instances, occurring in ninety-six examinations, four were in cases of dysentery.

The Lymphatic Glands. — The lymphatic glands were frequently found to be tuberculous, and this change was peculiar to the phthisical cases, although inflammation of the mucous membrane and even ulceration, on which states the tubercular condition of the lymphatic glands has by some pathologists been supposed to depend, were not confined to cases of phthisis. The glands were also sometimes found more or less red and tumefied. The order of frequency in which they were affected was, the glands of the mesentery, of the meso-cæcum, the meso-colon, the neck, the loins, and the axillæ.

The *mesenteric* glands were tuberculous in twenty-three cases out of one hundred and two. A portion of the gland was generally only thus affected; and the glands were seldom all affected at the same time: those nearest the cæcum were most frequently so. In one case only, every gland was wholly affected, and presented no trace of its original tissue.

'In one example only, we found a small quantity of grey semi-transparent matter in the middle of a partially tuberculous gland. In all other cases, as early as any miliary granulation could be perceived, it was yellow, opaque, and truly tuberculous; so that the progress of the tubercles here was different from what M. Laennec has assigned to it in the lungs.'

'The mesenteric glands, when they had become tuberculous, presented no other organic alteration. We only in one instance remarked a shining, firm, grained matter, by the side of the tuberculous matter, having considerable analogy with soft cancer.'--P. 108.

Although inflammation and ulceration of the mucous membrane were found in subjects in whom the mesenteric glands were not diseased, it is to be observed, that there was generally, if not in all the cases, ulceration of the mucous membrane when there was glandular disease in the mesentery; and when only some of the mesenteric glands were tuberculous, they were generally those in the neighbourhood of the cæcum, the most common seat of the largest ulcers. This state of the glands appeared to have no connexion with the duration of the malady. In the case already spoken of, in which all the mesenteric glands were diseased, no tumour was felt on pressure in the region of the mesentery, nor was any pain complained of.

The glands of the *meso-cæcum* and *meso-colon*, and the *lumbar glands*, were affected in the same manner as those of the mesentery, but less frequently: and from the absence of any grey matter in any case, the development of the tubercles in these parts appeared to be the same.

The cervical glands were more or less tuberculous in the tenth part of the cases; and, like those of the mesentery, tumefied and red. A comparison of different cases seemed to prove the change not to be dependent on ulcerations within the trachea. In one case only was any pain complained of, and in this case the *axillary* glands were similarly affected, and similarly painful.

The Liver.—The most frequent affection of the liver, and one which appears peculiar to phthisis, was *fatty degeneration.* It was found in about one-third of the cases.

'In this state the liver was pale, its hue more or less fawn-coloured, and it was spotted with red both within and without. Its shape was unchanged, but its size almost always increased, and sometimes to twice what is natural; the augmentation almost always taking place in the right lobe: so that the liver covered a great portion of the stomach, occupied the epigastrium, exceeded the false ribs by three or four fingers'-breadth, reached the crista of the ilia, and the spleen, which was sometimes pushed outwards by it. In one case it reached the middle of the abdomen, and was only about two inches from the pubis.'—P. 114.

When the liver was thus enlarged, its consistence was extremely soft, and it greased a knife or the hands like common fat. The cause of this affection is very obscure. It appears to be more common in women than in men; to have no dependence on the strength or weakness of the constitution, or on the age of the patient; and to have no connexion with morbid states of the duodenum. Sometimes the change takes place very quickly: in one instance, it existed when the disease (phthisis) ran through its whole course in fifty days. No peculiar symptoms were observed to indicate it, although the enlargement was of course discovered. Any other affection of the liver was so rare, as scarcely to require particular notice. In two patients, of about 19, small cysts were found in the liver, containing a greenish pulpy matter; and this appearance was not found in cases distinct from phthisis, nor in any organ except the liver. In one subject, the liver was emphysematous, and lighter than the lungs.

The Gall Bladder.—In two-thirds of the cases in which there was the fatty degeneration of the liver above described, the bile in the gall-bladder was dark-coloured, and had the consistence of treacle, although this appearance was observed in other instances, and not only in cases of phthisis.

The Spleen.—In seven cases out of ninety in which the spleen was carefully examined, examples of tubercles were observed in this viscus, and all in phthisical subjects.

'The tubercles were exceedingly numerous, varying in size from

that of hemp-seed to that of a filbert: the latter magnitude was only attained in one instance. With one exception, they were all more or less exactly rounded, yellowish, opaque, having a dull surface, and in every respect similar to tubercles developed in the lungs. They were not encysted, and the neighbouring parts of the spleen were healthy. The two subjects in whom they were found in the greatest number had also many tubercles in other parts of the body, in the mesentery, the neck, the axillæ, and even in the brain. In no case was any grey semi-transparent matter found near the tubercles, so that their formation seemed here also to be primitive.'—P. 123.

In one examination, round granulations were found irregularly scattered through the substance of the spleen, which was softer and larger than usual: they differed considerably from tubercles, were of a yellowish colour, had a shining surface, and were elastic and humid.

Enlargement as well as diminution of the size of the spleen, though both states occasionally occurred in phthisis, were not peculiar to it. M. Louis did not find any relation between its increased size and former attacks of intermittent or continued fevers; in most of the patients, indeed, who were known to have suffered formerly from severe intermittent or continued fevers, the spleen was very small. The same diminution was also seen in twenty cases in which the patients had fallen victims to peripneumony, or diseases of the heart, shewing, as M. Louis observes, the independence of the size of the spleen on impediments to the circulation. Sometimes softening, and sometimes increased firmness were perceived: the former was most frequent after acute diseases; but neither of these states seemed exclusively to belong to phthisis.

Urinary Organs.—Scarcely any part of the system was more generally found free from disease than this. In some rare cases tuberculous matter was found in the supra-renal capsules; and in three instances, the same formation was seen in the kidneys, prolonged a little way into the ureter: all were cases of phthisis. In nearly two hundred cases, in which the patients had died of different disorders, the kidneys, though minutely examined, presented no similar appearance. Not a single example was observed of disease of the bladder.

Male Organs of Generation.—In a few cases of phthisis, and in none others, more or less tuberculous matter was found in the prostate, and in one of them also, in the vesiculæ seminales and vasa deferentia. In this case, which is given at length in M. Louis's work,

——— 'there was no transformation of tissue, but only a de-

velopment of tuberculous matter, the result of a morbid secretion in the vesiculæ seminales and vasa deferentia, similar to what took place in the ureter of the patient, whose case was detailed in the preceding chapter: there is a considerable analogy between these and some cases of tuberculous peritonitis presently to be spoken of; and they are strongly opposed to the opinion of those who regard tubercles as the product of an inflammation of the lymphatic vessels.

'Another fact which merits notice is, that the tuberculous matter existing *out* of the lungs, as in the medulla oblongata, the folds of the mesentery, the spleen, the prostate, &c., was similarly developed in all situations, and not yet softened; a circumstance seemingly indicative of a single cause, acting simultaneously in all points.'—P. 139.

Female Organs of Generation.— Like the same system in the male, these organs were seldom diseased. Soft polypi in the interior of the body or neck of the uterus were frequently seen, but not particularly in phthisis: and in some instances, fibrous substances of inconsiderable size were found formed in the substance of its parietes. In one case, a small layer of tuberculous matter was found in the body and neck of the womb; and there were some miliary granulations of the same description immediately below, in the healthy tissue. In this case menstruation had been regularly performed until within three months of the patient's death, who died of phthisis. We shall have to speak of the symptoms of this disorder in detail hereafter; but it is impossible not to be struck with this almost total absence of disease in a part of the female economy of which the functions are so generally, if not so constantly, interrupted when phthisis is fairly established.

The Peritoneum.— Effusion into the peritoneal cavity, and marks of acute inflammation which had taken place often within twenty-four hours of death, were observed in phthisis, but not exclusively. The latter was observed in three cases of cancer of the uterus; and our own experience supports the belief, that this late inflammation is not an uncommon phenomenon in fatal uterine diseases, of which it sometimes unquestionably hastens the termination, though it cannot be traced to any cause of recent development. But changes peculiar to phthisis were observed in this membrane; its surface, as well as the omentum, being studded with semi-transparent miliary granulations in some instances, as it were deposited (in the latter case) on an imperfectly opaque false membrane: tuberculous matter was also sometimes met with in the vicinity of false membranes, and, in one very interesting case, on the omentum and meso-colon.

As we have not yet given any case from this first part of

M. Louis's work, and as this contains many circumstances worthy of attention, we cannot do better than present a literal translation of it to the reader, as a specimen of the author's minute attention, both to disease and to examinations after death.

'Case.—A travelling hosier, twenty-seven years of age, of a delicate constitution, was admitted into the hospital of La Charité on the 7th April, 1824, about a month after his arrival in Paris. He reported that he had been an invalid for five weeks: his complaint having commenced, after exposure to cold on his journey, with cough, expectoration, shivering, and partial loss of appetite. The symptoms had continued—he had much thirst, and his appetite quite left him. The slightest cause renewed the shivering; his cough had become much worse within the last eight days; and during that time dyspnœa had come on. Weakness had been a symptom from the beginning, and his legs had begun to swell; but he had not kept his bed: he took a little exercise every day; and his abdomen had been entirely free from pain.

'On the 8th, his face was a little coloured—there was some œdema of his ancles, and he was very feeble. The expectoration was sometimes greenish or yellowish, and imperfectly opaque, and sometimes greyish, of a semi-transparent, glazed appearance. Cough not frequent; much oppression; voice short; mucous *râle* at the posterior part of the thorax, particularly on the left side; percussion sonorous; pulse moderately quickened; heat not great. Tongue dry, and a little red; mouth open; great thirst; anorexia. Abdomen tense and protuberant, rather sonorous in all parts, not painful; but the patient now and then felt an uneasiness in it. Bowels costive. (*Oxymel of Chiendent* (*Triticum repens?*): *nitre: clysters with parietaria officinalis: rice milk: soup.*)

'These symptoms continued for the most part to increase until the time of the patient's death, which took place on the 29th August: their increase was very gradual, almost insensible: the cough was generally weak, and the expectoration scanty; and sometimes a whole day was passed without either. For the last three months the two lower thirds of the right side of the chest did not return any sound; respiration in the same part was obscure and distant; and a crackling sound was sometimes perceived under the corresponding clavicle. On the left side, respiration in the same point was rather weaker than in the lower portion of the chest, and the respiratory murmur was sometimes mixed with a mucous *râle*, and more rarely with a faint and imperfect crepitation. During the first fortnight the pulse was a little accelerated; after which it became calm, and remained so until almost the last, being always weak and regular. The heat was conformable to the state of the circulation, and abated with the diminishing frequency of the pulse: it was rarely greater in the night; and perspirations were still less frequent.

'The tongue, during the whole time, was almost constantly red and dry; and a small ulcer was formed on the right side of it, near

the tip, in the last days of his existence. The thirst increased and decreased with the fever. After some days' attention to diet, the appetite returned, and the patient after this was always demanding food; but he was only allowed some boiled rice and a little milk. He seldom complained of nausea, and vomiting was not frequent. The belly was more or less tumid, and he sometimes felt it uneasy; but he had no colic during the whole time. Towards the end of May, diarrhœa supervened, and continued until the beginning of June, when it ceased: it reappeared at intervals afterwards, and during the last twenty days was very great. The face soon lost the slight bloom which we had remarked in it, and became pale, and somewhat yellow. The patient was weary of the duration of his illness; but did not express anxiety concerning it, and only complained of being incommoded by the size of the abdomen, and by flatus to which he attributed it. He became rapidly emaciated; but his strength declined gradually—and up to the last day he walked about a little in the wards. As his weakness increased, his tendency to sleep became greater. At nine in the evening of the 29th August, he got up to make use of the close-stool, and had scarcely sate down upon it when his head fell against the wall: he was assisted into bed, and died, without suffering, in about half an hour afterwards.

'The treatment consisted of diluents, mild diuretics, and moderate astringents.

'*Examination of the Body thirty-four hours after Death.* —*External Appearance.*— Universal emphysema, most considerable about the neck and lateral parts of the trunk; accompanied with phlyctenæ, containing a violet-coloured fluid. Arms very small, but crepitating, indicating the extreme emaciation of the subject.

'*Head.*—Two small spoonsful of serum in the upper part of the arachnoid; a little more in the inferior occipital fossæ. Very slight sub-arachnoid infiltration. Brain a little soft: almost pulpy softening of the septum and lower part of the fornix. About a spoonful of serum in each lateral ventricle.

'*Neck.*—The epiglottis and larynx in a natural state. The mucous membrane of the trachea of a deep rose-colour, without any alteration of thickness or consistence.

'*Chest.*—The surface of the left lung was entirely free, and of a cineritious colour, intermixed with whitish spots, corresponding with more or less considerable masses of grey and tuberculous matter, larger and more numerous in the superior than in the inferior lobe. There were no excavations, and the pulmonary parenchyma round the tubercles was in a sound state. The right lung was affected in the same way, and two inferior thirds of it were covered with a false membrane attached to a corresponding one on the surface of the pleura by means of filaments, amongst which there was an effusion of about ten ounces of limpid serum. The bronchi were small, and of the reddish hue of the outside of an onion. The heart was

of natural size, and contained a small quantity of spumous blood: its fleshy fibres were flabby; and the walls of the ventricles were thin—those of the left ventricle not more than three lines in thickness; and they were so pliable, that it seemed at first as if the fleshy fibres were separated from one another by a portion of gaseous fluid; which, however, was not the case.

'*Abdomen.*—The parietes adhered to the subjacent parts by means of cellular filaments of different lengths. The small intestines were, for the most part, covered by the great omentum, which formed a sort of flattened cake, varying from twelve to fifteen lines in thickness, alternately yellow and bluish-coloured, and consisting of tuberculous and of grey or violet-coloured semi-transparent matter; the first forming about four-fifths of the mass, and not softened in any point. The meso-colon and meso-rectum had undergone the same alteration; but their thickness was less by one-half than that of the omentum. The greatest part of the mesenteric glands was tuberculous.

'The liver was attached to the diaphragm by a false membrane, which was separated without difficulty. It was of a deep yellowish-brown colour; of small size; very soft; and its specific gravity so inconsiderable, that it floated in water like healthy lungs. In the substance of it there were an infinite number of cells (*vacuoles*), from the size of a millet-seed to that of a pea, most of them empty. The bile in the gall-bladder was clear, and in small quantity. The spleen was larger than usual: the peritoneum covering it was separated in its lower half, forming a pouch, containing at least two ounces of a blackish coloured fluid. Its tissue was very soft, and its colour like that of the fluid just mentioned. The kidneys were in the natural state. The stomach was partially covered with a false membrane. Although it was separated from its connexions with the utmost care, there was a round opening to the left of the cardia, with pale and thin edges, which, judging from the absence of effusion (of its contents), seemed rather to be the result of the force employed than to have existed during life. The interior of the stomach presented two varieties of appearance: near the pylorus, and for a considerable extent, it was of a greyish colour, its mucous membrane mammillated, of good consistence, partially destroyed in twenty places within the space of two lines: in other parts, it was of a bluish-white, or clear yellowish-brown colour, extremely soft and thin, and the corresponding tissues were readily torn. The mucous membrane of the small intestines in their whole length had the paleness and softness of mucus: that of the colon was rather less altered in the same way. There were no ulcerations in either.'—P. 143.

This was the only case in which M. Louis found the tuberculous matter in the lungs no further advanced than in other parts of the body. The appearances in the omentum furnished further proof of the relation between the grey semi-transparent matter and tubercles. It was also the only *chronic* case in which such extensive emphysema was ob-

served. The state of the liver, of the ventricles of the heart, of the spleen, of the mucous membrane of the stomach and bowels, are all sufficiently remarkable; and were unattended, as it appears, with any symptoms indicative of their nature or extent. M. Louis considers the deposition of tuberculous matter in the omentum, like that found in the ureters, vesiculæ seminales, and vasa deferentia, as taking place by secretion or exhalation; a circumstance rendered, he thinks, more probable by the occasional deposition of cancerous matter in the same way, on the free surface of the peritoneum.

The Brain and its Coverings.—We rather dissent from M. Louis in considering the frequent appearance of disease of this important part of the system as at variance with the phenomena during life. However lively the mind of phthisical patients may be, it is not, except in some rare and certainly splendid instances, possessed of any great degree of power. It may have the same attractions and the same deceptious appearance of a spirit, which will be victorious over the insidious disease which is gradually undermining it; but it is equally incapable of great exertion, and equally soon fatigued. The body seems in this melancholy state to be kept alive by hourly care and incessant nursing; and the mind demands frequent varieties of amusement, or sinks for want of it. We need say nothing concerning the mere absence of pain; for, as regards the development of tubercles, pain seldom seems to give any indication of it in the chest or abdomen, any more than in the head.

The only appearances in the brain which were exclusively met with in the phthisical cases, were tubercles and hydatids. Partial adhesions, or effusion, or injection of the membranes or substance of the brain, were found in several cases of phthisis, but no less frequently in other chronic diseases. The inflammatory action which has already been more than once spoken of, as taking place shortly before death, may, it would appear, be set up in the arachnoid, as well as in the pleura, peritoneum, &c. Those, or less extensive softenings, were occasionally met with in phthisis and in chronic disorders, very rarely indeed in those of an acute character. M. Louis considers, that the small bodies which have so frequently been described as the Pacchionian glands, are the products of disease; founding his opinion on their entire absence in many subjects, and on the thickening and opacity of the arachnoid (to which he found them much more commonly attached than to the dura mater), when they were present.

In the single case in which hydatids were found in the

brain, the patient died with the common symptoms of phthisis; or at least complaining more of the trachea, which was much diseased, than of the chest, and not at all of his head.

'The dura-mater adhered very strongly to the sagittal suture: there was no infiltration below the arachnoid. On the upper part, and on the sides of the brain, and under the pia-mater, there were about a score of vesicles, which exceeded the prominence of the convolutions about a line or a line and a half; the remaining portion being buried in the cerebral substance, which was quite healthy all round them. The vesicles were round, and of various dimensions: three of them were of about the size of a common nut, of an uniform surface, and had a kind of pedicle, from which there proceeded a whitish opaque membrane, which did not cover the whole of the hydatid: the latter consisted of a soft and delicate membrane, containing a fluid which rendered water a little turbid. The other hydatids had the same structure, were rather larger, more opaque, and more uneven, some of them resembling a mulberry. The brain was strongly injected; the lateral ventricles, the tuber annulare, and cerebellum, were natural.'—P. 161.

In a case in which tuberculous masses were discovered near the surface, and in other parts of the brain, there had been no cephalic symptoms, occasional cephalalgia excepted. Tubercles were formed in the glands of the neck and right axilla, as well as in the lungs; the mesentery, spleen, and loins, in the same subject, a young woman of 19, who died after nine months' illness; and the tuberculous matter was equally developed in all these parts, the lungs excepted, in which, as was observed in all the cases but one (formerly alluded to), it was much more advanced.

Tubercles were always found in the lungs when they were found in other parts, except in one example, which, although M. Louis mentions it with praiseworthy candour, scarcely detracts from the conclusion he is inclined to draw from the general facts, that the development of tubercles in the lungs seems essential to their formation in other parts.

We have thus gone carefully through the first part of this valuable work. In our next Number we shall proceed to a consideration of the symptoms of phthisis, as exhibited in the majority of the cases from which those anatomical particulars have been collected, which have been so fully described.

II.

THE EPIDEMIC CHOLERA OF THE EAST.

Sketches of the most prevalent Diseases of India: comprising a Treatise on the Epidemic Cholera of the East; Statistical and Topographical Reports of the Diseases in the different Divisions of the Army under the Madras Presidency; embracing also, the Annual Rate of Mortality, and Practical Observations on the Effects of Calomel on the Alimentary Canal, and on the Diseases most prevalent in India. Illustrated by Tables and Plates. By JAMES ANNESLEY, Madras Medical Establishment, lately in Charge of the General Hospital, Madras, and Garrison Surgeon of Fort St. George. London. 1825.

Report of the Epidemic Cholera, as it has appeared in the Territories subject to the Presidency of Fort St. George (Madras), drawn up by Order of the Government, under the Superintendence of the Medical Board. By WILLIAM SCOTT, Surgeon and Secretary to the Board. Madras. 1824.

Observations on the Cholera Morbus of India: a Letter addressed to the Honourable the Court of Directors of the East India Company. By WHITELAW AINSLIE, M.D., M.R.A.S., late of the Medical Staff of Southern India. London. 1825.

OUR views would, indeed, be unphilosophical if we entirely confined them to those forms of derangement which are met with in the climates and countries wherein we ourselves reside. For it is from an acquaintance with the varying manifestations of diseases, as they are observed in all countries—as they are modified, and even altogether formed, by seasons and by climates; by habits and modes of life, and by individual constitutions and organizations; by influences which are permanent, and by those which are transient and contingent—that we are enabled to deduce satisfactory conclusions as to their sources, their intimate or remote relations, and as to the most successful measures both for their prevention and for their cure. Diseased actions, thus viewed as a symmetrical whole, present us with features, a knowledge of each of which serves to advance our acquaintance with the other, and to point out those relations in which they mutually stand,—whereas, when examined in the dismembered and very limited manner which narrower ideas suggest, the mutual connexion of the parts thus combining to form one systematic whole is overlooked, and our intimate knowledge of these parts individually materially impeded.

It is not, therefore, in the present state of medical science, that we expect to hear the *cui bono* of turning our attention to the subject before us disputed; or dread that the practitioner of this country will consider his notice unpro-

fitably directed to a disease with which his professional brother of another hemisphere is more directly concerned A more intimate acquaintance with what is but imperfectly known, although it may never come under our personal observation, is always desirable; but it is not the less so, when the information thus acquired may be rendered subservient to the general advancement of our science, and to the more perfect fulfilment of the duties of our profession, particularly as regards a correct appreciation of the very manifest effects resulting from causes, the nature and even the existence of which can only be inferred from these effects themselves, and as respects the means best calculated to counteract their fatal tendency.

We hope, therefore, that it will not be altogether without advantage to our readers, that we proceed to direct their attention to the epidemic cholera of the East (for it has not been confined to India), and to place before them a succinct, but full abstract of what we find most important in the volumes at the head of this article.

Of the accounts of the disease contained in these volumes, we greatly prefer those in Mr. Annesley's work. Mr. Scott's book seems to have been compiled from the reports which were furnished to the Medical Board of Madras, chiefly by the assistant-surgeons of the Company's regiments, Mr. Scott having, apparently, but little practical knowledge of the disease; and Dr. Ainslie's letter rests only upon what had previously been written on the subject, for he had left India some time before the breaking out of this most destructive epidemic. In the capacity of principal medical officer to the general hospital, and to the garrison of Madras, at the time when the disease was prevalent in that city and its vicinity, Mr. Annesley appears to have had most extensive opportunities of observing its course, of investigating its effects upon the organisation of its victim, and of testing, by experience, the different means recommended for its cure. We shall, therefore, entrust ourselves more especially to his experienced guidance in the following pages, at the same time that we embrace whatever farther assistance may be offered us in the labours of Mr. Scott and Dr. Ainslie.

Respecting the *literary history of the disease*, Mr. Annesley differs from Mr. Scott; and, we think, with great justice. Mr. Scott says, that the present epidemic cholera is the same as that known in India by the name of *mort de chien*, as described by Dr. James Johnson, in his excellent work on Tropical Diseases; and that the same disease was prevalent in some parts of India in 1774, until 1782; and again in 1787, according to the accounts furnished by Paisley, Son-

nerat, Curtis, and Girdleston. This Mr. Annesley disputes, and infers, from a comparison of the phenomena of the present disease with the cholera described by those writers,—1st, 'That we have no proof of the prevalence of cholera in India, as a wide-spreading epidemic, in former times; and, 2dly, That the accounts which have been given of the more than usual prevalence of cholera, in a particular district or country, or at particular seasons, evidently show, that such prevalence of the disease was owing to the nature of the locality, of the seasons, of the more evident atmospherical vicissitudes, and of the circumstances of those who were seized with the disease; and that it was not independent of those causes, and apparently resulting from others of a more occult nature, which, in the present imperfect state of our knowledge of the matter, have been denominated epidemic causes, or epidemic constitutions of the atmosphere.' For the opinions on both sides of this question, we must refer our readers to the introductory chapters in Mr. Annesley's Treatise and Mr. Scott's Report. We shall now proceed with an account of the symptoms of this disease; and here we should be doing Mr. Annesley injustice were we to omit his succinct and graphic delineation of their usual progress, especially when left to nature.

Symptoms.—'The progress of the disease is generally as follows: the patient feels, for several hours, or for a greater or shorter period, according to circumstances, a sense of general uneasiness and anxiety about the epigastrium, with a feeling of heat in the same situation. These symptoms increase more or less rapidly; and the countenance, which at first is merely expressive of uneasiness, soon becomes more and more anxious and distressed. The pulse, at this time, is generally quickened, and always oppressed. This state of the system forms the first stage of the disease; a stage which, from its importance in the treatment of the disease, I have called the stage of invasion, and considered more at large in the next section.

'Accompanying these symptoms sometimes, but always supervening immediately to them, the patient complains of sickness at his stomach, and an uneasy sensation which seems to invade the whole track of the digestive tube. To this sense of general disorder, and of derangement more particularly of the alimentary canal, soon succeed a copious evacuation of the stomach and intestines, a sense of exhaustion, of sinking and emptiness, and an irregular spasmodic contraction of the muscles of the lower and upper extremities. The evacuations which take place at this time consist, in a great part, of the matters remaining in the stomach and the rest of the alimentary canal at the period when the patient was seized with the disease; and, from the abundance of these evacuations, and the sense of emptiness and exhaustion produced by them, it seems as if the contents of the whole tube were completely evacuated at this time.

'The spasms, which generally come on at this period, soon increase; but, although they are tolerably general, especially in the extremities where they commence, they seldom attack the muscles of the back, loins, and face: the abdominal muscles are affected next in succession to the extremities, and, lastly, the thoracic muscles and diaphragm. With respect to the nature of the spasms, it appears to me that they partake more of the clonic than of the tonic character; but the kind of spasm varies very much, even in the same patient, in different stages of the disease: in some cases, it partakes somewhat of a tonic character at the commencement, but gradually assumes the clonic form, which, upon the whole, seems to be the predominating kind.

'With the supervention of spasm, and the evacuation of the alimentary canal, deafness, giddiness, noise in the ears, coldness of the extremities and surface of the body, are also present. Great oppression at the præcordia and epigastrium is now generally felt, attended by difficulty of breathing, and general collapse of the system. The pains sometimes felt in the abdomen are of a colicky nature; and these, with the pain accompanying the spasms of the muscles of the abdomen, and of the extremities, are relieved by pressure and friction. The skin becomes colder and colder as the disease advances, and is covered with a cold damp, which increases to a copious, cold, raw moisture, which bedews the shrunk, sodden, and cold integuments, especially of the extremities. The countenance now assumes a contracted or collapsed, cadaverous, and anxious appearance. The eyes are sunk in their sockets, and are surrounded by a livid circle. The pulse becomes first small, quick, oppressed; and afterwards, it scarcely can be felt at the wrist. Blood taken at this period is quite black, thick, and oily, and it frequently will not flow from the vein. The arterial blood also presents the characters of that usually circulating in the veins. The patient all the while complains of a burning sensation about the epigastrium and umbilicus, and of an unquenchable thirst. The tongue and mouth are, however, moist, cold, and white. The vomitings and stools are now frequent, and consist entirely of a fluid resembling rice-water, with mucous flocculi and albuminous matter floating in it. Sometimes these matters are muddy, turbid, and somewhat different in colour; but they are always without any admixture of bile. As the disease advances, these evacuations become less and less frequent, and sometimes subside for a considerable time before the death of the patient. The same may be said with respect to the spasms. The urine seems not to be secreted; and not only it, but even the saliva, and all the glandular secretions, appear to be completely arrested during the continuance of this dreadful malady.

'As the disorder advances, the eyes and other features become more sunk, and the corneæ assume a flaccid appearance. The extremities are perfectly cold, covered with a cold, clammy moisture, and their surfaces sodden and corrugated. The voice becomes feeble, sepulchral, and unnatural; the respiration more and more oppressed, generally quick, and sometimes slow; and the air which

the patient expires is cold. During this state, restlessness is generally observable, and is sometimes very urgent; the patient tosses about continually, and evinces the utmost distress.

'Although the patient is listless, impatient of disturbance, averse from speaking, and is altogether physically overwhelmed, still he retains his mental faculties to the last hour of his existence.

'Towards the termination of the attack, the sense of anxiety at the præcordia and epigastrium seems to increase. The restlessness appears to degenerate into a kind of jactitation; the vital actions gradually sink, and, at last, entirely disappear; and the patient dies, generally, within twelve, fifteen, twenty, or twenty-six hours from the invasion of the disease.'

The writers on the epidemic cholera who have preceded Mr. Annesley, have entirely overlooked the premonitory symptoms, or those slighter changes which mark the invasion of the disease. Mr. Scott even asserts, that no such symptoms exist; whereas, Mr. Annesley states, that 'it is a matter of the most serious importance, both as respects the reputation of the practitioner, and the lives of those who come under his care, that the symptoms denoting the invasion of the epidemic cholera be familiarly known to him;' for, he observes, by having recourse to a suitable treatment, during this stage, he may prevent the disease 'from assuming that degree of severity, which it inevitably would assume, if it were left uninterfered with even for a very few hours.' This opinion seems to us particularly just; and we are, therefore, perfectly disposed to agree with Mr. Annesley, inasmuch as he appears, throughout his treatise, to have paid a closer attention to the phenomena of the disorder, and to the changes observed upon dissection of fatal cases, than those who had preceded him. His statement also respecting the presence of premonitory symptoms—to the consideration of which he has devoted an entire section—is also supported by what is observed to take place in the animal economy at the commencement of all acute or severe derangements; and we surely cannot reasonably expect, that the epidemic cholera should in this respect present us with anomalies.

'A practitioner,' Mr. Annesley states, 'possessed of true professional tact, will discover in the countenance of the patient the earliest changes which mark the approaching invasion of cholera. The countenance is expressive of something approaching a state of anxiety, although the patient himself may not be aware of his state. His spirits are low, and there is a clammy moisture on the skin; and the pulse, though occasionally full and strong, is evidently oppressed and labouring.' 'He feels considerable nausea, and his bowels are more frequently moved than usual; but the stools then generally consist of such matters as have been lodged in the large intestines, and they consequently present various appearances, ac-

cording to the state of the digestive organs at the time of invasion.' In addition to these, the patient experiences, at this period, 'a great degree of exhaustion, and inability to make the least exertion. Colicky pains are frequently felt in the belly; but they often pass off, or are relieved by pressure, and the free evacuations which take place in this stage. The urine at this period is often in small quantity, and seldom voided.'

Mr. Annesley enters, with a considerable degree of precision, upon the consideration of the '*Pathognominic, Diagnostic, and Prognostic Symptoms;*' and states, that he has never seen a case of the disease which was unattended by a burning sensation between the umbilicus and scrobiculus cordis, precisely in the situation where a vermilion blush is invariably found in the intestines upon dissection.

'This is one of the first symptoms the patient is sensible of, and it is generally felt before vomiting and purging take place. Whenever this painful sensation is accompanied with an anxious look, and a general feeling of weakness or oppression, even without vomiting or purging, we may be certain that the disease is at hand; and at this stage it is generally manageable, if boldly and decidedly treated.

'The vermilion blush in the small intestines — which blush exactly resembles the colour which they assume when injected to shew the villi — I conceive to be peculiar to this disease, and to belong to its pathological character, because it is the only appearance that is not observable in many other diseases.

'There is no symptom more uniform than the black, thick, and ropy condition of the blood, particularly when the disease is fully formed. This condition of the blood, of which the arterial blood also partakes, is, even of itself, and still more particularly when viewed in connexion with the other symptoms, sufficient to distinguish the disease from the cases of sporadic cholera formerly occurring in India, and from the cholera usually observed in warm climates, or in temperate ones during the autumnal season.'....'The low, weak, small, and undeveloped state of the pulse from the commencement of the attack; the extension of the spasms so early in the disease to the muscles of the superior extremities and chest; the cold tongue and mouth; the coldness of the respired air; the great derangement of the respiratory function; the shrivelled state of the extremities; the cerebral congestion; the clonic nature of the spasms; the suppression of the urine and other secretions; the wide diffusion of the disease throughout Southern Asia; its violence and fatal effects;—are circumstances which authorise the inference, that the epidemic cholera is different from the common cholera of India, as observed previous to 1817, not in degree alone, but that it is also different in kind.'—P. 40.

Appearances on Dissection. — On this subject, also, we shall give, in his own words, the account furnished by Mr.

Annesley, as his details are more full and circumstantial than those contained in Mr. Scott's report.

'External Surface.—The appearances observable in subjects at the period of dissection, were a corrugated and shrunk state of the extremities; considerable lividity of the surface, and dark purplish colour of the lips, and parts not covered by the cutis vera. The soft solids were apparently shrunk; the eyes sunken; the features astonishingly collapsed and ghastly for the short duration of the disease, and the vessels at the surface contracted and bloodless.

'Head.—The sinuses and veins of the brain, and of its membranes, were always congested with black, thick, and viscid blood. The tunica arachnoidea was frequently opaque, and somewhat thickened and adherent to the adjoining membranes. Some gelatinous or serous effusion was often observed in the ventricles, and between the membranes. The brain was sometimes soft and pulpy, but it seldom presented any very decided marks of increased action.'

'Thorax.—The *heart*, and large *venous trunks*, were frequently distended by a thick black blood; the substance of the heart sometimes appeared softer, and more easily lacerable than in the healthy state. The *lungs* were generally shrunk, collapsed, filled with black blood, heavier than natural, and of a fleshy, hepatised, or bruised appearance. The *pleura* was usually pale and healthy: the *pericardium* was natural, and sometimes it contained a very small portion of serum.'

'Abdomen.—Upon opening the abdomen, a peculiar, offensive odour—as remarked by Mr. Jamieson, in his Report of the Medical Board of the Bengal Presidency, respecting this disease—was sometimes observed, particularly in those who died suddenly. The *stomach* generally contained more or less of a watery, muddy, and sometimes a grumous fluid. The colour of this fluid was various: sometimes it was colourless; at other times greenish, or passing to a yellow tint; and in some cases it was brown, approaching to black. The peritoneal surface of the organ seldom presented any other appearance than a greater congestion of the veins than was natural. The mucous surface was sometimes covered by a dark-coloured slimy mucus, and when this was removed, considerable congestion of the venous capillaries was observed. This congestion seemed to be chiefly seated in the sub-mucous cellular membrane, and was occasionally so extensive in particular points, as to give the appearance of ecchymosis of this coat. The internal tunic was occasionally much corrugated, seemingly much thickened, and doughy to the touch, more especially when it was not much distended by fluid or flatus. The stomach was frequently flabby and relaxed, and its coats could be more easily penetrated by a hard body than usual. In those cases in which some degree of reaction of the vital energies had taken place, the internal surface of this organ, par-

ticularly about the pylorus, presented a livelier colour, approaching to red, and was apparently thickened and contracted.

'The *omentum* was sometimes corrugated, or thrown to one side of the abdomen.

'The *small intestines* were, occasionally, more than usually constricted in parts, frequently distended by flatus, and their veins generally engorged with black blood: externally, they presented a doughy, thickened appearance, and their colour varied from a pale vermilion, through all the deeper shades, to a dark purplish hue; the former being chiefly remarkable on the peritoneal surface of the duodenum and jejunum; the latter in the ileum, about where it terminates in the cæcum. These shades of colour appeared to arise from the different degrees of congestion in the capillaries and veins, in different parts of the canal, from the injection of the arterial capillaries, and from the colour of the blood which the vessels contained.

'When the small intestines were laid open, their coats seemed thickened, especially if the intestine was not distended, or if it was in any degree contracted; they were frequently flabby, and more easily torn than usual. The internal surface was generally found covered by a viscid, thick, and clay-coloured substance, which sometimes passed to a cream, or yellowish tint. This was particularly remarked in those who died after a sudden and short attack of the disease. When this matter was removed, the mucous coat itself was usually pale in the upper portion of the small intestines, and dark-coloured and congested in the lower part, particularly where the ileum was blue or purplish externally. When the disease was of longer continuance, and more particularly when some reaction of the powers of the system had taken place, this viscid appearance was detached to a greater or less extent, and was floating in the fluid contents of the small and large intestines; and the mucous coat then seemed more vascular, and the arterial capillaries appeared more injected, than in the former class of cases.

'The *large intestines* were frequently contracted; sometimes they were distended, and at others, they were both contracted and distended in different parts, in the same case. Congestion of the veins and venous capillaries was generally evident, especially of those seated in the cellular substance connecting the tunics. The external coat was generally dark-coloured, owing to the blackness of the blood in the congested vessels. The mucous surface was frequently very vascular; sometimes it presented a dark-red colour, especially if the patient had lived for some time, and strong stimulants had been administered. These intestines never contained any fæces, and the fluids met with in them were generally similar to those found in the stomach and small intestines.

'The *liver* was generally darker than natural, and loaded with black, thick blood. Sometimes this organ assumed a purplish, or dark blue colour; at other times it was mottled, enlarged, flabby or pulpy, and easily torn.

'The *gall-bladder* was always distended by thick viscid bile,

which was generally of a dark-green or black colour, in subjects who died before the appearance of bile in the excretions; and although the hepatic duct was large and permeable, the mouth of the common duct was generally constricted, and seldom permitted the bile to flow into the duodenum without considerable pressure made upon the gall-bladder. In those cases which terminated fatally after an illness of long duration, and in which some reaction of the vital energies and a flow of bile into the intestines had taken place, the gall-bladder was generally empty, or contained but a small quantity of healthy bile; and the common duct, although not always free from some degree of constriction, was generally more permeable than in the former class of cases. In a few instances the gall-bladder was quite empty, relaxed, and flabby. In almost all the cases wherein bile was observed in the excretions, and the gall-bladder was found empty on dissection, and consequently, when it could be legitimately inferred that this secretion had passed into the intestines during the life of the patient, I remarked, that the viscid matter usually found lining the mucous surface of the small intestines, in the former description of cases, was detached to a greater or less extent, and was either floating in the fluid contents of the large intestines, or entirely removed, along with the matters which had been ejected from them.

'The *spleen* was generally enlarged, and engorged with black blood; and its texture was frequently soft: in some cases it fell to pieces whilst the examination of it and the adjoining parts was being performed, owing as much to an inordinate degree of distension, as to relaxation or softening of its texture. The colour of this viscus was uniformly darker than usual.

'The *kidneys* were generally of a healthy structure, and presented not any organic derangement which could explain the complete interruption which their functions had experienced in the course of the disease.

'The *urinary bladder* was generally empty, and shrunk under the pubis: its mucous surface was frequently covered with a considerable quantity of a viscid, mucous secretion.

'The *blood*.—The peculiar appearance of the blood particularly excited my attention in the first case of the disease which came under my care. In every dissection which I performed, I uniformly found the venæ cavæ, the mesenteric veins, the veins in the vicinity of the heart, the vena portæ, the iliac and subclavian veins, and the sinuses of the brain, loaded by a thick, viscid, and black blood. The right cavities of the heart were, generally, distended with the same description of blood, and when any was found in the left cavities of this organ, it was similar in appearance to that lodged in the right. The lungs were always completely engorged with blood of a pitchy or black appearance, and all the internal viscera presented a greater or less degree of congestion of blood, possessing nearly the same characters. The blood-vessels at the external surface of the body, and in the extremities, were generally contracted and empty, or nearly so.'

Mr. Annesley states, that the appearances on dissection, both as respects the solids and fluids, were precisely the same in the natives of the country as in Europeans. The only difference was in the duration of the disease;—in the former, the disease generally terminated more rapidly, the powers of life being readily overpowered, and congestion was more generally remarkable in them; in the latter, reaction more frequently occurred, and, consequently, signs of capillary action were more observable in them than in the former.

In his reasonings upon the relation existing between the symptoms and the appearances observed on dissection immediately after death had supervened, Mr. Annesley remarks, that 'the congestion of black blood and the serous effusion so often observed within the cranium seem to account for the stupor, deafness, vertigo, and noise in the ears, generally present during the life of the patient; and it was usually found that the lesions just alluded to were more marked in the cases wherein those symptoms were most manifested.'

With respect to the lesions observed in the respiratory and circulating organs, he states that these lesions were remarked to be in proportion to the extent to which the functions of these organs respectively were deranged.

'Whilst, however, I am ready to grant that a great part of these derangements was merely consequent on death, yet I must contend, that much of them had taken place before that issue occurred; and that the depression of the vital energy of the organs, at the time of the invasion of the disease, gradually led to, and became accompanied by, many of the derangements which these organs presented after death.' P. 119.

As to that which, to us, seems the most important of the *post mortem* appearances we have placed before our readers, namely, the uncommon state of the blood, Mr. Annesley observes—

'That this condition of the circulating fluid was not consequent on death, although it might have been more or less heightened thereby, is evident from the appearances which this fluid exhibited when taken away from a patient, even at an early period of the disease. During the subsequent stage, and more especially as the disease advanced to a fatal issue, the particular characters of the blood which have been now noticed were the most manifest, as may be seen in the details of the foregoing cases. That this state of the blood was the first material derangement, consequent on the invasion of the efficient cause of the malady, I shall not contend; but that it was one of the earliest links in the chain of effects consequent to that cause, and that it afterwards tended, by a necessary and evident process, to heighten and to perpetuate the derangement whence itself sprung, I have not the least doubt. That the nervous in-

fluence, in some manner or other, received the first impression of the morbid cause, and afterwards gave rise to this condition of the circulating fluid, may be inferred, if we be permitted to conceive that a diminished function of the lungs, liver, and other excerning viscera, was co-existent, or nearly so, with that primary change; and consequently, that the blood did not undergo an elimination of its effete and noxious constituents, to an extent requisite to the performance of the organic actions and the continuance of life.'

As to the *causes of epidemic cholera*, our authors appear unable to offer any positive proof. They ascribe the disease chiefly to some peculiar condition of the air; and state, that the predisposing and occasional causes which are observed to be influential towards the production of febrile disorders, dysentery, and sporadic cholera, had also some share in favouring the attack of this epidemic. Mr. Annesley supposes that the disease is dependent upon a certain electrical constitution of the atmosphere; that, owing to this constitution, the nervous influence becomes unusually diminished, and consequently the changes which the blood undergoes in the lungs take place imperfectly. Hence, those constituents, which are usually eliminated from the blood during the process of circulation, respiration, and secretion, accumulate in it, and act as sedatives on the brain and nervous system generally, occasioning the black appearance of the blood, the spasms, the depression of the vital energies, and the other pathognomonic symptoms of the epidemic. Mr. Scott will not allow that the disease arises from the electrical states of the air, or indeed from any particular condition of this fluid. He passes in review the arguments for and against the opinions which have been offered respecting the probable influence of electricity, of terrestrial exhalations, of contagion and infection, of sol-lunar influence, of seasons, and of bad kinds of food, in producing the epidemic; but he arrives at no conclusion, excepting that of universal scepticism as respects the operation of any of these causes; nor does he assign any other in their stead. The fact, the correctness of which he himself admits, respecting the non-appearance of the disease in ships arriving in the Indian seas, and previous to their having touched at some part where the epidemic had extended its ravages—or, in other words, that the disorder has never been observed to affect the crews of ships arriving in India from Europe, until after they had reached those places where it previously prevailed, or was prevailing at the time of their arrival — seems to us to support the opinion respecting the dependence of the disease on terrestrial exhalation of some kind or other, either affecting the purity of the air or its electrical states. If the epidemic cholera resulted from

a sol-lunar influence,—whatever that influence may have been, if, indeed, it were any thing,—we see no reason why such influence should not have produced its reputed effects upon those navigating the ocean, as well as upon those on *terra firma*. Whatever the more efficient cause may have been, there is doubtless much difficulty in a correct consideration of the subject. But, as respects the share which contagion may have had in propagating the disease, this cannot have been much, if indeed it had any; for Mr. Annesley furnishes the following facts, which accord with the greater part of the evidence adduced by Mr. Scott upon the subject.

'First, as respects the non-contagious nature of the epidemic. Here I must observe, that I am very far from conceiving that many pathologists of the present day will consider every disease which prevails epidemically to be necessarily contagious. Doubtless the particular causes which occasion epidemic maladies will greatly facilitate the diffusion by contagion of those which really possess that property. And it is not improbable, that some diseases, which at first originate from an epidemic influence solely, may become contagious, or rather infectious, from the circumstances in which those affected by them may be placed,—as from imperfect ventilation, previous want of, and present inattention to cleanliness, crowding together of the sick, &c. and may be disseminated more widely, owing to an infectious cause thus generated being superadded to the original and more generally prevailing causes whence these diseases at first sprung. We have proofs of such occurrences in fevers and dysentery; but the epidemic cholera appeared under circumstances which could in no way favour the idea that an infectious property was in any instance generated. There was generally no crowding together of the sick — no want of ventilation — no want of cleanliness; and the disease, at the time more particularly when it was most prevalent and fatal — at the early periods of its appearance — always terminates so rapidly, either in death or in recovery, that a sufficient period did not elapse, which, if we may judge from the progress of those maladies that are acknowledgedly contagious, is indispensably requisite to the operation of those changes on the fluids and secretions, whence a contagious property results. Moreover, the lapse of time between the existence of perfect health and of the full manifestation of disease was so short, that no such evidence of the intermediate changes, as exists in contagious diseases generally, could be detected in this. Very many also of those who were seized with the epidemic cholera, neither saw, nor came within the sphere of any other individual affected with the disorder.

'The epidemic cholera, it should also be recollected, appeared simultaneously at several stations far distant from each other, leaving intermediate districts of country unaffected by it. It is true, that on several occasions, when the disease prevailed amongst the troops and inhabitants of a particular station or town, and soon after troops or others arrived in these places, many of them were attacked with the

disease. I have adduced an instance of this at page 200. But it by no means follows from this circumstance, that they were seized in consequence of the communication of a contagious principle from those who were labouring under the malady; but, on the contrary, it is evident that they, having arrived at a district where the epidemic cause actively prevailed, in a state of predisposition, from fatigue, &c. were soon acted upon by this efficient cause of the disease.

'The sudden occurrence of the epidemic cholera in particular stations and districts, the astonishing violence with which it appeared, the great numbers which were immediately and simultaneously seized with it, and its very unexpected and sudden decline, and its total disappearance after committing unheard-of ravages during a few days only, are circumstances wholly incompatible with the belief, that it either originated in, or was diffused by, means of contagion. I have it in my power to adduce numerous facts in support of the above assertion; but as a sufficient number have been already brought forward in the able report of Mr. Jamieson on the disease as it occurred in the districts and amongst the troops under the Bengal Presidency, I consider it unnecessary to allude farther to them.

'In addition to the foregoing considerations, I may state, that medical officers and attendants on the sick were not affected by the disease in a greater proportion than other classes of persons in the districts or divisions of the army wherein the disorder was prevalent; — that individuals who were seized with cholera, from amongst those who were in the hospital for other disorders, did not appear to communicate the disease to other patients who had intercourse with them;—that when a single member of a family was attacked, the rest of that family was not more obnoxious to the disease than an equal number from amongst the community; and if more than one in a family or house were seized, it was generally simultaneously, or nearly so, and not in such a manner as would have led me to infer that the disorder had been communicated from the one to the other; — that when the disease was prevalent in a particular part of a town, in a certain street, or even in one house only, the circumstance was evidently attributable to the confined, unwholesome, and low situation of these places, or to particular, predisposing, or exciting causes, to which the individuals thus attacked had been exposed.

'In illustration of the above statements, I may adduce what occurred in the hospital under my charge. Indeed, both in that hospital, and during the course of my whole experience of the disease elsewhere, no more than two cases occurred to me, which the most strenuous supporters of contagion in this disease could adduce in aid of their views; and these cases evidently appear to have arisen from a very different source than from contagion. The first instance was a soldier attending his wife in the disorder, who was himself seized by it, and died an hour before her. But it is evident, in this case, that both were exposed to the same efficient causes — the same epidemic influence, the fatigue and anxiety experienced by her hus-

band whilst attending his wife, proving the determining cause of that influence, and facilitating its operation: and it is equally evident, that if the husband's disorder had arisen from a contagious principle proceeding from his wife, that, like other contagions, it would have required a longer time than the very few hours which elapsed, to operate the changes necessary to its development. The next instance was that of a female who had attended her friend who died of the disease, in whom she was much interested: after washing her, and removing her from the ward, she was herself attacked. The same observation which was made as to the first instance equally applies to this. These patients were in a ward with between eighty and ninety persons, many of whom collected around their beds, and yet not one of that number was attacked with cholera.

'I never saw more altogether than five or six persons, whilst patients in the hospital, attacked with the epidemic cholera; and, although I have had thirty or forty cases of this disease in the hospital at one time, when it contained not less than from one hundred and seventy to two hundred patients, yet not one instance of cholera occurred, which could be imputed to the admission of these cases.

We have now brought the *pathology* of the epidemic cholera fully before our readers. The consideration of the *Treatment* of the disease requires a more extended space than we can devote to the subject in the present number; we shall, therefore, defer it until the next, when it will be fully, and, we hope, satisfactorily discussed.

III.

Practical Observations on Hydrocele; with a view to recommend a new mode of Operating for that Disease, which is exempt from the inconveniences that have been found to attend all the other Operations; and at the same time more simple, and equally certain of producing a Cure. Illustrated with Cases. To which are added, some Practical Observations on Bronchocele, and on Inflammation of the Mamma: accompanied with a Table, containing upwards of One Hundred Cases of Bronchocele, treated at the Monmouth General Dispensary. By James Holbrook, Member of the Royal College of Surgeons in London; Surgeon in the Royal Navy; and Surgeon to the Monmouth General Dispensary. London. 1825. Pp. 107.

The author, before he describes his new mode of operating for cure of hydrocele, offers a few remarks on the causes of the disease, and on the different operations which have been hitherto performed for its removal. The most common causes are blows; injuries of the testicle from riding; a varicose state of the vessels of the chord; affections of the urethra, arising from gonorrhœa, stricture, or diseased prostate; disease of the rectum; and syphilis. He relates a case, out of several

which he has seen in the course of his practice, where an effusion of fluid into the vaginal tunic was caused by syphilitic affection. The fluid in this case, although very large in quantity, became absorbed as soon as the system was put under the influence of mercury.

Our readers are well aware, that in order to perform a radical cure for hydrocele, it is necessary, after evacuating the fluid from the tunica vaginalis, to produce a certain degree of inflammation of that membrane, so that it may form an adhesion to the reflected portion of it covering the testicle. Various means have been used for the purpose of producing this effect; for instance, incision, caustic, seton, tent, injections, composed of solution of zinc, of spirits and water, of port wine and water, &c. The common practice of late years has been, after drawing the fluid away, to throw an injection into the cavity of the tunica vaginalis, composed of equal parts of wine and water. This plan is found to prove generally successful. But there is some difficulty in always adapting the strength of the injection to the susceptibility of the part to become inflamed. Sometimes the inflammation runs too high; and now and then it is not sufficiently high to produce adhesion. The operation which our author recommends, and which he has several times performed with a successful result, is an improvement of the old one, by *seton*. But instead of passing a whole skein of silk through the scrotum and tunica vaginalis, according to the old practice, he applies merely a single or a double thread, which he withdraws on the third or fourth day. The following case will shew the mode in which Mr. H. operates. It is one out of eight, where the operation has been successfully performed without any failure.

'T. B., aged 50 years. Has a hydrocele on the left side, which, he says, commenced about four years ago. He can attribute it to no particular cause. Has had gonorrhœa when a young man, and is now subject to an impediment in his water, or what he calls gravel; and is, to use his own words, very tight in his bowels.

'The swelling is about the size of two fists, and there is no reason to suspect disease in the testicle.

'Nov. 3d, 1824.—Directed to have a dose of calomel, followed by an aperient mixture.

'5th.—I visited him this morning: the medicine had operated well; and, seeing no objection to the performance of the operation, with his consent, I discharged the contents of the swelling with the trocar in the usual way, amounting to about a quart. This being done, I grasped the scrotum and tunica vaginalis with my fingers, close to the testicle; and getting an assistant to hold one portion of it firmly, I passed a straight needle, armed with a common ligature,

through it, and then tied the end loosely together. Having desired him to remain in bed, and live abstemiously, I left him.

'7th.—The scrotum and testicle is (are) swollen and inflamed, and he complains of pain in his loins. Is rather feverish and thirsty. A bread-and-water poultice to be applied to the part, and an aperient diaphoretic mixture. (To be taken, we suppose.)

'9th.—The swelling the same, but less painful. Slight pain in the loins continues. There is a little oozing from the punctures. Withdrew the ligature. Directed the part to be fomented, and the bread-and-water poultice continued.

'11th.—The swelling is rather abated, and is less painful. Is free from fever. Punctures look almost healed. No application.

'13th.—Swelling still subsiding. Has no pain in the loins. Allowed to sit up, with the scrotum suspended.

'16th.—The swelling reducing fast. Is in no pain.

'20th.—There is scarcely any swelling, but the testicle is rather tender.

'Did not see this patient again until the 2d of December, when he came into town to see me. He was quite well.

Mr. H. recommends the thread to be passed from below upwards, in order that any fluid which may ooze from the punctures may the more easily escape. A sufficient degree of inflammation of the parts, to cause an adhesion, takes place, by allowing the seton to remain in for three or four days only. According to the old operation by the seton, the thread was allowed to remain in for a fortnight or more, which rendered the cure very tedious and painful. The operation recommended by Mr. H. is very simple; and so far as it has been hitherto tried, it has proved perfectly successful. It requires, however, further trial before we can justly pronounce its comparative merits.

We shall be able to take but a very cursory view of the author's articles on bronchocele, and on inflammation of the mamma, especially as they contain nothing new, or very particularly interesting. Respecting the former disease, he remarks, that the number of females afflicted with it, in proportion to that of males, amounts to nearly ten to one, according to his practice. He thinks that the disease is hereditary; and that it affects those who live in valleys as frequently as it does those who inhabit mountainous places. The only division into which he considers the affection resolvable, is the distinction into soft and hard.

As an internal remedy for bronchocele, Mr. H. gives preference to burnt sponge before any other. He believes that very few cases occur which may not be benefited, if not cured, by this medicine. He has found iodine serviceable, particularly in the hard species of tumour; whereas the burnt sponge appeared better adapted for the removal of the soft

kind. But as it is probable that the curative property of burnt sponge depends entirely upon the iodine which it contains, the apparent superiority of one remedy over the other may depend chiefly upon the quantity of iodine taken in a given time. It is seldom that a dose equal to twenty minims of the tincture is taken in the form of burnt sponge; consequently, by varying the quantity of iodine according to the texture of the tumour, this medicine would probably be found to answer the purpose in every instance where burnt sponge would be serviceable.

As an external application in bronchocele, the author strongly recommends pressure. He mentions several instances where it proved very useful. The only objection to this is the inconvenience arising from the situation of the tumour. It obstructs the free passage of the air into and from the lungs, as well as of the blood from the head, which must cause a very unpleasant sensation to the subject of it. Few, therefore, would have the resolution to persist in the use of this remedy sufficiently long to derive any material benefit from it.

There is a table accompanying this article, containing upwards of a hundred cases of bronchocele, most of which were cured, and almost all relieved, by the plan of treatment already noticed, assisted in some cases by bleeding, either generally or locally, digitalis, &c.

It is unnecessary to make many remarks upon the Essay on Inflammation of the Mamma. The author mentions that he was induced to publish it, in order to recommend a more general employment of *friction* as a remedy. We have often ourselves found friction with oil very useful; and it is the remedy to which nurses generally resort when they find the breasts hard and lumpy. When employed in time, it will frequently prove successful in preventing inflammation, and consequently suppuration, from taking place. The author advises it to be continued even after the inflammation is established. Leeches may be applied at the same time, which will not interfere with the use of the friction. The bowels, of course, should be kept open with saline aperients, and the diet should be sparing. If the inflammation should gain ground in spite of these remedies, he recommends poultices and fomentations, according to the common practice. We cannot agree with Mr. H., that 'in no case ought the abscess to be opened by a lancet.' We are satisfied that the patient may frequently be relieved from many hours', if not days', excessive pain, by opening the abscess as soon as the fluctuation of matter can be distinctly perceived. When this is not done, the abscess will often become very extensive, and the

use of the mamma will be destroyed, from adhesions taking place between the sides of the lactiferous tubes; whereas, if the abscess be discharged in time, the greater part of the gland will be preserved perfect. We have never found any bad consequences to follow this practice.

IV.

RETROSPECTIVE REVIEW.

The Physician's Pulse Watch; or, an Essay to explain the old art of feeling the Pulse, and to improve it by the help of the Pulse Watch. By Sir JOHN FLOYER, Knight. 2 Vols. 8vo. London. 1707.

THERE are perhaps few circumstances more discouraging to those who are ambitious of obtaining some reputation in the profession of medicine than the contemplation of its history for the last three hundred years. Within that time many learned and ingenious men flourished, who enjoyed the highest estimation of their contemporaries, and fondly hoped that they were laying at once a permanent foundation for the science which they cultivated, and of the fame which was the object of their ambition. But a few years comparatively have passed, and their names are almost forgotten — the more erudite alone are acquainted with their labours; and even by them are they considered as valueless. And so far has this been carried by some practitioners, the best informed as respects modern opinions and publications, that the older authors are subjects of perpetual ridicule; and he who ventures to acknowledge that he sometimes peruses them is almost regarded as an object of pity. The learning and observations of Forestus and Sennertus—the practical rules of Fernelius, Riverius, and Bellini—the good sense of Hoffmann, and the ingenuity of Stahl, are considered as equal; or, in other words, as undeserving the slightest attention. This, however, may partly be accounted for from these authors having written in a dead language, with which few physicians are so well acquainted (we speak it with shame and sorrow) as to be enabled to read it without labour. We might nevertheless expect, that as we approached nearer to our own time, and authors of our own country, the reputation would be more permanent, and the opinions of physicians more consonant with those of the present day; but even here also are we mistaken; for so rapid and so numerous have been the revolutions of professional language, rather than of practice, perhaps than essentially of theory, that the

books published only a hundred years ago are unintelligible, except to those who have devoted much time to the medical literature of the period, and who have thus become acquainted with the then prevalent mode of expression. In the volume of Sir John Floyer, an account of which we are about to lay before our readers, we shall have an ample proof of the accuracy of the assertion we have just made; for while the obscurity and uncouthness of his language are more than usually prominent, his command over the rugged and barbarous terms of his art astonish as much as they puzzle us.

It was a doctrine of the empirics, as related by Celsus, that all physiological theories were equally useless, and that whatever opinions were embraced, physicians treated diseases in the same manner, and with equal success. Something of this kind may be averred of all the writers of medicine for the last two centuries; various as the language they employed, and opposite as the theories they promulgated, the same remedies were recurred to, and generally in the same manner. Occasionally, indeed, an author has sprung up, who, from caprice or studious eccentricity, has inculcated a mode of practice altogether contrary to that commonly established, and who would treat even inflammatory disorders with stimulants; but still, as respects the body of the profession, our statement is accurate. It appears to us, therefore, that before entirely rejecting the practical experience of the old authors, or condemning entirely their doctrines, we should endeavour to know how far the apparent difference between our own opinions and theirs is real; for though in the geographical distribution of the earth we may come to the same point by different paths, this will at least not appear probable in medicine. We may, indeed, state for ourselves, that after much consideration of some of the works alluded to, we seem merely to find the same facts expressed in different words, while from the neglect of such writings, instead of advancing, medical science has gone on in a perpetual circle. What to-day is "nervous influence," a few years ago was termed "animal spirits," and "the cacochymias" have been translated into "morbid diatheses." We have given up the "concoction of morbific matter," and we have taken in its place "a series of diseased actions"—we talk not of "stagnation of the blood," but we employ a more euphonous circumlocution, and dilate upon "impeded circulation." These are a few of the instances by which medical authors have deceived themselves and their readers; for nothing can be more manifest, than that we have made no advance in the science by the alteration of the terms.

Yet, let us not be misunderstood. We do not advocate the obscure technicalities of the chemical or the mechanical physicians; but we wish to call the attention of the medical writers of the present day to the fact, that, in our explanation of pathological phenomena, we are not more advanced than our forefathers; while in practice we have rather recurred to their treatment, than made any original discoveries of our own. There is, indeed, a much more imposing surface than the rude and cacophonous language of the old schools afforded; we experiment, and we speak of excessive momentum of blood—of local determinations—of disordered actions—of arterial contractions and relaxations; we have an abundant supply of terms descriptive of supposed interior actions; and we appear frequently to bring the experimentum crucis as the test of our theories. Yet with all this, in practice we recur to experience alone; and though by manifest symptoms we judge that certain alterations of structure have taken, or will take place, we are perfectly ignorant of the nature of the actions producing them; we know these last only by their result. In the mechanical arrangement of the different corporeal systems, we seem alone to have made any real advancement; and so far as by mere mechanism we can go in living bodies, we know something. We were about to have stated, that we had also made some progress in the less frequent employment of barbarous technicalities; but when we look back only to the few modern terms of art that we have given—when we remember the sensibilities of Bichat, and the vital principle of Hunter, with the host of words which these authors have first applied to the explanation of living phenomena, we much question whether, in the lapse of time, the language of our day may not be as unintelligible to our descendants as that of our forefathers is to us. We have been led into these observations from the perusal of several English professional writings, much celebrated a century ago, but which are now more remarkable, as exhibiting a curious and useful view of the human mind, than for their intrinsic medical information. Both, however, Dr. Cheyne's and Sir John Floyer's works, to which we here particularly allude, contain some valuable observations; but so lost and obscured in their theoretical speculations, that they are of comparatively rare consultation. We cannot, indeed, join with those half-witted gentlemen who perpetually decry theories, because we agree in opinion with Mr. Abernethy, that if a man thinks, he must and will theorise; but certainly it would be very desirable that his theories should, in the present state of our knowledge, be as little as possible connected with the expo-

sition of practical experience. It is the simple result of experience in the Monita and Præcepta of Mead, and the Commentaries of Heberden, that will ensure them a reputation and a frequent perusal, when the speculations of the highly gifted and ingenious Bichat and Parry shall scarcely obtain attention. Still, however, we think it useful to recur to even the oldest and most obsolete authors occasionally, if not for professional improvement, though even this must be the partial result, yet for the acquisition and cultivation of a proper estimation of our own powers and those of our contemporaries. No one can be so uncandid as to believe, that the intellectual endowments of the present day are superior to all those of two hundred years ago; while in scholastic learning, in classical erudition, in deep and profound argumentation, we are very manifestly their inferiors. To what, then, do we owe the improved state of medical science as a science (we comprehend physiology, and the accompanying necessary branches for its cultivation and practice), but to depending less upon our mental vigorousness, and more upon mere diligence? whence if we have not yet been able more successfully to explain the vital and pathological phenomena, we have at least learned the inadequateness of their attempts, and have collected a mass of facts and observations, which, if they are not enough at present, may, in connexion with others hereafter, be successfully applied for this purpose by some fortunate and ingenious individual. We shall now proceed to give an account of Sir John Floyer's "Pulse Watch," which we shall precede by the little which is known of his history and family.

"Sir John Floyer," we are told by Wood, in the Athenæ Oxonienses, "was the son of Richard Floyer, of Hinters, Esq., became a Commoner of Queen's College in the beginning of the year 1664, aged fifteen years; took the degrees in Arts, that of Master being completed in 1671; entered on the Physic line, took the degree in that faculty; practised in the city of Lichfield; became a Knight, and much in esteem in those parts for his practice." To this meagre account Wood has added a list of his works, published at the time he wrote; but which does not comprehend either his Essay on Cold Bathing, his Account of Asthma, nor the Physician's Pulse Watch. For the former of these works, that on Cold Bathing, became the subject of much ridicule; and Sir Richard Steele, in the 15th Number of the Tatler, makes his familiar, Pacolet, say, "that a Fellow of the Royal Society, who had writ upon Cold Baths, came to visit me, and solemnly protested I was utterly lost for want of that method—upon which he soused me head and ears into a pail of water,

when I had the good fortune to be drowned.' We are told by Boswell, that by his recommendation Dr. Johnson was taken to London for the royal touch. Dr. J. mentions him, in a letter which Boswell has published, as having falsified the register of his age, 'that he might pass for younger than he was. He was not much less than eighty, when to a man of rank, who modestly asked his age, he said, "go look," though he was in general a man of elegance and civility.' Upon what authority Dr. Johnson made this assertion respecting the register does not appear. The accusation was not very likely to be true; nor does it appear, from the date of his birth as given by Wood, and his death in 1734, at which time he was eighty-five, that any doubt could have existed. Wood published the Athenæ Oxonienses in 1691, forty-three years before the death of Sir John Floyer, and died in 1695, before it came to a second edition. The only additional information which we have been able to obtain respecting Sir John Floyer, is the occurrence of his name in the charter of James the Second, after the surrender of the former charter. He is created by this deed a justice of peace during his natural life, in common with a Thomas Hammond. When, however, by one of those arbitrary acts which characterised the reign of James the Second, the latter was removed, Sir John Floyer retained his office of magistrate. It is probable that he held this office under the original charter. As a physician, he was unquestionably in great repute in his own day; and his work on asthma is still a book of authority. To persons out of the profession, he is perhaps better known now by his advocacy of Cold Bathing than by any other of his works. The Physician's Pulse Watch is a curious specimen of an endeavour to distinguish diseases by varieties of the pulse, which he was the first to describe by the number in the minute, as well as by its strength and peculiarities. After the contents there is an advertisement, stating, that 'the Pulse Watch here treated of is made and sold by Mr. Samuel Watson,' etc. It seems somewhat curious, that we have tradition alone for the fact we have just stated, of Sir John Floyer being the first to distinguish the numbers of the pulse. The only authority we have been able to find is a mere 'on dit,' attached to the memorials of his having lived, rather than of his life, in the different biographical dictionaries. There appears, however, no doubt of its accuracy, for Bellini, who wrote particularly upon the pulse, a few years before the end of the seventeenth century, notices a vast variety,—as the vermicular, the formicans, the tremulus, the serratus, the caprizans—'caprizans autem dicitur eo quod sicut

capræ saltantes primo solum urgent,' etc.—the dicro myurus, or mouse-tailed pulse, with we know not ho more, undefinable and unintelligible; but he has r marked the number of beats in the minute. To S Floyer, therefore, this honour, and whatever advan been derived from it, is due.

In the older works, there is always something exc characteristic and entertaining in the prefaces, w writers appear to have considered not as mere oppo of apologising for their publication, but of affordin view of the subject of which they professed to treat the advantages that would result to mankind from duce of their labours. Till the middle of the sev century, also, there was an affected parade of erudit every page was loaded with references to obscure and far-fetched historical anecdotes. And thou gradually wore away, till, under the influence of th and refinement of the Addisonian school, a founda laid for the present prevalent and less pretendi reliques of the older fashion, much lowered, indeed, original Gothic and florid richness, were still, ev Addison himself was writing, occasionally published thing of this kind, but more especially the quai expression by which the style just alluded to wa guished, appears in the following passage from Floyer's preface to the Physician's Pulse Watch. however, who wish to see something of original writi style, we recommend Sir Thomas Brown's Religio M work not a little worthy perusal, from the ami liberal feelings of the author, as well as from hi The quotation we now lay before our readers giv view of the purport of the author's work, and of estimation in which he held his practice, in ref diagnosis and medical treatment.

'The Greeks used their ars Σφυγμικὴ for prognosticatio and also a part of the Semeiotica; but the Chinese also h that a part of their therapeutics, as well as of the other the pulse they take their indications of cure, in which celled the Greeks..... The cacochymias were the all diseases with the Greeks; but because these cannot diseases, and they are sometimes very obscure, or much r one another, I shall endeavour to adjust the cacochymia numbers of the pulse, by which they may be known, and the Chinese practice to that of the Greeks, as most ob certain, and short; and assert, that upon that we may bu practice of physick. I can find by the index in my clo goes too fast or too slow, without knowing the mechan

and I can add to, or take off the weights, to regulate its motions, when it exceeds or is deficient: so it happens in the practice of physick; our life consists in the circulation of the blood, and that running too fast or too slow produces most of our diseases. The physician's business is to regulate the circulation, and to keep it in a moderate degree, suppose once in three minutes; if it run oftener or slower, our mechanism is out of order: but 'tis not necessary for us to understand the motions of the particles in the blood, nor the texture of the viscera and the organs; 'tis enough that I know by a hot regimen and hot tastes I can raise deficient pulses; and by a cold regimen and medicines of a cool taste, I can depress and sink the number of exceeding pulses. By this method all fine hypotheses will be excluded from practice, and a more certain and sensible foundation will be laid for it; and we may give every physician leave to talk what philosophy pleases him best, and whether a hot or cool method must be pursued: the greatness of the disease, the strength of the patient, and the quantity of the medicines, as well as their qualities, will be known by the pulses, and all the old method of practice, and rules for cure by contraries, will be comprehended under these two general indications of stopping the pulses or circulation when they run too fast, or promoting them when they move too slow.'

After endeavouring to explain away the observation of Celsus, that the pulse is 'res fallacissima,' an opinion very little consonant with the high encomiums he himself lavishes upon it, we have the following extraordinary passage—extraordinary, not less for its utter unintelligibility, than for its assemblage of hard and almost unutterable terms. That, however, some meaning was attached to them by the writer himself, and by his contemporaries, is certain, since he is not the only author who wrote so uncouthly. We are aware that some attempts have been made to modernise this language, especially in the explanation of the temperaments offered by Richerand. It does not appear to us, however, that he has much mended the matter.

'Tis a great wonder to me that Galen did never count the pulse, since by the exceeding pulses we may well know fevers, and the hot intemperies, and hot cacochymia; and by the deficient pulses, we may know the cold intemperies of parts, and the cold cacochymia: as the blood moves faster, it produces the choleric cacochymias; and as it moves slower, the pituitous.

'Not only the cacochymias will be discerned, but also the several natural constitutions, which shall be distinguished by the four secreted humours, choler, salt serum, phlegm, and succus melancholicus; and the four compound constitutions are, when a plumpness is joined with choler, that is, the hot and humid; and when salt serum and leanness are joined, then the constitution is hot and dry: if phlegm be joined with plumpness, then it is a constitution cold and moist, or humid; but if the body be lean and melancholy,

then the constitution is cold and dry: by the ot and cold, the ancients understood the different rarefactions of our humours; and by the dry and moist, they meant the different quantities of nutritious humours; and all these they discerned by the sense of feeling; but I shall distinguish them by the several numbers of the pulse.'

In these two passages he has endeavoured to explain, though not very successfully, the grounds upon which he founds his practice, as likewise the extent to which it can be carried. It will be manifest to our readers, that Sir John Floyer was well read in the ancient medical authors, and that he had imbibed not a little of their fanciful and cumbrous theories. In another part of his volume, or rather in the body of the work, he distinguishes the diagnosis, &c. drawn from the cacochymias and from the pulse, into the philosophical and mechanical, giving, however, the preference to the latter, on account of its easier application. He dwells, indeed, very much upon the superiority of the latter in this respect; and he concludes his preface with the following curious expression of his hopes and confidence:—

'I hope what I have done will excite the young physicians to improve this subject, which will be very useful, by improving the notions of many diseases, and will reduce them to a circulation too slow or too fast; and we shall discover hereby the true and real effects of all specifics, as they either stop or accelerate the pulse. I hope the reader will friendly correct any mistakes; and though I be insulted with the ridicule of many learned men, as I was at first for my book of Cold Baths, yet in time they will allow this tract may prove very useful as well as the other.'

Having thus given to our readers some account of the preface to this really curious volume, we proceed to the consideration of the body of the work. Certainly one very great charm which these old treatises have, is the abundant information they contain of the opinions of former times, and of individuals whose intellects were of the highest order, though their knowledge was more confined on particular points than that of the present generation. That mind must be curiously constituted, which, having been employed in the study of medicine, has no interest in what Galen, the master-spirit of his age, thought respecting the pulse, when as yet the circulation was undiscovered, and its real cause unknown. There is something, indeed, to us particularly interesting as well as tranquillising in recurring in this manner to past times; and we know nothing that contributes more, amidst the turmoils and perplexities of the world, to allay for a little the sad feelings these excite, than the intercourse we are thus enabled to hold with other ages. The

cui bono, indeed, of such knowledge, the advantage immediately derivable from it in medical practice, it might be difficult to point out; but if an acquaintance with the human mind be in any way applicable to the purposes of life, and if this is to be obtained, not by the personal observation of one individual, nor the attentive perusal of one system of metaphysics, but by noting it, as far as may be done, under the various circumstances in which the world has been placed, then, though not immediately, yet collectively, even medicine is benefited. But the truth is, that as much valuable instruction is to be acquired, by well-regulated minds, by the contemplation of the errors of the mighty intellects of antiquity, as by the great truths which have been announced and unfolded by the moderns. However misunderstood were the vital phenomena, yet were the explanations given founded upon the observations of actual facts; and when, after the study of modern science, we turn to the pages of classic medicine, it may happen that we may receive important hints—sometimes from the mistakes, and sometimes from the accuracy of the writer. Certainly, however, under no circumstances can we have any right to despise the abilities of Hippocrates or Galen; nor can we neglect, without injury to ourselves, the classic elegance of Celsus. To many of our readers the following account of Galen's doctrine of the pulse will not be unacceptable; and they will not fail to remark a curious coincidence in some respects between this theory and that lately advocated by Dr. Carson.

'Galen believed that the heart and arteries dilated themselves like a pair of bellows, and drew in the air and blood; and that by their contractions they expelled the fumes; and that the heart and arteries contracted at the same time and moved together. He asserts likewise, that *the right ventricle of the heart draws in the blood from the vena cava*, and the left ventricle, air from the lungs; and that, in the contraction of the heart, the blood passes through the septum medium of the heart; and that in the left ventricle, the animal spirits were made, and thence distributed through the aorta: this vital spirit was called the *calidum innatum* by Hippocrates, of a nature like light, produced from the air and the thin pure parts of the blood.'

Of the immediate cause of the pulse, however, Galen was ignorant, and his notions were extraordinarily vague; for though he inferred that there was a communication between the veins and the arteries, he reversed the order of this communication; and he conceived,

'That the parts attracted the humours, and that nothing was in the arteries but spirits; and that the facultas pulsatilis moves the artery as well as the heart; but he ingenuously confesses, that he knew not what that faculty was.'

It is an interesting confirmation of the little dependence that can be placed upon any specific description of what has been termed the vital principle, as well as of the peculiar difficulties that attend it, that all authors, however varying their definitions, still agree in its being something too subtile for our senses, and almost for our comprehension. Hence they have had recourse, in their analogies or reasonings regarding it, to the most subtile matter known at the time,—as light by Hippocrates; fire by Aristotle, Willis, and many other authors; æther by Hoffman, and electricity by Abernethy. What a proof is this that all we know on the subject is truly, that we know nothing! We perceive, indeed, that there must be some superintendence over our animal frame beyond mere mechanism; but farther we cannot go. We are confirmed that there is a God above us, 'in whom we live, and move, and have our being;' but the deep obscurity in which this part of the living functions is veiled seems laid as a perpetual memorial to the arrogance of man, that in himself he is nothing, and of himself can effect nothing.

In mentioning, in a former part of this paper, that what is now 'nervous influence' was formerly 'vital spirits,' we may seem to have been somewhat inconsistent with the above extract from Sir John Floyer: the next quotation, however, will fully justify us in this respect, as well as afford us some specimen of the mode of medical reasoning prevailing a century and a half ago.

'Galen's opinion, that the vital spirits were generated by the heart, is true, if fairly explained; because, by the pulsation of the heart, the circulation, and digestion, and rarefaction of the blood are managed; and by a long circulation, the air, which is contained in the blood as well as in the other fluids, is very much rarefied, and the volatile parts of the blood, by joining with that, are spiritualised; and from this mixture of hot and rarefied air, and the volatile oil and salt of blood, distilled in a thin clear lympha, the animal spirits are generated when secreted through the glands of the brain.'

Upon this beautiful piece of unintelligible prescription for the manufacture of vital spirits, Sir John Floyer says, 'Tis plain that Galen knew the true uses of the motion of the heart and pulse, viz., the generation of the vital spirits,'* &c.

* It may not be uninteresting to our readers to read an account of the manufacture of the spirits, as taught in the schools.—We copy the following from a book, entitled 'The Grounds of Physic,' published in London in 1715.

'How are the animal spirits made? They are generated in the brain by a separation from the blood; which being charged with a spirituous matter, is thrown out from the left ventricle into the vertebral and carotid arteries, and through them, whence it enters into the cortical substance of the brain and cerebellum, which is of an ash colour, and larger than the rest, compounded of several veins and arteries from the branches of the carotids, variously folded and twisted with one another. The blood after this manner pressed forward,

Amidst very much description and explanation similar to what we have just given, such as, 'that the blood is naturally of a spumose consistency, which is turned into bubbles by a spirituous air;' that 'the spontaneous flux of the animal spirits into the muscular fibres of the heart, produces the reciprocal contractions;' we find passages and doctrines which could not be altered with advantage even at the present day, and in which plain good sense is expressed in a manly, unpretending, and even elegant manner. We know not where to find a more suitable description than the following:—

'The natural pulse is moderate as to greatness, strength, celerity, frequency; and it is also equal in all its pulses, for the same quantity of blood is injected by the same force in the same time, and the arteries are contracted in the same manner as they are dilated.'

And in the natural uses of the circulation he varies nothing from our present opinions. He concludes it is necessary to the secretions and excretions of the body, to the due support of the vital actions, and, in fact, to every function of the animal economy. He observes, that it is very plain that the quality of the blood has much influence upon the circulation; for he conceives that an alteration in this fluid takes place when the pulse is affected by the different kinds of diet and medicine, and as 'is sufficiently proved by the injection of different liquors into the veins.' Having, as we noted formerly, described several kinds of cacochymias, he states, that those also alter the pulse, according as the acrid, salt, bitter or slimy, watery or acerbe, prevail.

The following experiment, in imitation of the pulse and circulation, is worth noticing, and in some parts, perhaps, the analogy attempted to be drawn is correct, though of course it would be ridiculous to consider it accurate in every circumstance.

'I injected into the small guts of a cow, by Sir Samuel Moreland's hand engine, a sufficient quantity of water to fill them, and I laid the guts round on the grass in three or four rings; the one end of the gut was fastened to the engine, which was set in a pail of water, and about half a yard of the guts fastened to the engine remained empty, *as the upper part of the great artery does;* the other end of the gut I nailed to a stool on one side or edge of the gut. I observed that the circle which was next the pump vi-

the hinder part always driving on that which is foremost, pops through the windings of the arteries into the whiter substance of the brain and cerebellum, where the most subtile parts of it, by a peculiar conformation, are separated, the passages being there on purpose straitened, and get into the cavities of the nerves.'

brated, like the pulse, as often as the water was injected, and that the water in the guts moved forward upon every stroke of the pump, and returned back a little after the force was spent. And this regurgitation may be perceived in the pulse of weak persons and in obstructions of the artery. I observed the pulse lesser, as well as the regurgitation, in the second circle of the guts; and in the third and fourth, no pulse could be observed; as there appeared none in the veins, which are vessels continued to the arteries. I observed, farther, that the water was forced out of the guts in a continued stream, and every stroke of the pump did accelerate and give a jerk to the liquor, like the bleeding from an artery cut.'

We have marked a part of this passage in italics, that the physiological opinion inculcated might be noticed. It seems strange, that though its incorrectness will be readily acknowledged, we know not where any experiments or observations have been recorded for the purpose of its refutation. That the whole series of blood-vessels are always full, seems a truth to which we assent, without requiring a strict demonstration of the fact.

The difference in the strength of the pulse he very properly deduces, not only from a difference in the quantity of blood contained in the vessels, but also in the contractions of the heart: and also, with his notion of the spumous consistency of the blood, he conceives that a great pulse may be produced by a great rarefaction of the blood and spirits; or, in other words, that there is a plethora *ad molem*, depending not upon increased quantity of blood, but upon its augmented bulk. Dr. Gregory, in his Conspectus, has noticed this species of plethora, and has, with his accustomed elegance and good sense, questioned the existence of such a state—'Annon aliquando de his rebus nonnihil hallucinati sunt Iatro-mathematici, molem sanguinis credentes augeri, quum auctus ejus impetus propter calorem, exercitationem vehementem aliaque stimulantia potius in vitio esset?' Of the varieties of the pulse, as regards the sensation it affords to the hand, he makes considerable use, and enumerates very many sources of such inequalities; as different diseases of the heart and of the lungs, and affections of the spleen, stomach, and other abdominal viscera. His enumeration of these inequalities is taken from Bellini; and we doubt not that our readers will be perfectly satisfied with the information, that there are thirteen distinct kinds described, without our favouring them with the description of each. The most useful distinction, however, Sir John Floyer tells us, and here we come to his own favourite practice, 'is the difference we observe of the numbers of the pulse in a minute,' seventy-five being the most usual pulse. He divides the constitutions into hot

and cold, and considers all pulses above seventy-five as belonging to hot constitutions, 'because the body is overheated, and the blood and spirits too much rarefied;' and all below, or the deficient pulses, as belonging to cold constitutions and cold diseases. These pulses also he describes as deficient in magnitude, force, &c.

We have in this division into hot and cold diseases, with the exposition of the accompanying pulses, an interesting example of the proneness of the human mind, in the infancy of science, to systematise upon too small a collection of facts. That a rapid and vehement pulse is generally observed in diseases in which the skin burns, and the fever is high, is very true; yet it is equally so, that the frequency of the pulse is not always in proportion to the heat of the body, nor is a slow pulse always week and feeble. Indeed, as regards the slow pulse, the contrary is the fact; and one of the largest and most powerful we ever felt, gives only thirty-two beats in the minute, and on one occasion only twenty-eight. By copious bleeding, it again rose to thirty-two.—Sir John Floyer supposed forty to be the number at which 'in syncope the pulse ceases, with all sense and motion.' In his chapter on the causes of the alteration of the pulse by the temperaments, he has adopted the Hippocratic division into sanguineous, choleric, phlegmatic, and melancholic. The first is, when the choler is in its natural quantity, and the blood and spirits well rarefied; the second, he derives from an excess of choler or bile, for he holds it as proved by Borelli, that the liver secretes thirty-two ounces in a day, and that in every twenty pounds of blood, there are always two pounds of choler. 'And this choler is necessary to the crasis of the blood and the digestion of the meat, and its bitter acrid taste stimulates the heart to a frequent contraction.' But as the blood itself has rather a sweet taste, the choler is obscured by it. And after this gratuitous piece of physiology, he informs us truly, 'that the great mass of blood is from the sweet chyle, and has the same parts, but more digested;' beyond which we do not now suppose that we have much knowledge.

The phlegmatic is derived from an excess of natural pituita in the blood, which pituita is 'the chyle new mixed with the blood or the lacteal lympha secreted from it by the conglomerate glands, and the pituitous constitutions depend on the great quantity or crudity of this humour.'

'The melancholic humour is bred in the spleen, and is thick, black, stagnating blood, tinctured with an acid, and is thence returned into the blood again. Some melancholic black humours are

secreted into the stomach, mouth, and lungs, in black spittle, and through the glands of the eyes in blackness thereabouts.'

He speaks also of a fourth humour, which he distinguishes as 'salt lympha, whose office is to change the bitterness of choler to a sweetness.'

Now, fanciful as all these temperaments, or rather their supposed causes, are, we cannot peruse an account of them without perceiving how very much they have been observed and noted; and that if we now distrust the explanations that are offered, it is rather because we cannot prove that they are true, than that we have proved that they are false: and they are indications of frequent and often deep ratiocination, which, not content with manifest phenomena, sought to penetrate into the most hidden mysteries of the animal body. That the bile is a bitter, acrid substance, that it is the only secretion which, apparently connected with the perfection of the digestive process, has any very decided stimulating qualities, is a fact altogether undeniable. That this fluid enters into the composition of the chyle, and that the chyle supplies the waste of the blood, is the physiology even of the present day. Now, again, the blood stimulates the heart to contraction (we consider this as most consonant to our present knowledge, though we are aware that other explanations have been given, which, at last, however, are but newer hypotheses); and if we seek for the stimulating principles of the blood, certainly one of the most probable is the bile.

Again, in choleric people, the pulse is more rapid, more easily excited; what then more natural than to infer, that the stimulating principle of the blood is in excess? Even as regards the explanation of the melancholic temperament depending upon the spleen, we have the foundation in observation. The excessively low spirits of those who are particularly subject to dyspepsia, and who occasionally vomit the coffee-ground substance, after which general relief is experienced, would point out the admixture of this with the circulating fluid as a cause of the melancholy. But the spleen is filled, or rather is composed of a matter like dark grumous coagula; hence it was probably taken as the source of the secretion and the melancholic temperament. We dare indeed assert, and without the least fear that it can be contradicted, that no theory has been promulgated so wild, which has not its foundation in some manifest facts; and, however untenable now or little regarded, they have frequently sprung from endeavouring to discover, by deep and persisting reflection, that which required the scalpel of the anatomist, and the experiment of the practical physiologist. Having thus described the temperaments, and the humours by which he supposes them caused,

he asserts that 'the quantity and mixtion of the simple secreted humours, or their qualities, acquired by being over digested or crude, produce all the cacochymia;' and he then proceeds to arrange the pulses and different degrees of the cacochymia, so that they may correspond with each other. Thus, from seventy to eighty is 'the first degree of the hot exceeding pulse,' the blood and spirits are more rarefied, and it has for its source, hot seasons, exercise, violent passions, much care, study, &c.; and the blood of such persons is thick and florid, and their urine and face yellowish, with a high florid colour in their cheeks; their bodies are plump and warm. From eighty to eighty-five is the next, and this happens in the scurvy, ulcers of the legs, &c. In this manner he pursues the subject of the number of pulses up to ninety, and then returns to the deficient pulses, or those below seventy-five;—all, it is to be remembered, are merely however the pulses of the cacochymia, or of those morbid constitutions which render individuals liable to hot or cold diseases. That these notions are very fanciful, and are merely founded upon what the author thinks should be, rather than what actually has been observed, is too evident to require proof. Sir John Floyer, however, seems to have spent much labour in observing the pulse, and his remarks upon the alteration in its beat, by the external causes or non-naturals, contain much correct information. The following passage, though we now know it not to be accurately true, has yet an interest, when we consider that the theory of Crawford upon animal heat was connected with the supposition, that an increased rapidity of circulation would always produce an increased evolution of manifest caloric. It will be observed, however, that Sir John reverses the matter, and looks upon the heat as the source of the rapidity of the circulation, instead of the circulation the source of the heat.

'If the heat of the blood increases a little above the natural, the pulse becomes greater; but if it increases more, the pulse becomes not only greater but quicker; but if the heat increases to the highest degree, the pulse becomes very great, and quick, and frequent. And from this observation I infer, that if I can *measure the frequency by counting the numbers of the pulse in one minute, I can thereby measure the heat of the blood;* and I can also measure the celerity of the pulse produced by that heat.'

In the medical system which Sir John Floyer adopted, he seems to have been a follower almost exclusively of the humoral pathologists, for he refers every change of the animal body in the first instance to the change in the humours. Thus the effects of baths in altering the pulse is explained by its operation upon the blood and animal spirits, hot baths

rarefying both, and a cold bath condensing them. Much food oppresses the blood and spirits, and makes the pulse inordinate and unequal; hot and spicy substances render the blood acrid and stimulating, hence increasing the number of beats in the minute; while cold drink and a mild vegetable diet ' cool all our humours and stop their violent motions and fermentations.' In the same manner also, all the changes of the circulation consequent to the various passions are all derived from changes effected upon the blood and spirits. On the effects of these non-naturals, as they were formerly termed, viz. ' the air we breathe in, our meat and drink, our exercise and rest, our evacuations and their obstructions, and the passions of our minds,' his observations appear to have been numerous, and are in general accurately stated. Here, however, as in every other part of the volume, we are beset with theoretical speculations, which serve only to obscure the facts they were intended to explain. The alterations of the pulse in disease likewise have been correctly noticed by the worthy knight, though rendered in the same manner unintelligible, from the accompanying ' cacochymias and intemperies, the calida, frigida, humida, sicca,' &c.

After having stated at considerable length the varieties of the pulse in the different relations just mentioned, namely, as they differ by nature or by disease, he subjoins, in a second part, what he calls ' a new mechanical mode of preserving health, and prolonging life, and for curing diseases by the help of the pulse watch, which shews the pulses when they exceed, or are deficient from the natural.' This consists in nothing more than the regulation of the circulation; for he says, life consists in the circulation of the humours and the blood, and the expulsion of the excrementitious humours; but the latter will always vary as to its completeness with the former. Accordingly, if not well performed, the disturbance in the circulation will shew it; and as this may arise either under a hot cacochymia or a cold cacochymia, or the consequences of these, and as peculiar pulses have been assigned to each, a physician may readily recognise the cause of the disease, and apply his remedies. Thus, therefore, it will not be necessary for a practitioner to search beyond the state of the pulse, because, though the disorder does not consist merely in derangement of the circulation, but likewise in an alteration of the humours, the latter cannot exist without the former; and the peculiar nature of the pulse, combined with the number, will enable the practitioner to restore his patient to health, by only restoring the ordinary state of the circulation. What we have here stated very briefly, Sir John Floyer has exhibited, as

might be supposed, more at length, and has prescribed the differences in diet, according to the age, or sex, or temperaments, that should be observed for the preservation of health, the indications from the pulse for a stimulating or a lowering plan, and the different medicines that should be administered. In the following quotation we have an epitome of his opinions on this subject, and of the real service he imagined he was rendering to the profession by his explanation and advocacy of the '*ars sphugmica*.'

'I have above mentioned the Galenic indications from the humours and cacochymias, and have endeavoured to adjust them to a swift or a slow circulation and pulse; which method of physic is both mechanical and philosophical, though I believe the mechanical is most easy and certain; for in this method it is not necessary to assert more of the humours, than as they are moved too fast, or too much rarefied, or in too great quantity, or that the humours are deficient, condensed, too slowly moved: this is obvious and certain from the pulse; and by experience we know, that a hot or cold regimen will prove them. Infinite are the opinions of Galenists and chymists about the nature of every disease; they agree as little in their physiology and explication of humours; there are as many different hypotheses as physicians, therefore no practice can be certain which depends on notions, or hypotheses, or any of the modern philosophy; but in the circulation, we find both our life and death, and diseases, which are several irregularities, which tend towards dying or stopping of the circulation and pulse.'

Thus then is it manifest, that Sir John Floyer considered himself as an entirely practical writer; little supposing that in less than a century he himself would be numbered among those hypothetical physicians whose practice he condemned.

So intent is our author through the whole of this treatise in impressing his opinions, that they are repeated and explained in every part of the work—sometimes more briefly, and at others in very great detail. And after having given the general signs by which different plans of proceeding are indicated, he applies his doctrines to particular cases, as, that 'by the pulse we may be directed in purging,' the kind of purgatives we should use, the extent to which they should be carried, &c.; and again, that 'the pulse will direct us in the use of diuretics, diaphoretics, and all alteratives.' He has added 'a table of the pulses according to diseases, and the predisposition to them by the several cacochymias.' One hundred and forty, he says, is 'as many pulses as can be counted;' and this is worthy of notice from one who had paid so much attention to the subject, and may make us question some of those reports which have affected to carry it higher. He has added also 'a table of the morning pulses,

in several months as they vary, with a comparison
the pulses and barometer and thermometer.'

It may be readily imagined that a practitioner, r
much for the 'indicatio curationis' upon the puls
take far more than ordinary pains in collecting an
its peculiarities. Whatever value this phenomen
have in enabling us to form a correct diagnosis, it is
tain, that the modern manner of attending, or ra
attending to it, so that the feeling the pulse is becom
matter of form, must entirely prevent us from obtai
advantage from it, or permit us to do so in a ve
degree. The habit of Sir John Floyer was far dif
this respect, and the directions he has left require g
and much time, if they are to be accurately follow
though we do not believe that 'the Physician
Watch' will communicate much information to th
tioner, nor enable him to draw more correct conclusi
the medical treatment, we yet do believe that th
knight himself did really derive very great assistan
the observation of the pulse. There is much in phy
may be felt, and of which the feeling is correct, th
shall in vain endeavour to describe the source of it to
The peculiarities of countenance will enable a close
to detect very frequently the nature of the disease;
even, or we are much mistaken, in inflammation
organs, so as to point out very accurately the in
organ affected. The countenance of the scirrhous
tion is well known; yet who can describe it? And
the countenance, so does it appear to us that it may
the pulse. For it is very certain that the vital func
performed according to fixed, though not always kno
and he who has long directed his attention to the pu
nay, it is certain, that he will, discover slight irreg
which will remain concealed from a less attentive
experienced observer. Of those who are in the habi
mining the brain of insane persons, very many have
that there is no morbid change in a majority of in
yet a very eminent, and somewhat sceptical anatomi
own day, is reported to have said, that there is in
every instance a morbid organic alteration; a min
quaintance with natural structure having perhaps
him to recognise disease which others have sough
vain. The observation of Celsus as to the pulse, that
fallacissima,' is most accurately true, as we now fee
not perhaps more so than of every other sympto
neither heat, nor thirst, nor pain alone, will suffic
accurate diagnosis. If then we do not allow that

Floyer has really made that improvement in medical practice which himself contemplated; yet let us give him that credit, which is evidently due, of having called the attention of practitioners to the variations of the pulse more minutely than had been done before, and of having himself employed it much and successfully in the formation of his own opinions.

The volume contains, in addition to the exposition of his own doctrines, an account of the Chinese art of feeling pulses, and our author has employed himself in interpreting it. A single specimen of this Chinese text will suffice to exhibit to our readers the little value of the tract. The extract from the Chinese is in italics.

'*The spleen governs the mouth; that which is moisture in the heavens, in earth is earth, flesh in the body, and spleen in the members.*'

Here comes Sir John Floyer's interpretation.

'The splenetic are great spitters, and have ulcers in the gums; water produces earth, in the body 'tis the nutritious juice, and that is called the spleen in the members.'

He has added a table of hot and cold diet, from animals and vegetables, which seems chiefly fanciful, and drawn from their immediate manifest qualities. Thus among articles of cold diet, or antiphlogistic, are 'all meats eaten cold in general;' and the contrary belong to a hot diet.

Such is a general account of Sir John Floyer's 'Physician's Pulse Watch,' which we have laid before our readers as a part of professional history. To those who demand on every occasion the *cui bono* of labours, and refuse commendation where no direct and practical benefit is conferred, the trouble we have taken will appear lost, and the high opinion we have expressed of Sir John Floyer misplaced. Instead, however, of entering upon our own defence, which after all might be very easily done, we gladly shelter ourselves under the powerful protection of Dr. Samuel Johnson; for if his authority will not suffice, it would be vain to expect that any efforts of ours would be more satisfactory. 'I am far from any intention to limit curiosity, or to confine the labours of learning to arts of immediate and necessary use. It is only from the various essays of experimental industry, and the vague excursions of minds sent out upon discovery, that any advancement of knowledge can be expected; and though many must be disappointed in their labours, yet they are not to be charged with having spent their time in vain; their example contributed to inspire emulation, and their miscarriages taught others the way to success.'

PART II.

COLLECTION OF MEDICAL FACTS, WITH OBSERVATIONS.

Section I.—Original Papers.

Half-Yearly Report of the Medical Cases treated at the Kent and Canterbury Hospital, viz. from the 1st of July to the 31st of December, 1824. By Robert Chisholm, M.D., Physician to that Institution, Member of the Royal College of Physicians in London, and Extraordinary Member of the Royal Medical Society of Edinburgh.

It will be necessary to refer to some of the cases mentioned in my last report, including the *first* six months of the year, previously to entering on the report for the *last* six months of 1824.

Case III.—*General Dropsy.*—William Edwards was reported as having been made an out-patient, much improved in health, and capable of undertaking several long journeys into Devonshire, Norfolk, &c. &c.

Having neglected himself, and resumed his former intemperate habits, ascites again made its appearance, and two respectable practitioners were called to his assistance; from them I learned the sequel of the case. Edwards was living by himself in a state of the greatest wretchedness and intemperance, being constantly drunk whenever he could get money to buy gin. Nothing else would remain on the stomach. Some effervescing medicine and a strong *purgative enema* were ordered. The latter was taken dose after dose *by the mouth*, (although it produced excessive vomiting), and occasioned his death, which took place before I had heard that he was worse. The last time I saw him was about two months before his death, when his health was better than it had been for years.

Case V.—*Paraplegia, with Epilepsy.*—David Russell was reported as having been made an out-patient (June 4th), with considerable use of his legs,—the fits less frequent, &c.

Since my last report was written, Russell has more than once *walked* to Canterbury from Lenham; and once (October 2d) returned on foot the *same day*, making a distance of 36 miles. He cannot quite get rid of his fits; but they recur much less frequently.

Case VI.—*Rheumatism affecting the Pericardium.*—William Foster, a private in the 15th Hussars, left the hospital to join his regiment in Ireland, on the 13th of August; since that time I have several times heard from the regiment, and am happy to state that his health continues good, and that he has been able since that time to do his duty.*

* Vide Repository, No. CXXXII., Dec. 1824, p. 447 *et seq.*

In my last report I proposed mentioning some cases then under treatment (viz. epilepsy, remittent fever, and affection of liver); I now proceed to do so.

Case I.—*Affection of Liver.*—Sarah Anne Clarenbold, aged 22, single woman, was admitted into the hospital on the 5th of March, 1824, with 'pain in the right hypochondrium, greatly increased on the slightest pressure; the most distressing hiccough; costive bowels; motions of a good colour and consistence.'

The most varied and active treatment was tried. Leeches, blisters, free purging, mercurial preparations, sedatives, &c. &c. were but of little service, the hiccough sometimes continuing without the least intermission for the space of thirty-six hours, leaving the upper part of the face and eyes completely black, as if she had received a violent blow. On the 14th of May, she was made an out-patient at her own request, and went home to the neighbourhood of Dover, with medicine to keep the bowels free, some antispasmodic medicine, and the ung. hyd. which she had been using for some time in the hospital, night and morning, without producing any effect on the mouth.* She, however, became tired of using the ointment, and a very considerable time after its use *had been discontinued* ptyalism came on, and the pain in the side, and hiccough, left her. Although I could not ascertain the fact, there can be little doubt that an abscess had burst, and the contents passed off by the bowels. Her health is now very much improved; but she is afraid of a return of her complaint, as her side sometimes causes great uneasiness.

Case II.—*Remittent Fever.*—Two girls of the name of Spratt, were admitted as out-patients, on the 23d of January, 1824; they were attacked regularly *thrice* a day with a cold fit, succeeded by heat, viz. at eight in the morning—at noon—and again in the evening. After the bowels had been freely cleared with calomel, neutral salts, &c. &c., bark, the arsenical solution, aromatics, &c. were given. As we are in the habit of seeing our out-patients only once a week, and finding that these girls were not getting any better, I determined on taking the eldest, whose health was most affected, into the hospital. The plan pursued with both was pretty much the same.

Anne Spratt, October 16th, was admitted as an in-patient on the 26th of March. The bowels being in a good state, the Liq. Arsenicalis, confect. opii and aq. menth. iridis, were given three times a day. Full diet.

April 4th.—The medicine continued. Five grains of Plummer's pill night and morning—twenty minims of tincture of opium in mint water, to be given (and repeated) on the approach of the cold fit.

May 3d.—The comp. submur. pill to be continued. Decoct. and tinct. of bark, three times a day.

May 14th.—Sulph. of quinine, one grain; ext. of hyoscyamus, three grains three times a day. Decoct. aloës comp.

* Medical Sketches, by Sir James M'Gregor.

This plan was persevered in until the 23d, when she had pain in the side, and four leeches and a blister were applied. Cath. med. often; and, although I did not expect much benefit from it, a scruple of charcoal and ten grains of magnesia, were given three times a day.

June 9th.—' Worse since taking the powders.' The pain in the side having subsided, three grains of the sulphate of quinine, and five of the ext. hyoscyam: were made into two pills, and given *twice* a day, and the decoct. aloës comp. to regulate the bowels.

On the 9th of July, Spratt was much improved in health—in fact quite well. She was sent home. Fearing a relapse, however, I continued her as an out-patient, with a supply of the pills and decoct. al. comp. She returned on the 15th, with pain in the side, for which leeches (to be repeated), a blister, fever mixtures, with the vin. ant. tart. were ordered.

Having, by these means, subdued the pain in the side, I turned my attention to the remittent or *intermittent* fever (for though they were of short duration in the day, the *intermissions were perfect*), which was precisely in the same state as when she was admitted. About this time, Dr. Copland paid a visit to our hospital; at his suggestion the following medicine was ordered. Aug. 13.

Pulv. Cort. Cinchonæ ʒij.
Pulv. Capsici gr. v.
Ft. pulv. ex cyatho Vin. Alb. Hispan. bis in die sumend.

This plan was followed with advantage until the 17th of September, when three grains of capsicum and half a grain of quinine were added to each powder.

November 12.—*Not so well.* Mist. cath. (senna and salts) *daily*, blue pill, five grains; opium half a grain, on alternate nights; two grains of quinine three times a day. Having combined various bitter and astringent medicines with little effect, I determined, about the middle of January 1825, to give calomel and antimonial powder at night, purgative medicine in the morning, and fever mixture three times a-day. Under this treatment her health improved. Both sisters were discharged cured. The father, mother, and brothers and sisters of this girl have been more or less affected in the same way, as well as an elder sister living *several miles* from her father's residence, which she *had not visited*, and which is equi-distant from the sea and some marshy ground, being about two miles from each.

Case III.—*General Dropsy.*—John Ells, aged fifty-five, was admitted, June 16th, 1824, with general dropsy.

Acupuncturation on the abdomen with pretty large needles. Water passed in large drops at first, but soon ceased to flow. No peritoneal inflammation followed; the operation was not repeated, as the desired effect was not produced. A mixture composed of ext. elaterii., spir. æth. nit. and syr. rhamni cathart. alternate mornings; decoct. cinchonæ three times a-day, and solut. supertart. potassæ pro potu ordinario.

18th. — Cont. med. Fiat paracentesis abdominis. Four quarts of water from the operation. To have a pint of porter daily.

21st.—Cont. med. Pil. hyd. submur. gr. v. quaque nocte.

July 10.—Utatur acupunctura cruribus. Cont. med.

August 6.—Made an out-patient. Cont. med.

Sept. 17.—Is quite well of dropsy; complains much of headach, for which a blister to the nape of the neck, behind the ears, &c. were ordered, and he was finally discharged cured *.

Case IV.—*Epilepsy.*—Rebecca Beer, aged twenty-one, from Dover, was admitted May 14th, 1824. She was generally seized *once* a-day, sometimes more frequently, with a sensation as if she were about to fall down; the countenance during the few seconds that this sensation lasted was expressive of horror, and the skin of the face and extremities was chilly, and presented a complete specimen of the 'cutis anserina.' As she had been bled more than once for this complaint without relief, she was ordered to take the comp. submur. pill at night, a purgative mixture every morning, and camphor mixture, with the ammoniated mixture of valerian and tinct. of hyoscyamus three times a day.

18th.—Cont. the med.; the shower bath twice a week, and the ung. ant. tart. to be rubbed on the upper arm. This plan was followed up with some benefit until the 23d of July, when she was desired to use the shower bath *thrice* a week, and to take argent. nitrat. gr. $\frac{1}{8}$, ext. conii gr. iij. ter quotidie.

August 19.—Made an out-patient at her own request; she considered herself much better.—For the sequel of this unfortunate girl's case, I am indebted to my friend Mr. Sankey, a very excellent surgeon at Dover. The purport of Mr. Sankey's letter (which I am exceedingly vexed at having mislaid) was, that he had been called in great haste to see Beer, who was labouring under very obvious symptoms of pressure on the brain,—that he had bled her largely without relief. She died in the course of a very few hours.

Mr. Sankey was good enough to examine the head, when he found a very considerable tumour on the left hemisphere of the brain. I may be allowed to remark, that Beer never complained of pain in any particular part of her head, and that there was nothing like paralysis of *either side* whilst in the hospital.

Case V.—*Epilepsy.*—Elizabeth Moss, aged 43, a married woman, living as servant with a lady in this city, was admitted an out-patient of the Kent and Canterbury Hospital, May 28, 1824. Has been subject to fits of epilepsy many years. Ordered the ung. ant. tart. to be rubbed on the upper arm; free purging with croton oil every second morning; a pill twice a day, composed of argent. nitrat. gr. $\frac{1}{8}$, ext. conii gr. ij.

June 18.—Has had no fit, nor vertigo, to which she was very subject. Cont. med. et ung., sed aug. dosis argenti nitrat. ad gr. $\frac{1}{4}$, bis quotidie.

* He has been discharged nearly a year, and has had no return of the dropsical symptoms.

Dec. 10.—Had slight giddiness about a month ago, but no fit since she became a patient of the hospital. Cured. Discharged.*

Diseases of Patients admitted between the 1st of July and the 31st of December, 1824.

DISEASES.	Admitted.	Cured.	Received Benefit.	Died.	Made Out-Patients.	Discharged for Non-attendance.
Abscess of liver	1	1				
Aphonia	2	2†				
Ascites	1		1			
Bladder and kidneys, affection of	1	1				
Chorea St. Viti	1	1				
Dropsy, general	1		1			
Dysmenorrhœa	1	1				
Diabetes	1				1‡	
Enteritis	1	1				
Hydrothorax, &c.	1			1‖		
Hæmoptysis	2		1		1§	
Heart, affection of	1					
Icterus	1	1				
Liver, affection of	4	3			1¶	
Leucorrhœa	1	1**				
Mucous membrane, of the stomach and bowels, inflammation of	1	1				
Mesenteric glands, disease of	1	1				
Pleuritis	1	1				
Phthisis	2			1		1††
Rheumatism, acute	2	2				
———, chronic	3	3				
Stomach and liver, chronic affection of	3	1	1	1‡‡		
Tussis, chronic	1	1				
———, phthisica	3	3				
Vertigo	1	1				
Total	38	26	5	3	3	1

CASE I.—*General Affection of the Thoracic and Abdominal Viscera.*—Thomas Pepper, aged fifty-six, was admitted on the 29th October, 1824. Great loss of flesh; difficulty of breathing; sallow

* Mrs. Moss has had no return of epilepsy for more than a year: in case of a return, I shall not fail to mention it in a future report.

† One of these had an affection of the chest, and the other lost her voice from being frightened.

‡ Vide Case II. ‖ Vide Case III. § Vide Case I.

¶ This man is still under treatment.—I shall give his case in a future report.

** Made out-patient, and died.

†† Made out-patient, and discharged for non-attendance.

‡‡ Discharged at her own request, and died.

countenance; pain on slight pressure on the right hypochondriac region; clay-coloured stools.

Medicines were ordered to meet as much as possible the various symptoms, with but little and transitory relief. He died 28th of November.

Sect. Cadav. 16 *hours after death.*—Lungs on the right side firmly adhering to the pleura costalis; on the left about three pints of fluid. The whole surface of the heart and internal surface of the pericardium covered with raised papillæ resembling the rough part of an ox's tongue; liver much enlarged and tuberculated; stomach contained much fluid, and was extremely thin; the whole of the thoracic and abdominal viscera more or less diseased.

Case II. — *Hydrothorax with Hypertrophia and Dilatation of the Heart.* — Jacob Bristow, aged forty, was admitted December 12, 1824. Difficulty of breathing; inability to lie down; pulse irregular; liver enlarged, &c. &c.

The compound submur. pill, and a mixture with infus. of digitalis and sedatives were ordered.

He died on the 9th January, 1825.

Being much engaged, Mr. Major, one of the surgeons of the hospital, was kind enough to examine the body for me: I give the examination in his own words.

(*Bristow*)—*Sect. Cadav.* 24 *hours after death,* (*by Mr. Major.*)—'The right side of the chest contained six pints of fluid; the pleura costalis of the same side was, throughout its whole surface, of a dark red inflammatory appearance, covered at several places with a dense layer of adhesive matter; the pleura covering the diaphragm was in the same state; the right lung diminished in size, but healthy; no morbid appearance of the lung of the left side; the heart greatly enlarged, its substance considerably thickened and hardened, its cavities very much dilated. About the centre of the internal surface of the stomach there was evident appearance of inflammation extending along the pylorus into the duodenum, as far as the termination of the bile ducts. The liver very much enlarged and indurated; externally of a dark-purple colour; when cut into, it presented the usual appearance. Gall bladder of the natural size, but filled with black inspissated bile. Spleen greatly enlarged; the other abdominal viscera presented no morbid appearance.'

Case III.—*Leucorrhœa.*—Jane Spain, aged eight, was admitted July 9, 1824. Profuse colourless discharge per vaginam; sometimes, however, according to the mother's account, resembling menstruation, both as to colour and periodical return.

As this child was very weak and pallid, I ordered decoct. cinchonæ with sulph. acid. After a short time the sulphur. acid was omitted, and tinct. cinchon. added to the decoction, and half a grain of the plumbi superacetas, with ext. conii gr. ij. was given three times a day. Generous diet. Under this treatment the health was much improved, and the discharge entirely ceased.

She was discharged cured.

Diseases of Out-Patients admitted during the last Six Months of 1824.

MALES. RESULT.

DISEASES.	Admitted.	Cured.	Received Benefit.	Died.	Discharged for non-Attendance.
Asthma	1		1		
Bladder and kidneys, affection of	2	1*			1
Crusta lactea	1	1			
Chorea St. Viti	1	1			
Fever, intermittent	2	2			
Ditto, typhus	1	1			
Hepatitis, acute	1	1			
Ditto, chronic	1	1			
Heart, affection of	1†				1
‡Head, affection of	1	1			
Obstipatio	1	1			
Mucous membranes, disease of	1	1			
Mesenteric glands, disease of	2	2			
Neuralgia	2	2			
Phthisis	2§			1	1
Prostate, disease of	1		1		
Rheumatism, chronic	7	6			1
Ditto ditto, with anasarca	2	2			
Stomach and liver, chronic affections of	3	2			1‖
Sore throat	1	1			
Tussis, phthisica	4	2	1		1¶
Vertigo	4	4			
Ditto, with slight paralytic affection	1	1			
Total	43	33	3	1	6

* Attended at the hospital but once.
† Attended once only.
‡ Vide Case IV.
§ One of these attended but once—the other three times.
‖ One attendance only.
¶ Attended three times only.

Case IV.—*Affection of Head.*—Thomas Davis, aged one year, was admitted an out-patient on the 20th August, 1824, with symptoms exceedingly like those of hydrocephalus. 'Head large, and too heavy for the neck to support. Eyes prominent; strabismus. Bowels in a bad state."

Ordered—Hydrarg. cum creta gr. x. quaque nocte. Ung. antimon. tart. nuchæ. Mist. cath. f℥ss. ad. f℥j. quotidie.

Sept. 3d.—Cont. med. et ung.

10th.—Cont. med. et ung. admov. hirud. ij. temporibus et repetantur triduo interjecto.

Oct. 10th.—The above plan has been followed, viz. the powder

every night; leeches twice a week; purgatives daily; and a free discharge from the neck. The powder to be taken every second night, but the leeches and purgative as occasion may require.

Nov. 19th.—Habeat pulv. (ut ant. præscript) no. xij. capiat unum subinde. Mannæ optim. ℥j. Ol. Ricini f℥ij. Mist. Tragacanth. q.s. M. capiat coch. medium pro re nata.—Cured.—Discharged.

The mother of this child requested me to see him as I was passing her house, about *four months* after he had been discharged from the hospital. He remained perfectly well until attacked by measles, which he had very severely. Erysipelatous inflammation of the face and head supervened, and he was moribund when I saw him.

Diseases of Out-Patients admitted during the last Six Months of 1824.

FEMALES. RESULT.

DISEASES.	Admitted.	Cured.	Received benefit.	Died.	Discharged for non-Attendance.
Ascites, with dysmenorrhœa	1	1			
Bronchocele	1	1			
Breast, affection of, with dysmenorrhœa	1	1			
Chlorosis	1	1			
Cough, chronic affection of liver	1	1			
Chorea	1	1			
Dropsy, general	1		1		
Debility, chronic	1	1			
Fever, quotidian	1	1			
Hæmoptysis	2	1		1	
Hydrothorax	1			1*	
Leucorrhœa	1	1			
Liver and stomach, chronic affection of	4	4			
Lumbricoides	1				1
Neuralgia	2	2			
Ditto, with chronic affection of chest	1		1†		
Ditto, bronchocele	1	1			
Obstipatio	2	2			
Ovarial disease	2	1	1		
Paralysis of arm (slight)	1	1			
Pleuritis	2	2‡			
Phthisis	1			1‖	
Rheumatism, chronic	2	2			
Suppressio mensium	2	2			
Sore throat, with affection of chest	1	1			
Tussis phthisica	3	1	1		1§
Total	38	29	4	3	2

* Far advanced in phthisis, and attended but three times.
† *Cured of neuralgia*—chest relieved.
‡ One of these referred to the surgeon for deformity of spine.
‖ Attended but once at the hospital.
§ Attended but once—discharged.

Total of In and Out-Patients, from the 1*st of July to the* 31*st Dec.*, 1824.

	Admitted.	Cured.	Received Benefit.	Died.	Discharged for non-Attendance.
In-Patients	38	26	5	3	4
Out-Patients (Males)	43	33	3	1	6
Out-Patients (Females)	38	29	4	3	2
Total	119	88	12	7	12*

Section II.—Abstracts of Practical Facts, British and Foreign, with Remarks.†

1. *Amputation, with subsequent Discharge of Blood into the Wound,—Case, &c.*

Case.‡—A lad, aged sixteen, who had long suffered from *necrosis* of the tibia, by which he was wasted to a shadow, had the leg removed above the knee, by the *double-flap* operation.§

In the course of the operation three arteries were tied; but a fourth, which also gave blood, but seemed small, was merely drawn out with the forceps, in the expectation that its subsequent retraction would arrest the discharge. The wound was then closed by six stitches, and dressed lightly with a roller and compresses, &c.

During this and the four following days, there was a considerable discharge or oozing of *bloody serum* from the wound; but as the stump did not appear at all distended, and as no unusual pain was felt on its being handled, it was not disturbed. On the sixth

* I have little doubt that *at least half* of those discharged for non-attendance *have died*, although the fact has not been reported to me. I have, therefore, been under the necessity of placing them as above.

† The 'Facts,' &c. quoted in this department of our Journal, are drawn chiefly from the *Original Communications* contained in the recent Numbers of the other medical and scientific journals, foreign and domestic; the more valuable parts of which, relating to the Science of Medicine, will thus, monthly, find a place in the Repository, in a condensed form, and illustrated by occasional *observations* of our own.—Editors.

‡ This case is extracted from an article on *amputation*, by Dr. Dewar, of Dumfermline, in the Edin. Med. Journ., Oct. 1825, p. 270. It occurred, as we learn, some time in the present year, but no particular date is given.

§ It may be proper to mention, that the flaps appear to have been formed from the *inside* and the *outside* of the thigh; that is, so formed as to meet in a vertical direction.

morning, however, as the same discharge still continued, three of the stitches were cut out, and the wound opened, when its cavity was found *filled with a considerable quantity of clotted blood.* This being removed, the wound in a few days assumed a healthy appearance, and on the eighteenth day * was perfectly healed.

Observations.—This case is given by the reporter, as an illustration of the superiority of the *double-flap* operation over the *circular;* for, notwithstanding the untoward circumstances which occurred during the cure, the stump, he states, was round and plump, and the bone deeply buried in a mass of muscle and integument.

We, however, have been induced to give it insertion in our pages for the purpose, rather, of directing the attention of the profession to the important fact, that the discharge of *bloody serum* from a closed wound or cavity may in general be considered as an indication of the effusion of *blood* itself: for when in such cases blood is poured out, and particularly when poured out under circumstances favourable to its speedy coagulation, the *serum* alone will often escape, whilst, as in the case before us, the clotted *crassamentum* remains.

II. *Severe Injury of the Brain,—Case, &c.*

Case.—A young man was wounded in the forehead by the *breech-pin* of his gun, which was blown out, as we are told, in the discharge of the piece.†

He was knocked down and stunned for a time by the blow, but soon recovered sufficiently to walk with a little help to the nearest house, whence he was conveyed in a cart to his own residence, a distance of about two miles. Here a surgeon was quickly summoned to his assistance, by whom he was found sitting up in a chair, and able to converse on the subject of the accident.

On examination, it appeared that the piece of metal had been driven through the hat, and piercing the *frontal bone*, a little to the left of the spinous ridge, and about an inch and a half above the edge of the orbit, had entered the BRAIN to the depth of about an inch, carrying before it a circular piece of the hat, and several splintered pieces of bone.

As the piece of metal had been withdrawn from the skull by the removal of the hat, and as there was no bleeding of any apparent import, the wound was covered with a piece of sticking-plaster,

* The eighteenth day; we presume, after the operation, or it may, perhaps, be the eighteenth day after the removal of the clotted blood, for neither is particularly specified.

† The *breech-pin* (not breach-pin, as our northern contemporary gives it), is an iron screw, about two inches, generally, in length, which attaches the *breeching* of the barrel to the stock of the gun. As this screw is not exposed to the direct action of the powder, and as it is comparatively of little weight, and ill-shaped for a projectile, we cannot bring ourselves to believe that the severe injury described in this article could have been inflicted by it. In the subsequent paragraphs, therefore, we use the phrase *piece of metal*, instead of repeating on every occasion with our author, the misnomer—*breach-pin.*

whilst a messenger was dispatched for some necessary instruments for the surgeon.

In about ten minutes, however, after the application of the sticking-plaster, the patient, who had been so much at ease just before, was seized with a well-marked *epileptic fit*, which in turn ceased immediately on the removal of the plaster, beneath which a slight discharge of blood was found to have taken place.

A sufficient portion of the integuments was now raised by a crucial incision, when it was found that the opening in the bone was so large, and the fractured pieces so numerous, as to render the employment of the trephine unnecessary for any purpose.

Buried in the brain, at the depth of about an inch, the piece of the hat was found, in size and shape as the end of the piece of metal by which the wound had been inflicted. This being removed, and with it several angular pieces of bone, and all extraneous matter, the integuments were laid down, and the wound dressed superficially.

After this, the patient was freely bled, and the bleeding, we are told, was repeated on every accession of pain or fever; the bowels also were kept freely open, and the most abstemious regimen was enjoined. Under this treatment the wound slowly, but gradually healed, and the patient recovered perfectly, and almost without the occurrence of an untoward symptom.

Observations.—We give this case on the authority of Mr. Crowfoot, of Beccles, (Suffolk?) in whose practice it is stated to have occurred, and by whom it is reported in the Edin. Med. Journal for October last, p. 260.

Although rather loosely drawn up, it may, we think, be considered as an interesting example of the very different effects which *injury* and *pressure* are calculated to produce on the functions of the brain.* For we have here a very severe *injury* of this organ, followed by little if any functional derangement; whilst the slight degree of *pressure* caused by the confinement of a little extravasated blood was immediately followed by an epileptic paroxysm, that is, by insensibility and convulsions.†

This remarkable difference, which is rarely adverted to as it deserves, may perhaps be explained by considering that the effects of an *injury* may for a time, at least, be limited to the spot on which it has been inflicted; whilst every the slightest degree of *pressure* on any part must, in an organ confined and constituted as the brain, be instantly and equally felt in every other.

But in order to this difference being strongly marked, it is necessary, perhaps, that the part immediately acted upon should belong

* *Injury* and *pressure*. We use these words, of course, in contradistinction to each other; meaning by the first, wounds and loss of substance, and by the other, pressure simply.

† The connexion in this case, between the pressure alluded to and the epileptic fit, seems to us clearly established by the sudden invasion and immediate cessation of the paroxysm, after the application, and on the removal of the adhesive plaster from the wound.

to that portion of the brain which is not essential to life, or sensibility, or motion; for otherwise, the effects of injury and pressure will, in all probability, be very nearly alike.

We must not conclude without observing that the patient, since his recovery from the wound, is stated to have had two or three other epileptic attacks. As he never was subject to such attacks previously, we cannot help considering those now mentioned as connected with that which occurred on the day the wound was received, and would recommend for them, therefore, should they continue, a similar mode of treatment, namely, the removal of all pressure at the seat of injury, by means of a free incision, &c.

III. *Case of Hydrocephalus, in which the Operation of Puncturing was repeatedly performed with advantage.**

In April, 1822, Mr. Sym was called, as he tells us, to visit a male infant eleven weeks old, and affected in the following manner, viz. the head was exceedingly enlarged, and evidently contained a fluid, for it was diaphanous (when placed in the direct rays of the sun) down to the temporal muscles, and returned, on being agitated, the sound of fluctuation.

On inquiry, it appeared, that the head had originally (*at the time of birth*) been unusually small, and that the child had been always very fretful; but that it had gone on thriving pretty well until it was about six weeks old, when it began to sleep worse than before, to take less nourishment, and to decline in flesh, the head at the same time becoming tumid at the fontanelles.

Small blisters (to the *head*, we presume), and a gentle course of calomel, were now prescribed, as much—Mr. Sym candidly acknowledges—to fulfil the ordinary routine of practice, as with any hope of relieving the patient. In the course of a fortnight, however, these proceedings were abandoned; for the integuments covering the wide spaces between the bones had become so thin and tense, that rupture was apprehended; and the child, also, was now emaciated, and rejected the breast.

It was determined, therefore, to remove part of the fluid, and accordingly a small opening was scratched with a lancet in the posterior fontanelle, and six ounces of *salt-tasted serum* drawn off. The removal of this quantity left the head so flaccid, that it was found difficult, we are told, even by the aid of a bandage, to keep it in form; but the child did not appear to suffer any inconvenience from the loss; on the contrary, it revived after the operation was over, slept well the succeeding night, sucked more greedily next day than it had done for several weeks preceding, and the pulse became both fuller and slower.

It was not long, however, before the head again became distended, and the same distressing symptoms again supervened which had existed before the operation. About the same quantity of fluid,

* By Mr. James Sym, of Kilmarnock, in Edin. Med. Journ. Oct. 1825, p. 295.

therefore, was again drawn off, and with similar good effects, and this repeatedly;* the relief afforded by the operation being always so obvious, that the parents themselves of the child became anxious to have it performed, sooner in general than the surgeon thought necessary.

On the whole, the operation was *repeated*, we are told, *five* times in the course of three months, and *thirty-six* ounces of fluid altogether withdrawn from the head.† At length, however, that is to say, about a fortnight after the last operation, the fluid ceased to accumulate, and death, in a little time after, seems to have taken place.‡

As this event approached, we may also observe, the fluid not only ceased to increase in quantity, but a part of that already effused seems to have been absorbed; for within a week of the child's death, as Mr. S. states, the scalp fell in between the parietal bones, so as to form a deep furrow at that part. He further states, that about this time also, the secretion of *urine* was 'very remarkably diminished.'

The following is the report given of the *appearances* found on dissection:

Dissection. — The *dura mater* adhered firmly to the bones of the cranium, and the thickened *arachnoid membrane* formed a large sac, containing two and a half pounds (pints?) of limpid serum, and partially divided into two chambers by the *falx*.§ The *cerebellum* and *pons varolii* were of the natural size and appearance, as were also all the *nerves* which originate within the cranium; but in place of the *cerebrum*, there was only a small, firm, flat mass, not larger than a garden bean, which lay in the *sella turcica*, and which was so much compressed, that it was impossible to recognise in it any parts corresponding to the structure of a healthy brain.

* The second and subsequent operations were performed by means of a small trocar and canula.

† "Was *repeated* five times." We are rather at a loss to determine from this phrase, whether the operation was performed *five* times or *six*. As Mr. Sym's language is not very precise, the former may be intended; but the expression, strictly interpreted, implies the latter (for *repetition* cannot be affirmed of the *first*); and the total quantity of fluid withdrawn (thirty-six ounces), compared with the only other quantity specified (six ounces at the first operation), would seem to indicate the same.

‡ It will be observed, that we speak rather loosely in this paragraph, with respect to the *periods* at which the different events mentioned in it occurred—a circumstance to be attributed to the negligence of Mr. Sym, who, in the whole of the original article, has given us but one date, namely, that in the first line, "April, 1822." He states, indeed, that the child "was six months old when it died;" but, from his own detail, it appears to have been nearer seven.

§ No notice is taken in this report of the state of the *pia mater*, which seems to have disappeared, together with the *cerebrum* itself: or was the fluid really encompassed by the *arachnoid membrane* alone, as Mr. Sym alleges?

IV. *Spontaneous Hydrophobia.**—*Cases, &c.*

Case 1st.†—George Edgar, the subject of this case, was a private soldier in the Coldstream Regiment of Guards, aged about thirty, florid, and remarkably robust.

Being quartered at the Pigeon House,‡ near Dublin, he had passed the morning of the 13th July, 1824, engaged in angling, at the distance of about a mile from the Fort, to which he returned at noon to dinner. Discovering, however, some time after his return, that part of his fishing-tackle had been left behind, he ran back to the place where he had been angling with all possible speed; and finding, on his arrival there, that the tide had already risen so high as to cover the spot, he plunged at once into the water, covered with perspiration as he was, and remained in it, as we are told, for about an hour and a half.§

During the night of the thirteenth he felt chilly, and was sleepless and depressed; but on the following day (the 14th) he is stated to have been entirely free from uneasiness or complaint.

‖Towards the morning of the 15th, however, he awoke with some sensations of uneasiness about the throat, and complained, on rising, of a dull sense of weight at the upper part of the thorax on the left side, and of a benumbed aching, striking down the left arm, and most felt at the wrist. His countenance at the same time was pale, his lips livid, and his whole character that of excitement, alarm, and restlessness. He was, in consequence, immediately sent into Dublin, to the Regimental Hospital, where, on admission, his appearance was so peculiar, (although at the time complaining but little), that Dr. Whymper (then surgeon to the regiment) was immediately summoned to his assistance.

I was forcibly struck, this gentleman says, on seeing him, with the extreme anxiety of his countenance, and the irritability of his manner, so different from his usual respectful and soldier-like demeanour. He now complained of slight pain only, but of much

* By *spontaneous* hydrophobia, of course we mean, hydrophobia arising without previous introduction of any morbid poison.

† From an article in the Lon. Med. Journ. (Nov. 1825, p. 375), by Dr. Whymper, late surgeon, now surgeon-major of the Coldstream Regiment of Guards.

‡ The Pigeon-House is a fortified post, commanding the entrance of the harbour of Dublin.

§ The 13th, it appears, was one of the hottest days in July, in Dublin.

‖ In the original article it is stated, that the symptoms about to be detailed commenced on the morning *next after* the bathing, but no particular dates are mentioned. Through the kindness of a military friend, we are enabled, on the authority of Dr. Whymper himself, to insert all the necessary dates, and to state, as we have done in the text, that the hydrophobic symptoms did not appear until the morning of the *second day* after the bathing.

It is proper to add, that the slight inaccuracy here corrected arose from the original article having been drawn up under circumstances which did not admit of an immediate reference to official papers.

oppression under the five upper ribs of the left side,* and of an obtuse aching of the left arm and shoulder, which were weak and powerless. The pulse was oppressed and wiry, and somewhat, also, irregular and intermittent. The breathing was slow and laboured, and frequently interrupted by deep sobbing sighs. The skin was rather cold, but the thirst was excessive, whilst at the same time he refused to drink, which took away his breath, as he said.

Under these circumstances a large bleeding,† a warm bath, and free purging, by means of the oleum ricini, were immediately directed; from the prompt execution of which orders the patient experienced so much relief, that the remainder of this day was passed in a state of comparative tranquillity.

16th.—After a restless night, his situation this morning was found much worse than before. For although now free from pain, the sense of weight, and the numbness already described, were very distressing, and the respiration had become exceedingly anxious, and was performed, as it were, by continual low-drawn, convulsive sobbings. The act of inspiration in particular seemed, we are told, to be solely one of *volition*, being interrupted on every occasion, when the attention was in the least withdrawn from it, and only re-established after a violent and convulsive struggle, such as occurs under a sense of impending suffocation.

The pulse, also, was now again irregular and intermittent; the look wild; the pupils dilated, but very sensible to changes of light; the head giddy, and all the senses inordinately excited.

The bowels had been freely acted upon, and the skin was cold and moist; but the thirst was still excessive, and he could no longer bear the sight, or even the sound, of fluids, which now produced a sensation of horror, and sometimes even brought on convulsions.

Convulsions, also, were now excited by any attempt to swallow, and by every circumstance which affected any of the external senses in a sudden or unexpected manner.‡ Thus, the shutting of a distant door, the fall of a little water on the floor, the motion of the window-blinds by the air, producing a sudden flickering of light, the movements of persons near his bed, or the touching of any part of his body unexpectedly, were all, or any of them, sufficient to produce this effect; and principally, as Dr. Whymper states it seemed to him, by withdrawing the attention of the patient for the moment from what he emphatically calls, 'the business of breathing.'

As the former bleeding had been productive of temporary relief, the operation was now repeated; but the sight of the fluid blood, or

* There was manifestly nothing of an inflammatory character in the pain and oppression here mentioned, for they were at all times relieved by strong pressure on the part.

† We are enabled to state that forty ounces of blood were taken at this bleeding.

‡ *In a sudden or unexpected manner;* for we learn that if aware beforehand, and prepared for what was about to occur, he might be approached, or even touched, without appearing to suffer from it.

the sound of its fall into the basin, brought on a convulsive paroxysm, and after losing about eight ounces, he became so faint that the vein was closed.

While this state of faintness continued, he was comparatively tranquil, and an attempt was therefore made to exhibit a dose of *opium* and *hyoscyamus;* but after having taken the pills into his mouth, he refused, or was unable to swallow them.* He tried, however, and succeeded in getting down a little warm tea; but the effort produced a fit of strangulation which nearly proved fatal, and from which he recovered bathed in a cold sweat, and labouring under an inexpressible degree of anxiety and horror.

He now sat constantly upright in his bed, changing his position, and moving his pillows and bed-clothes every moment; complaining at the same time, only of the load which choked up his throat and chest; and spitting, hawking, and gnashing his teeth, in continual efforts to clear his mouth and throat from the viscid saliva which he imagined to be the cause of this choking. But whilst his appearance at this time was so appalling that his attendants shrunk from him with astonishment and terror, his mind was clear, and free from all intention of mischief.

At length, about four o'clock in the afternoon, this state of excitement and suffering subsided, and a state of *collapse*, as it is termed,† or as we shall simply say, a state of tranquillity and ease, suddenly succeeded. The nervous irritability now ceased; the respiration became natural; the pulse regular, though very feeble; and the power of swallowing was perfectly restored. His mind, also, became quite calm; he felt that death was approaching, had prayers read to him, sunk gradually into a state of syncope, and thus calmly expired.

This event took place, we find, at about ten o'clock at night, so that the entire duration of his illness was about forty hours.‡ On examination of the body after death, the only morbid appearances met with of any note are stated by Dr. Whymper to have been the following, viz.:—

A remarkably flaccid and extenuated state of the parietes of the heart, which were as easily torn as soaked pasteboard, and an unusual dryness of the *serous* surfaces of the thorax and pericardium.

* At this time, also, a large blister was applied between the shoulders, and another over the left upper ribs; but the progress of the disease afforded no opportunity to judge of their effects.

† Our only objection to the term *collapse*, arises from its involving certain hypothetical notions, with which we have nothing to do in this place.

‡ In the original article, it is stated that the duration of this man's sufferings was about *thirty* hours. From the preceding detail, however, it appears that the stage of excitement occupied at least *thirty-four* hours, and that of collapse about *six*.

For these particulars, and for any others in which we may seem to vary from our authority, we are (as stated in a former note) indebted to Dr. Whymper himself.

The great veins, and the right auricle of the heart, are also stated to have been found distended with blood; but this is a circumstance too common, and too accidental in its nature, to be regarded either as morbid or remarkable.

Observations.—No person acquainted with the characteristic symptoms and natural progress of hydrophobia will hesitate, we imagine, to acknowledge the preceding case as a true specimen of that disease.

The only question, then, likely to arise, will be with respect to its origin, and upon this point, no doubt, some difference of opinion will exist; for some will at once affirm that it *must* have arisen from a *rabid* bite, received at some former period of the man's life; while others, seeing no traces of any such event,* and taking into consideration all the circumstances of the case, and the powers of the animal economy, will be inclined to consider it as of *spontaneous* origin.

To this latter class we belong, and have, indeed, been chiefly induced to give the case a place at such length in our pages, on account of its being, in our opinion, one of the most satisfactory of the kind with which we are acquainted.

For the case which follows so much cannot be said, and it is added, therefore, rather as an interesting sequel to the former, than as a true case of hydrophobia in itself. For although perfectly satisfied in our minds as to its identity with the preceding case, we are, at the same time, willing to admit, that others may, without reproach, entertain doubts upon the subject; and may allege, as the disease did terminate differently, that its progress, if left to nature, would have been different also.

Case 2d. †—On the 28th July, (1824) that is, twelve days after the death of Edgar, the subject of the preceding case, Wm. Cooper, a private soldier in the same regiment, aged about twenty-five, was admitted into the hospital with the following symptoms, viz.:—

Considerable pain in the left side of the chest, in the region of the heart;‡ a disposition to hiccup; an urgent sense of impending suffocation, from which he obtained momentary relief by frequent, deep, and spasmodic inspiration; constant efforts to clear the fauces and trachea from viscid mucus; urgent thirst, but with disinclination to attempt drinking, which seemed to take away his breath, and induce strangulation.

The skin was cool and clammy; the pulse small, wiry, and irregular; and the countenance peculiarly distressed and anxious. The natural functions were regular, except that there was a great discharge of limpid urine.

* The most careful inquiries were, it appears, made upon this subject, but without discovering any ground, even of suspicion; and the man, at the time of bathing, we are told, was in a state of perfect health.

† Extracted from the same article as the preceding case.

‡ This pain, as in the case of Edgar, was, we are told, relieved by pressure.

On being questioned, he stated that he had not felt quite well since the time of Edgar's death;* that in particular, he had felt weak, low, and depressed for some days; that he had, however, been tolerably well the preceding day, and had only been attacked with his present complaints a few hours before admission into the hospital.

He was immediately bled *ad deliquium*, which produced considerable relief; and in the course of the day his bowels were freely acted upon by purgatives, exhibited by the mouth.

On the following day, however, the distressing symptoms connected with the organs of respiration, &c. were found to have again returned with great severity, and spasms were now more easily excited by slight external stimuli than before.

A second bleeding, therefore, and again *ad deliquium*, was this day carried into effect, which seems to have extinguished the disease; for from this time, we are told, he gradually recovered, and in about a fortnight was able to leave the hospital, and go into the country for change of air.

Observations.—It appears now, however, that the constitution of this patient received a shock in the conflict to which it had thus been exposed, from which it never has, and probably never will, recover; and that he is, in consequence, at this moment about to be discharged the military service as an invalid.

His present complaints are, we are informed, constant dyspnœa, palpitation, and occasional attacks of asthmatic paroxysms; with a remarkable agitation of manner, and hesitation of speech: complaints, we may observe, very nearly allied to those under which he laboured in his illness of July 1824, and from which he seems to have suffered in a greater or in a less degree, ever since that period.

V. *Case of Fistulous Opening between the Vagina and the Urethra, successfully treated by an Operation.* †

There are few diseases more distressing to the patient, and few, in general, less under the control of art, than those fistulous openings between the vagina and the urethra, which sometimes occur in females after parturition, &c. The following case of this kind, therefore, in which a successful operation was performed for the relief of the patient, will no doubt be perused with some interest by our readers.

* In explanation of this circumstance, it may be observed, that this man had been one of the attendants upon Edgar, and, as we have been informed, one of the most anxious and assiduous. He was well aware, therefore, of all that patient had suffered, and was evidently struck and alarmed, we are told, at the similarity which his own situation bore to that of his unfortunate comrade.

† The three articles here immediately following, serve, in some measure, to illustrate each other; the subject of the *last* presenting us, in one body, with a combination of the same, or similar maladies, as those under which each of the other patients had separately laboured.

*Case.**—C. Mahony, a healthy country woman, aged twenty-six, applied to Mr. Hobart, the reporter of the case, (July 17, 1825,) for relief, under the following circumstances.

About ten months before, she had, after a tedious labour of five days, been delivered by means of the *perforator* and *crotchet*. From that period she had been unable to retain her urine, or discharge it through the urethra, the whole of it passing, and that constantly, from the vagina, and producing, independent of other distress, excoriation and ulceration of the nates and thighs.

On dilating the vagina by means of Mr. Weiss's speculum, (in effecting which, we are told, some difficulty was experienced, in consequence of the anterior portion of the vagina being considerably thickened), a satisfactory view was obtained of the fistulous opening into the urethra, which gave rise to these symptoms. This opening was nearly oval, with its longer diameter in the direction of the vagina; its edges smooth and callous; its size sufficiently large to admit the point of the finger; and its situation about two and a half inches from the os externum.

The plan recommended by Dessault and others, of introducing a pessary into the vagina, and keeping a catheter in the urethra, had been previously adopted, and persisted in, it is said, for two months, but without any advantage. The edges of the opening, also, had been touched with caustic, and the actual cautery even had been applied, but with no better effect. It was determined, therefore, to bring the parts into contact, and to retain them so by means of ligatures, if possible, after having reduced them to a granulating state.

For this purpose the *argentum nitratum* was applied several times to the callous edges of the opening, and when by these means they were brought into a proper state, two ligatures were introduced, and secured so as to retain the parts in due contact. A catheter was at the same time introduced into the bladder through the urethra, and properly secured in its place also.

At the end of fourteen days, as we are told, the ligatures were withdrawn, and three days after the catheter, when it was found that the opening into the vagina had been perfectly closed, the whole of the urine flowing now from the urethra. For some days, however, the patient suffered a little from incontinence of urine; but this also ceased as the urethra recovered its natural tone, and by the end of August, the woman seems to have been relieved from all inconvenience.

Note.—We have not thought it necessary here to enter into any of the details connected with the actual performance of the operation, as this had nothing peculiar in it but what arose from the nature of the instruments employed, and as it would be impossible to convey accurate notions with respect to these instruments by mere words. Upon this point, therefore, we must refer to the

* From the Lon. Med. Journ., Dec. 1825, p. 439, by Mr. S. Hobart, surgeon, &c. Cork.

original article, which is illustrated by a plate of the instruments in question.

VI. *Morbid Anatomy—THE UTERUS—Osseus Tumour, &c.*

A LADY, sixty-nine years of age, was attacked (on the 23d Nov., 1824) with symptoms of strangulated hernia, which, notwithstanding the reduction of the intestine on the following day, proved fatal in about thirty hours.

On examination after death, the usual appearances of extensive peritoneal inflammation were found, but the state of the UTERUS attracted more attention, as well on its own account, as because no suspicion seems to have been previously entertained of any particular disease in that organ.

The following description of the state of this part is taken from the report of Mr. Rose, by whom the body was examined.*

The uterus projected into the middle of the cavity of the pelvis, in a pyramidal form, and seemed at first to consist of one entire mass of bone. On taking it out of the body, however, the *anterior* part was found still fleshy, and on dividing this, the *cavity* of the uterus was also found perfect, though much compressed and reduced in extent; but behind this cavity, and imbedded in the substance of the uterus, *a spherical mass of bone* was found, as large as a pullet's egg.

This mass consisted, as it is stated, principally of *phosphate of lime*, which, from the arrangement of the particles, seemed to the reporter to have been originally deposited in a *tubercle*, similar to that about to be described.

Imbedded also in the substance of this organ, and a little below one of the *fallopian tubes*, one of the *hard rounded tubercles* so often met with in the uterus, was also found. It was of a white appearance, as large as a hazel nut, and when cut into, exhibited the common structure of these bodies, being intersected by membranous septa.

It is proper to add, that this lady had been the mother of three children, the youngest of whom, at the time of her death, was thirty-five years of age.

Nor must it be omitted, that an *oval pessary* was found in the vagina, which, judging from its appearance, and the intelligence obtained from one of the family, had remained there, in all probability, for a number of years, entirely forgotten, as it would seem, by the patient herself, and by those around her.

VII. *Morbid Anatomy—UTERUS, VAGINA, and BLADDER.*

In a female subject, apparently about thirty-five or forty years of age, of whose previous history nothing was known, and which externally exhibited no peculiarity of any note, the following singular appearances are stated to have been found on laying open the abdomen, &c.

* From a communication by Mr. Fowkes, of Hampstead Road, in Lon. Med. Journ., Dec. 1825, p. 467.

A tumour,* almost perfectly globular, and four inches and a half in diameter, occupied the greater part of the pelvis, compressing the *rectum* firmly, and nearly hiding the *uterus* from view.

The anterior surface of this tumour was in contact with, but not adherent to the peritoneum; while its superior surface was partly covered by the *ileon* and the *caput coli*. The bladder, pressed to the left side, was small, flat, and empty, and lay immediately between the anterior surface of the tumour and the internal face of the pubes; and on closer inspection, the fundus of the uterus, the ovaria, and the fallopian tubes, were to be seen beneath it, low down in the pelvis.†

When the tumour, bladder, uterus, and rectum were removed from the pelvis, it became evident that the diseased mass grew from within the substance of the cervix uteri,‡ as the peritoneal covering of the womb, and its peculiar texture, were to be observed extending over it; the uterine substance, however, becoming gradually thinner as it approached the upper part.§ The tumour was hard, incompressible, and remarkably spherical, with slight depressions or undulations on some parts of its surface.

On cutting through the external covering—derived, as has been just stated, from the peritoneum and uterine substance—the whole tumour was found to have a crust or covering *of bone*, about the twentieth part of an inch in thickness, and so hard as to require a saw for its division. This crust being divided, the mass was cut through the centre with a knife, and was found to consist of a dense tough, semi-transparent, and elastic substance, apparently homogeneous, and more closely resembling *cartilage* than any thing else. The whole tumour appeared perfectly sound, and exhibited no trace of inflammation or ulceration in any part. Its origin was three inches wide, and had no communication with the cavity of the uterus.

On laying open the UTERUS, its lining membrane appeared healthy and unchanged, and the cavity would have been of the ordinary size, but for the encroachment of another tumour, at the upper and back part. This second tumour was situated in the posterior thickness of the womb, and resembled the other in its structure, except that it had no osseous matter attached to it.

The VAGINA was laid open from the back part, when a new and unexpected morbid appearance presented itself—the neck of the BLADDER being found extensively destroyed, and a free communica-

* The details which follow are taken from a communication by Dr. Godman (one of the editors), in the Philadelphia Medical Journal for May 1825, p. 82. The *subject* to which they relate appears to have been brought into the dissecting-room.

† Both the ovaria were found altered, apparently disorganised, and closely resembling hydatids clustered together.

‡ From that part of the cervix uteri next to the bladder.

§ The uterine substance covering the tumour, is stated to have been about the eighth of an inch in thickness at the base, and less than half this at the upper part.

tion existing between the cavity of that organ and the vagina.* The aperture by which this communication was formed was three-fourths of an inch in diameter, and had its edges rounded, and smoothly cicatrised. The surface of the vagina was covered with a tenacious mucus, but no appearance of inflammation was to be seen, even on close inspection. In other respects, also, the parts around were natural, except that every trace of the *meatus urinarius* had disappeared.

VIII. *Ulceration and Rupture of the Stomach, Case, &c.*

Case.†—An unmarried lady, tall, thin, of a melancholic temperament, and about forty years of age, had been for several months troubled with an uneasiness at the pit of the stomach,‡ and other dyspeptic symptoms, when, on the evening of the 1st March, 1824, she was seized, after some chilliness, with *a sudden pain at the pit of the stomach,* which forced her to cry out.§

In about an hour after this occurrence she was seen by Dr. Elliotson, to whom we are indebted for the particulars of the case, and who thus describes the situation in which he found her on his arrival.

'She was standing in her bed-room, leaning on the neck of a female servant, and groaning with agony at the pit of the stomach. Her features, naturally long and sharp, seemed now unusually so; her swarthy, pallid complexion was become cadaverous, and the expression of her countenance was that of the most dreadful suffering. She was shivering with cold, though before the fire, and her hands were icy and blue. Her pulse was a hundred and twenty, but neither full nor hard, nor particularly weak; her breathing was very quick and short, and she retched every now and then, but vomited nothing more than the barley-water she was drinking.' In addition to these symptoms, there was pain at the epigastrium on pressure, and independent, as it were, of the constant agony at this part already mentioned; and her situation, we may add, had been nearly the same from the commencement of the attack.

Sixty drops of laudanum were immediately exhibited, and the dose was thrice repeated in the course of about three hours, but without any benefit. She was then bled to the amount of about twenty ounces, but with the same result; and soon after had a *fifth*

* This communication, it is evident, must have been in close proximity with the base of the tumour, growing from the cervix uteri.

† From the Medico-Chirurgical Transactions, vol. xiii., 1825, p. 26.

‡ This *uneasiness* she was in the habit of relieving by copious draughts of *hot* water; and during her fatal illness, she was for a time, we are told, 'incessantly drinking water, *so hot,* that no one but herself could hold the glass in which it was contained.'

§ She had dined on *pork* a few hours before, which meat agreed better with her than any other. Her bowels had been open in the morning, and she had no hernia.

dose of laudanum, (*sixty drops*) which, in a little time, was followed by considerable ease.*

Next day this calm continued, but there was still much tenderness of abdomen, to correct which, and relieve the bowels, a large blister, and ten grains of calomel were prescribed.

These remedies, however, did no good, for on the third day the tenderness of the abdomen was greater than before, and more widely extended, and the bowels had not been relieved. Her situation also, in other respects, had evidently changed for the worse. Calomel, therefore, and purgative clysters, were ordered to be repeated at intervals, until the bowels were opened, and were several times exhibited, but ineffectually; for the calomel was rejected, and the clysters brought nothing away. The castor oil, therefore, was now administered *per os et per anum*, and at length the bowels yielded, and the tenderness almost disappeared; but these symptoms, seemingly so favourable, were only the precursors of death, which took place on the fourth day, about *seventy hours* after the commencement of the disease.

Examination of the body.—The body was examined about forty hours after death. On laying open the abdomen, which was prodigiously distended, a large quantity of very fœtid gas escaped. The whole of the *peritoneum* lining the abdominal muscles, and nearly the whole of that part covering the anterior surface of the viscera, was found coated with a layer of fibrine; and a good deal of yellowish fluid with white flakes, (such as is the mere product of inflammation,) was collected in the upper part of the abdomen.

In the anterior part of the cardiac half of the *stomach*, a little below the small curvature, an aperture was found, perfectly circular, with a smooth edge, large enough to admit the end of the little finger, and surrounded by a dark-coloured ring of some extent. *Within*, an ulcer was discovered, two inches in length, narrow at one end, and gradually becoming broader and deeper towards the other, where the aperture just mentioned had taken place. The edges of this ulcer were smooth, but the surrounding parts were much thickened, very hard, and red.

The stomach contained a good deal of soft dark matter, which readily escaped through the opening, on moving or pressing the organ; but no appearance of any such effusion having taken place during life, could be discovered.

Observations.—This case is chiefly valuable, as serving to correct some statements which have been made, with respect to the *diagnostic* symptoms which may be expected, when RUPTURE OF THE STOMACH has taken place.

Thus Mr. Travers says that these symptoms are, 1st, sudden, most acute, peculiar, and *unremitting* pain, *radiating* from the pit of the stomach or the navel, to the circumference of the trunk, and

* She had thus, in about four hours, three hundred drops of laudanum; but a part at least of the first dose had been rejected.

even to the limbs; 2dly, coeval *rigidity* of the abdomen; and 3dly, a *natural pulse* for some hours, till the symptoms of peritonitis begin.

Now in the present case, the pain did *remit* after the fifth dose of laudanum, and the patient remained comparatively easy for about twenty-four hours.* The pain also seems to have been confined to the region of the stomach, and not to have *radiated* from this in any direction; 2dly, there was no *rigidity* of the abdomen observed; and 3dly, the *pulse* was at no time *natural*, being one hundred and twenty from the commencement.

IX. *On the Propriety of Surgical Operations in Chronic Diseases of the Uterus and its Connexions.* By Professor Foderé.—(*Journal Complementaire.*)

The title of Professor Foderé's paper on this subject is put in the form of an interrogatory: — *Is it advantageous to the patients, that chronic diseases of the uterus and its connexions should be made the subject of surgical operations?* The question is important at this time, when the boldness of modern surgery is ready to attempt whatever the mind can conceive for the benefit of those labouring under disorders of which the tendency is to destroy life. There is no want of courage in the present day to perform whatever is practicable: there may be some danger lest the same courage should occasionally lead to the performance of what does not promise to be useful.

The first part of Professor Foderé's remarks relates to the subject of extirpation of the uterus. After stating it as his opinion that cancer is never a local affection merely, he proceeds to give many examples of diseases to which the name of cancer has been erroneously implied — a mistake which has not only often, in his opinion, excited needless alarm in the patients, but has led to the performance of unnecessary operations, to which the cure, that might have been effected by simple means, has been improperly attributed. Several examples are mentioned in support of this assertion, which have occurred in his own practice. The danger of the operation is thus considered: —

'I can conceive that a prolapsed and strangulated uterus, deprived of heat, sensibility, and circulation, may have been some-

* Dr. Carm. Smith long since recorded, in the 'Medical Communications,' (vol. ii. p. 467, 1790,) the case of a young lady, in whom rupture of the stomach took place when she was going to bed. Instant and violent pain succeeded, and continued through the greater part of the night; but in the morning she complained of *no pain*, passed the day tolerably easy, and died suddenly in the evening. Mons. Laennec also, in the *Revue Médicale* for March 1824, mentions a case which occurred in his own practice, in which the pain *lessened* in theevening after the rupture, and was scarcely felt on the third day. The quality of being *unremitting*, is therefore improperly attributed to the *pain* which takes place on *rupture* of the stomach.

times removed without inconvenience, the economy having gradually become accustomed to the void which is left between the bladder and rectum; and in this way may be admitted the observation of Baudelocqué, who thought that a hernia of the womb, hard, scirrhous, ulcerated, or gangrenous, might also be amputated, particularly when not of great size, and when its natural functions had ceased. For the same reason, Molinetti observes, that the extirpation of this organ may be successful in aged women, because in them many of the vessels have disappeared, and the calibre of the rest is diminished. It is, however, no less certain that operations of this kind have been for the most part unsuccessful, even in cases of hernia; and that, before determining on such a measure, whatever may be the disease, we should take the following circumstances into consideration: — 1st, The possible descent of the intestine and of the epiploon by the opening made in the peritoneal duplicature which connected the uterine system with the bladder and rectum. 2d, That although, in general, the uterus in subjects advanced in life is flabby, its vessels small, and its sensibility and circulation diminished, it is no less a matter of observation, that, independently of women in whom menstruation is prolonged beyond the usual period of cessation, many are also subject to menorrhagia for many years after that epoch, a circumstance indicative of great plenitude of the uterine vessels. 3d, That the excrescences known by the name of polypi, implanted in the mucous membrane of the uterus, occasion frequent hæmorrhages, and that their extirpation sometimes occasions irremediable accidents of this kind. If hæmorrhagy is what we have so much reason to dread in these conjunctures, what may we not apprehend in a uterus yet in its full vigour, and the centre of a great degree of vitality? In the year 1817, a very able hospital-surgeon in a large city had a patient in the wards, of more than fifty years of age, afflicted with an old and complete procidentia uteri, entirely disorganised. The surgeon tied a large pedicle, as high as the vagina, and two hours afterwards divided it. The excised mass contained, (according to his belief, but as I do *not* believe,) the whole of the uterus, with the ovary and Fallopian tube of the right side. The vaginal cul-de-sac was closed by adhesion, and the woman was perfectly cured at the end of three days. Emboldened by this success, the surgeon tried the same operation on a younger woman, who continued to menstruate, and he removed a painful tumour at the neck of the uterus, together with a portion of the vagina: great hæmorrhage followed, which could not be checked, and the patient died two hours after the operation.

'These two cases are alone sufficient to prove, that whatever success we may expect from an operation in a case of prolapsed uterus, and in an aged subject, we cannot look for the same result where the uterus is carcinomatous and in its proper situation. No body can be ignorant, that in cancerous affections the affected organ is greatly engorged, and that the slightest touch is sufficient to produce bleeding: even supposing, therefore, that the disease is

local, not dependent on a constitutional disposition, which will be evinced in some neighbouring parts, and that it might be destroyed by an operation, how are we to arrest the hæmorrhage, and prevent its being fatal to the patient? The fear of this occurrence is surely sufficient to dissuade us from the operation, admitting the possibility that an operation might put an end to the disease. But the possibility is what cannot be admitted: how, indeed, is an operation to be conducted in parts out of the domain both of the eye and of the hand? It may be said, that nothing more is required than to divide the neck of the uterus and the upper part of the vagina, parts accessible to the hand, with the assistance of a *speculum*; but can we forget, that, even supposing cancer to have first shewn itself in the neck of the uterus, it is of a nature to pervade the whole of the organ, and that good practitioners have always considered it essential, when operating for cancer of the mamma, to remove and cauterise every part which looks suspicious,—a precaution which has been far from invariably ensuring success? How is the surgeon to dive into the interior of the uterus and its appendages to remove all the parts that are diseased? The details of all that must be necessary in such a case, and of the useless torment inflicted on the patient, are horrible to reflect upon.

For these reasons, Professor Foderé concludes that the operation is impracticable, and has no analogy with that for cancer of the breast, where all the parts are open to the eye and accessible to the hand. With reference to the mistakes that have been made concerning the existence of scirrhus and cancer of the uterus, he gives the following minute description of both:—

'In *scirrhus*, if I may trust my own observations, aided by what I have learnt from a perusal of ancient and modern writers, the patient is previously the subject of frequent indispositions, and her colour and physiognomy undergo a change some time before any alteration is discovered in the texture of the uterus. The attack of the disease is not always deferred to the period of the change of life, but the patient complains of various difficulties and irregularities of menstruation: to which succeed an unusual sense of weight in the region of the womb, occasioned by the engorgement of the neck or of the body of the uterus, or of both. The progress of this engorgement is usually slow: if it is seated in the body of the uterus, it forms only a small tumour in one of the iliac regions, or in both at the same time, and which can only be distinguished through the parietes of the abdomen after some years, or by the introduction of the finger to the upper part of the vagina and the sides of the womb. When its seat is the neck of the uterus, it is sooner discovered by an examination, the lips of the os uteri being then found rounded, uneven, everted, and, if the examination is made at a later period, hard and ulcerated. In the beginning of the malady the patient makes little complaint, except of distension and weight, which produce dragging feelings in the loins and groin, with numbness, and frequently with swelling of the lower extremities, extending to the labia; with difficulty, when the scirrhous tumour

fills the lower portion of the pelvis, in evacuating the bowels or bladder. But if the indolence of the tumour excites no apprehensions in the mind of the patient at this time, an attention to the symptoms does not allow the enlightened practitioner to entertain the same degree of confidence: — 1st, The several inconveniences of which the patient has complained go on increasing; her face grows pale, her features become changed, her flesh becomes flaccid, her eyes hollow, her mouth large: she is soon fatigued, and unwilling to walk. All the parts of the body, the head, the chest, the abdomen, suffer at once. The patient is distressed with nausea, vomiting, faintings, imperfect sleep, alarming dreams, palpitations, sometimes in the epigastrium, sometimes of the heart. The pain of the head is particularly referred to the occiput and temples, and sometimes to the orbits, where a sensation is experienced which resembles the tearing of membranes or the fracture of the orbitar cavities. Emaciation and ulceration of the legs follow, and a collection of water takes place in the cavity of the peritonæum or of the uterus. 2d, There is generally a suppression or diminution of the menses in the two first months of the existence of the tumour; but after this, an abundant and immoderate flow, alternating with leucorrhœa. Nauche examined the fluid discharged so copiously; it is serous, of a faint peculiar odour, changes he syrup of violets to a green colour; and forms large, not deep-coloured, spots on linen, generally with a brown border.*

'Scirrhus of the uterus may possibly, like that of the mammæ, exist a long time without proceeding to ulceration; but we have seen no example of it, and imagine it scarcely to take place. At last, however, the scirrhus becomes painful, and ulcerates: *it is cancer*. Fixed, heavy pain is felt, with nocturnal exacerbations, lancinating at intervals, resembling what would be produced by a needle or any pointed substance: burning heat throughout the uterine system; frequent desire to go to stool or to make water; constant discharge of fœtid, sanious, scalding fluid, mixed with clots of blood or fleshy and decomposed fragments, and, sometimes, from the erosion of vessels, of pure blood in considerable quantity, which the patients mistake for a return of the menses, and by which, although they are weakened, they are so much relieved, that, as Sennertus and others have observed, they consider the complaint at an end, and begin to form projects for the time of their recovery. Fever, which up to this time had not appeared, now comes on in the form of hectic, increasing when the pain is greatest. The pain is not confined to the uterus, but extends to the inguinal and pubic regions, the epigastrium, the mammæ, the back, the temples, and globe of the eyes: the extremities are often cold, and covered with a cold perspiration: the symptoms which have been described as occurring in the occult stage of carcinoma become more marked and inconvenient; nausea, or almost continual nidorous eructations, which destroy even all desire for food, although the food, if taken, does no good to the

* Traité des Maladies de l'Utérus. Paris, 1816.

patient; frequent vomiting of yellow, green, or dark-coloured matter; black, offensive, liquid dejections; and a yellowish, livid, or lead-coloured appearance of the skin; the features of the face wholly changed, and expressive of pain; small, very frequent, and contracted pulse; dry cough, and a feeling of dragging in the chest towards the clavicles and behind the sternum; dry tongue, its edges having an erysipelatous redness; extreme emaciation. I have attended many stout patients who have wasted away with incredible rapidity,' (the professor says, '*que j'ai vu fondre comme du beurre au soleil,*') 'and who, having become living skeletons, receiving no relief from opium, in full possession of their intellectual faculties, have died objects of loathing to themselves.

'The symptoms which have already been enumerated are sufficient to shew the practitioner that he has to treat one of the most cruel and incurable of diseases: and to these are to be added the results of examination, which ought to be made with much caution. The os uteri will be found hardened, irregular, having fissures, or sinuosities, or tubercular enlargements; or reduced to a shapeless mass, fungous, soft, and sometimes extending considerably towards the vulva. The slightest touch of the finger produces pain, and causes sometimes a discharge of pure blood, sometimes of a fluid resembling the lees of wine, and sometimes greenish or a grey lead colour.

'It is evident, therefore — 1st, That it would be absurd to place any confidence in an operation to be performed in such a morbid and incicatrisable tissue as we have described, and in a disease which only appears locally after having affected the whole economy; quite as absurd, indeed, as to expect to cure phthisis pulmonalis by the bold, but gratuitously cruel, operation of extirpating tubercles from the lungs. 2d, It is also evident, that when medical or surgical means have been successful, the disease has not been carcinoma. I conclude so, because I read in modern works treating of scirrhus of the uterus, that the uterus has been found *cartilaginous, calculous*, almost *ossified*, even *petrified*, which may be true; but those conditions have nothing in common with scirrhus properly so called, or occult cancer. We must have very little knowledge, or still less prudence and humanity, to alarm all our female patients by suspicions concerning all diseases of the breasts and uterus, as if these organs were not subject, like others, to simple inflammation and its cruel terminations; conducting ourselves, in short, like those who can see nothing but syphilis, forgetting that the sexual organs were subject to diseases before the American scourge was heard of in Europe. Cancerous affections are assuredly less common than they are supposed to be; and I am inclined to think, that those who maintain an opposite opinion reckon under this head simple inflammatory affections and transient engorgements, to which women of a soft and sluggish organisation are subject, and those who have had scrofulous affections from an early age, or who are of a scorbutic diathesis, or have had some unnoticed venereal affection. I have been fortunate enough to disperse some of these engorgements, which were not unattended with pain, in women

who continue well at this time, twenty years since they were under my care, but I never imagined that I dispersed a scirrhus or a carcinoma. Thus, in a woman, the wife of a sea-captain, aged thirty years, of a scrofulous habit, living upon fish and seldom eating meat, I was surprised to find a very sensible uterine engorgement, accompanied with profuse and acrid leucorrhœa, disappear in a fortnight, under the use of a decoction of the viola tricolor (*pensée*), with roasted meats and generous wine, the only means I employed. The same decoction, with soap pills, (*pillules de savon*, composed of white almond soap and extract of liquorice,) and the extract of conium, succeeded in another case, in a woman of twenty-five or thirty years, in whom the neck of the uterus was engorged and very painful: she also used the hip-bath and vegetable diet; and absolute continence was enjoined for the space of a month. A very lively and accomplished lady, then about thirty-six years of age, who was extremely anxious about herself in consequence of a similar affection, and whom I had attended for a cutaneous eruption, was relieved at once by perfect rest, leeches, the hip-bath, emollient fomentations, and a plaster of Burgundy pitch placed between the shoulders: when the uterus appeared to get into a natural state, the patient's whole body became covered with violet and black coloured spots, in consequence of which I recommended the use of the *cruciferæ*, the juice, and in tisanes, and the antiscorbutic syrup prepared according to the recipe of Beaume, (with horse-radish leaves, the becabunga or veronica aquatica, bitter oranges, canella, white wine, &c.) with complete success. Another patient, about the time of the cessation of the catamenia, a woman of irritable temperament, complained of great pain at every menstrual period, which caused her to dread the approaches of her husband, together with swelling of the neck and body of the uterus, and of the whole abdomen: bleedings from the arm, in order to divert the determination from the uterus, rest, attention to diet, and emollient fomentations, produced a calm, dispersed the engorgements, and conducted her safely past the critical age. A fifth patient, aged thirty-two years, was treated in the same manner, but without experiencing the same advantage: in this case the os tincæ was very rugged and prominent; and every time it was touched the finger brought away fœtid blood, and the patient complained of pain. I learnt, on inquiry among the neighbours, that though this lady was of very virtuous character, her husband led a very irregular life; and this made me suspect some combination of syphilis. I therefore caused the employment, in addition to the use of baths, whey, and the application of a Burgundy pitch plaster between the shoulders (as a revulsive), of the syrup of Cuisinier, (composed of sarsaparilla, the leaves of the white rose, borrago, bugloss, aniseeds, senna, and sugar,) and also fumigations of cinnabar: by which treatment she recovered beyond my expectations.

'I may conclude, then, and, according to my opinion, with as much foundation as concerning what we are most certain of, that the partial or total excision of the uterus is never practicable; neither where there is a scirrhus, nor where there is carcinoma, nor

where there is disease of any other kind: in the first case, because the operation does not cure, and only hastens death; in the second, because the patients may be cured by other means, and even by the efforts of nature.'

Whatever opinion may be entertained of the conclusions to which Professor Foderé has come, the above practical observations, the result of many years' experience, cannot but be considered valuable.

X. *Cauterisation of Variolous Pustules.*

The plan of checking the progress of small-pox pustules, as detailed by M. Velpeau, has been noticed in some of the English journals. It appears, that the first person who employed this method was M. Bretonneau, a very intelligent practitioner residing at Tours. Having met with great success in some attempts to check disease by acting directly on the seat of attack, he was led, in 1818, to attempt the cure of furunculi by caustic applications; and afterwards to make similar experiments on the vaccine vesicle, and subsequently on the pustules of variola. The latter experiment has been repeatedly tried both by him and by M. Velpeau; and the results, as stated by the latter, are, that this operation will succeed in completely checking the progress of the eruption, when performed on or before the third day, but less completely if performed later; the general progress of the disease being at the same time favourably influenced: and also, what is surely a matter of no small importance, the pustules which have been so cauterised leaving no marks in the skin after desquamation.

M. Valpeau laments that the strong prejudices entertained in France against vaccination are likely to afford too many opportunities of repeating these experiments. The remark, we regret to say, is even more applicable to England.

M. Bretonneau pierces the pustule, and takes off the top with a gold or silver needle dipped in a solution of the nitrate of silver: M. Velpeau employs a pencil of nitrate of silver with which he touches the pustules after removing the top of them.—*Archives Gen.*

XI. *Disease produced by the Use of Stays.*

Dr. Eusebius de Salle (Journ. Compl.) considers himself the discoverer of a disease which he attributes to this cause. It consists chiefly of a thickening and induration of the subcutaneous tissue around the cartilages of the lower ribs on the left side, producing a semicircular tumour, which is increased after food is taken, and is accompanied with a dull pain. The constant occurrence of this on the *left* side, is accounted for by Dr. de Salle, by the greater habitual distension of the stomach on that side, for some hours after dinner. Leeches and friction will generally alleviate this malady; but its complete cure is rendered difficult, even in France, where stays are not commonly worn, by the unwillingness of the patients to leave them off entirely. It is to be observed, upon this subject, that

although females in this country, of all ranks, are accustomed to wear stays made of more unyielding materials than are usually employed in France, the disease in question has been hitherto unobserved. Pain in the situation referred to, is a very common symptom in females, and an enlargement of the left hypochondrium not very rare; but whatever evils stays may produce, we cannot join Dr. de Salle in accusing them of this.

XII. *Treatment of Croup.*

In Hufeland's Journal for January 1825, is elated a case of croup, successfully treated by continual nausea and frequent vomiting. The case seemed nearly hopeless. It had been treated by active antiphlogistic means in the first instance, but the symptoms increased; the countenance became covered with a clammy sweat, the jugular veins, &c. distended, the head was thrown back, and the neck bloated. From time to time there ensued most severe suffocating paroxysms, which were always slightly relieved by violent retching and vomiting. In this hopeless state, Dr. Bonorden, under whose care the patient was, determined to keep up the vomiting by artificial means; for which purpose, he used a mixture composed of antimonial wine, ipecacuanha, and oxymel of squills. After continuing this plan for some time, a membranous substance was vomited up, the size of a silver groschens, and soon after a considerable quantity of tough thick phlegm. The breathing now became easier; and under the administration of calomel, in the dose of two grains every two hours, diarrhœa ensued. The patient gradually recovered: she was a girl five years of age.—*Hufeland's Journal for February* 1825.

Section III.—Intelligence relating to the Medical Sciences.

I. *On the Carob, or Sweet-Pod.*

The carob, caroba, or sweet-pod, is the produce, according to Linnæus, of the ceratonia siliqua, a tree which grows principally in Sicily, and at Naples, and various other parts of the coasts of the Mediterranean. The carob was well known to the ancients, by whom it was called *ceratia*, or *ceratium*, (*Grecé*, κερατια, κερατιον,) and sometimes by the Romans *siliqua Græca*. Vulgarly, also, it has been known under the denomination of *St. John's bread*, from its having been employed, as it is said, by that celebrated personage as a substitute for bread at the time of his shipwreck.

The pod, when unripe, is green and fleshy; when ripe, it is still green, but with a mixture of brown, and instead of being fleshy, is firm in its texture. When dried, it is compressed and unequal, generally bent, about five or six inches long, and of a red-brown colour externally. Internally, the pod is divided into cells (about thirteen or fourteen), in each of which is lodged a quantity of soft *pulp*, and a single oval *seed*. The pulp, which is of the colour and

taste of honey, formerly constituted one of the ingredients of the syrupus diacodii; and is said to be possessed of emollient and expectorant virtues, which would render it highly useful in asthmatic complaints and convulsive coughs, particularly in children: in a recent state, also, it is said to possess aperient properties. With respect to the mode of exhibition, it may be prepared as a decoction, in the proportion of an ounce of the bruised pod to a pint and a half of water; or it may be added in the same proportions to a decoction of the Iceland-moss. The simple decoction is palatable, and may be used by children in pertussis as a common drink.

The seeds, termed *xylococca*, are extremely hard, of a reddish-brown colour, and bitter hydrocyanic taste: when roasted, they form, it is said, a good substitute for coffee. — *Lon. Med. Journ., August*, p. 171.

II. *Champooing, as practised at the Tonga Islands.**

If, during the day, a chief or other person of rank feels fatigued with walking or any other exercise, he lies down, and has one or more of the following operations performed upon him by some of his attendants, viz. *toogi-toogi*, *mili*, or *fota*. Of these terms the first implies, *a constant and gentle beating with the fist;* the second, *a rubbing with the palm of the hand;* and the third, *a compressing and grasping of the integuments with the fingers and thumb.*

These operations are generally performed by females, and all contribute, we are assured, materially to relieve pain, lassitude, and fatigue; producing at the same time a soothing effect upon the system, and a disposition to sleep.

When performed for the purpose of simply relieving fatigue or lassitude, the legs and feet it would appear are the parts generally operated upon; but in cases of local pain the part affected, or its immediate neighbourhood perhaps, is selected. Thus in *headach*, the skin of the forehead, and the scalp in general, is subjected to the *fota*, and often, we are told, and indeed, we have no doubt, with great effect.

Sometimes, also, in cases of fatigue, a proceeding somewhat different from any of these is adopted; three or four little children being employed to trample upon the body all over with their feet, to the great relief and comfort of the patient, who lies stretched naked on the ground. —*Mariner's Tonga Islands, 2d edit.* vol. ii. p. 342.

III. *Cretins.—Peculiarity in their Sculls.*

'In the anatomical school at Paria, I remarked,' says the late Mr. John Bell, 'a singular circumstance, and one which very much excited my attention. I saw four or five skulls belonging to that unfortunate race of beings denominated *Cretins*, the idiots of the Savoyard mountains.

* A cluster of islands in the South Pacific Ocean, called by Cook, 'The Friendly.'

'On examination of these skulls I found them to be *wonderfully thick;* and all of them were depressed at the great occipital hole, as if the head being too heavy, had pressed too hard upon the *alba.* * The skulls are at the same time extremely large, and the whole head and bones have this unusual thickness.

On careful inquiry I found that these symptoms constantly prevailed, never failing to appear the same in every particular. In so much, therefore, as regards the Cretins being *idiots*, the *cause* is explained, although I have never upon any occasion heard of this circumstance being noticed.'—*Bell's Observations on Italy*, 4to. 1825, p. 89.

Observation.—This unusual thickness of the bones of the skull in *idiots*, has not so entirely escaped notice, as Mr. Bell seems to have imagined. Thus Dr. Spurzheim, in his lectures, particularly mentions it, and extends the observation even to *maniacs*. But he at the same time seems to think that this affection is only to be met with at an advanced period of the mental disorder; of which it is probably a *concomitant effect*, rather than an *exciting cause*.

We cannot, indeed, abstain from expressing our surprise, that a man of Mr. Bell's acuteness and information, should for a moment have permitted himself to consider, as a *general cause*, *that* which in a multitude of cases could not by possibility occur, until long after the imputed *effect*; for the idiotism of Cretins exists, as it is well known, often from infancy; that is, long before the bones of the skull have acquired even their *natural* thickness, and of course therefore still longer before any thing like an *unnatural* degree of thickness can appear.

IV. *Crotchet Case—Fatal Laceration.*

It is well known to those conversant with the practice of midwifery, how dangerous an instrument the common CROTCHET is, even in the hands of the experienced. We have seldom however an opportunity of demonstrating this in a satisfactory manner; for the *unlucky* practitioner is generally anxious to conceal, even from himself, the proofs of his own negligence or want of skill. It may be worth while mentioning, therefore, that the late Mr. John Bell had in his possession the *pelvis* of a woman who died from the effects of a laceration produced by this instrument, *the hook of which had caught the soft parts of the brim of the pelvis, and torn them to the os externum.*

This pelvis is still, it is said, preserved in a private collection in Edinburgh.—Vide *Edin. Med. Jour. Oct.* 1825, p. 392.

* *Alba.* We give this word as it appears in the original; where, no doubt, *atlas* was intended by the author.

There is some obscurity also in the latter part of the next sentence, where perhaps we ought to read, *the whole of the bones of the head*, instead of *the whole head and bones*, as we have given it from the original also.

V. *Dr. Jenner—Statue to his Memory.*

We have the satisfaction to state, that in the course of last month (November) a marble statue to the memory of Dr. Jenner was erected in the cathedral of Gloucester.

The execution of this monument reflects, it is said, considerable credit upon the artist, Mr. Sievier, to whom it had been intrusted. The Doctor is represented in the gown of his Oxford degree; holding in his right hand, which crosses the body, and supports a fold of the gown, a scroll; and in the left, which hangs carelessly by his side, the appropriate academic cap. The statue, seven feet in height, is placed upon a base and pedestal of eight feet; and upon the *die* of the latter is simply inscribed, Edward Jenner, with the time and place of his birth, and of his death.

VI. *Successful Injection of the Veins from the Arteries.*

In the winter of 1823, I placed a pipe in the left carotid artery of a tall, slender, emaciated subject, apparently thirty or forty years old; and having throughly warmed it by immersion in heated water, threw into the body, with the ordinary brass injecting syringe, melted tallow, highly coloured with fine *King's yellow*,* which gave it a very rich hue. The syringe was filled, and emptied through the tube in the artery three or four times.

On examination, I was much pleased to find that the fluid had returned through the *veins*, so as to fill them very perfectly; but, on more attentive observation, my surprise was increased, by discovering that the smallest *veins* in both arms, distinguished by the naked eye, were filled with a material differing in colour from that contained in the arteries. In fact, the colouring matter had been entirely separated from the tallow during its passage from the *arteries* to the *veins*; for in the *arteries* the colour was a rich yellow, dispersing as it approached their extremities; and in the *veins* the pure white of the tallow was entirely free from any admixture.

I have not since repeated this experiment, nor was it in my power to preserve the specimens, as this circumstance occurred the day before the conclusion of my winter courses, and at a time when I was obliged to remove from the house I then lectured in at an exceedingly short notice; but I induced some members of the profession to examine them, who were well qualified to ascertain the correctness of my observations.—*Dr. J. Godman, in Philadelphia Med. Journ. May* 1825, p. 92.

VII. *Lithotomy — Lateral Operation with a Straight Staff.*

We understand that Mr. Charles Averell (author of a recent work on *Operative Surgery*) has lately performed the operation of cutting for stone, on a boy nine years of age, in the manner recommended by Mr. Aston Key, of Guy's Hospital.

* *King's-yellow*, sulphuret of arsenic; called also auripigmentum, or orpiment.

A *straight* staff was first introduced into the bladder, and an incision then made upon it in the usual manner, until the groove was exposed: which done, the knife was carried along the groove, and the prostate gland divided throughout its whole extent. The operator then, directing his nail along the groove of the staff, felt his way into the bladder, until the point of his finger came in contact with the stone. The staff was now withdrawn, and the forceps introduced into the bladder through the wound, the finger serving as a conductor. Upon seizing the stone, however, it was found that the wound was too small to admit of its being extracted thus. The forceps, therefore, were necessarily withdrawn, and the wound being enlarged by means of Sir A. Cooper's beaked knife, they were again introduced, and the stone easily extracted. It was of the mulberry species, and weighed one ounce and a quarter. — *Med. Chir. Review.*

VIII. *Oil in the Serum of the Blood,—Case, &c.*

Another example of this remarkable occurrence has lately been met with by Dr. Traill, of Liverpool, of which we extract the following account from a letter addressed by him to Dr. Duncan, jun. of Edinburgh.*

The patient was a man addicted, as it would appear, to the use of strong liquors. He had been ill in the spring, and had been bled, when the *serum* of the blood was observed to be cream-coloured. This excited attention; but at a subsequent bleeding, three days after, the blood was nearly natural.

About the beginning of July, he was again taken ill, and was found, when visited by his medical attendant, 'very feverish, with great difficulty of breathing; stitches about the ribs, and acute pain at the pit of the stomach. The tongue was at the same time white, and thickly coated; and the pulse hard, full, and strong.'

Under these circumstances, he was bled to the amount of twenty-four ounces, which relieved him immediately. The blood exhibited the same appearances as in April, and the *serum* is thus described by Dr. Traill:

'It was of a rich Isabella-yellow, or cream-colour; and when recent, was a homogeneous fluid, of the consistence of thick cream; but on being kept, it coagulated, so as not readily to pour from the bottle. On analysis, it yielded the same ingredients as the former specimens; but the proportion of *oil* in this was greater than in any before examined. A piece of paper dipt in it, and applied to the flame of a candle, did not inflame; but it scarcely crackled in the flame when applied to the wick, as watery fluids usually do.'

Dr. Traill adds, that in all the cases of this nature met with by him, the patient was, at the time of the occurrence, labouring under an internal inflammation, affecting the chylopoietic viscera; and was also more or less addicted to the abuse of strong liquors. This latter circumstance may indicate, he seems to think, some connexion between the presence of *oil* in the blood and the occurrence in dram drinkers of what is called *spontaneous combustion.*

* From Edin. Med. Journ., Oct. 1825, p. 421.

IX. *Transfusion of Blood.—Another recent Case.*

This operation has, we find, again, for the third time, been recently performed in this city, in the case of a puerperal woman, exhausted, as it is alleged, by flooding. The details, however, as they have come to our knowledge, are not of a nature to satisfy us that the operation was either so necessary or so beneficial as those engaged in the performance of it seem to have thought.* We notice it here, therefore, simply as an historical fact, of recent occurrence among ourselves, and as such entitled to a passing record.

Whilst upon this subject, it may not perhaps be improper to mention, that Messrs. Waller and Doubleday, to whom we are indebted for the two other cases of *transfusion* which have recently occurred in this city,† have lately commenced a course of practical midwifery, *in partnership*; but whether this union be the result of the cases, or that the cases were the result of the union, is more than we can pretend to determine.

X. *Of the Chloruret of Lime as a disinfecting agent.*

M. Deslandes has published an observation upon the use of chloruret of lime in destroying the odour arising from putrid animal matter. In a case in which the placenta was retained and came away in shreds, producing such effluvia that the chamber could hardly be borne, this preparation completely succeeded. It was injected in the proportion of an ounce to a pint of infusion of marsh-mallows. The putrid odour disappeared after the second injection; and this being frequently repeated, it did not again return.—*Bibliothèque Nouvelle Médicale, Aug.* 1815.

XI. *Artificial Anatomy.*

In the sitting of the Académie Royale de Médecine, on the 5th of July, M. Alard reported upon an artificial piece of anatomy. It represents a man of the natural size. The different parts may be separately raised so as to exhibit the muscles, blood-vessels, nerves, &c. and the viscera. The report was highly favourable, and the Academie decided upon recommending it to the minister for encouragement, 'au ministre pour être encouragé.' What would an English minister say, to being asked upon every trifling occasion to encourage the inventions of mechanics? It certainly is a proud character in our country, that what is really useful requires not ministerial interference, and that the national rewards are only distributed when the benefits conferred are truly national. The homage which was paid to the genius of Watt by the noblest and most distinguished of our land would have lost the greater part of its value were it to be doled out to every speculative or inventive sciolist. The time, we trust, will never arrive when British genius will look to government only for its reward,—for while truly British minds exist, the nation at large will be ready to encourage it, provided it is directed to objects

* Doctors *Uwins* and *Blundell*, and Mr. Wright, surgeon.

† Vide Repository for Nov. p. 470; and for Dec. p. 571, 1825.

of public utility; and if it be not, its possessor may be proud of his endowments, but has no right to complain if he be not enriched.

At the same sitting M. Masseau related the dissection of an epileptic patient, who died from the disease at twelve years of age, having been subject to it from infancy. The heart in this subject was so extremely small, that it scarcely equalled a hen's egg in size, and even this was almost entirely due to the right auricle. The author conceives that the impediment which must have been offered by the reflux of the blood into the jugulars, and thence into the brain, the right ventricle not being able to receive the quantity sent from the head, might in some measure serve to account for the convulsions. There was nothing peculiar in the appearance of the brain.—*Bib. Nouv. Méd. Sept.* 1825.

XII. *Clinical Remarks on the Diseases most prevalent during the preceding Month.*

The commencement of December was cold, and rather frosty; but since the eighth there has been a more continued series of rain than we remember for some years past. The atmosphere has been close and warm for the last three weeks; and on the evening of the 14th, we had the unusual occurrence of a violent thunder storm.

The great mildness of the weather has rendered very much fewer the number of asthmatic patients than are usually met with at this season of the year; and slight febrile complaints have continued to prevail without diminution. Generally speaking, we have observed the cold of December to give a decided check to fever; but this has not appeared to be the case during the last month. Pneumonia has been rather frequent among children, and many fatal cases have occurred; but it has presented nothing peculiar, either in its symptoms or progress.

We have met with a case of inflammation of the heart, which has terminated favourably. As usual with this complaint, its attack was insidious, and the symptoms by no means decided. There was an inability to lie down without danger of immediate suffocation; pain in the region of the heart extending to the back; dyspnœa, and slight cough. The countenance was peculiarly pale and anxious; the pulse sixty, firm, but small; and there was an extreme languor. Antiphlogistic remedies were very actively employed, and the patient is convalescent.

In our last report we mentioned the influence of the argentum nitratum in suspending the attacks of epilepsy. We have since had an opportunity of examining the consumptive patient who experienced such decided benefit from its administration. The only part examined was the brain; and it seems extraordinary, that with such disease as was found in this organ any medicine should have been serviceable. The individual had no attack after having taken the argentum nitratum, though it was discontinued after the first week, and he lived for nearly two months longer. —The ventricles formed one cavity, at least the communication was very open; but

the septum lucidem partly remained, and had the appearance of a strong transparent membrane. There were at least twelve ounces of fluid in the ventricles. But the most extraordinary appearance was a large, hard, and externally cartilaginous tumour, situated upon the superior and anterior portion of the cerebellum close upon the median line: it was very strongly attached to the tentorium, and slightly to the cerebellum; indeed, it was separated from the latter without any injury to the medullary substance. Internally the tumour was composed of white scrophulous matter. It was the size of a large walnut.

XIII. *Proposed Society for the Diffusion of Obstetrical Knowledge.*

The society to consist of all denominations of medical practitioners resident in Great Britain, whether physicians, surgeons, or apothecaries, legally authorised to practice as such. The number to be limited to five hundred, and to be divided into two classes of resident and non-resident members.

The management of the society to be vested in one president, two vice-presidents, one treasurer, a directing committee of ten, and a conservator of the museum, who shall act also as librarian.

All members to pay *three* guineas on their admission; and the annual subscription to be two guineas for the resident, and one guinea for the non-resident members.

The society to have a house in a central part of the town; with a museum and library, open all the year round for a certain number of hours daily; at which members may attend to consult books, write, or converse together in the manner of the best clubs.

The instructions and orders of the officers and committee to be executed by an honorary and a stipendiary secretary, the latter of whom shall also be sub-conservator and sub-librarian, and shall reside in the house.

The members to present a book or books, whether modern or ancient, on subjects of medicine, particularly midwifery, or their own works, for the purpose of forming a library—and also all such preparations of healthy or morbid anatomy, illustrative of the different branches of obstetrical science, as they may be able to spare.

An ordinary general meeting of the members to take place every Monday evening, at eight o'clock during the months of November, December, January, February, March, and April, for the purpose of discussing obstetrical subjects, and conducting the ordinary affairs of the society. An anniversary general meeting to be held on the first Monday in April, for the election of officers, and for receiving the committee's and treasurer's reports.

Two prizes, value 25 guineas each, to be funded, for the best papers on subjects of obstetrical science, and its various branches; the prizes to be distributed by the president at the anniversary general meeting.

A bulletin of the proceedings of the society, drawn up in an instructive form, and in the manner of the Scientific Gazette, with occasional wood-cuts and lithographic engravings, to be published on

the first of every month, while the ordinary meetings are held, and distributed gratuitously to the contributing resident and non-resident members.

The principal objects of the society to be—1. To promote the diffusion of obstetrical knowledge. 2. To encourage public and private schools of midwifery. 3. To procure some legislative enactment, to regulate the practice of midwifery in Great Britain. 4. To form a plan for the gradual education of a certain number of respectable females, to practise as midwives in those parts of the country where male practitioners cannot be procured. 5. To suggest to the public, the best method of securing protection, and a proper treatment, to the children of those females who go out as wet-nurses, by forming an establishment for the temporary reception of such children.

XIV. *Marischal College and University, Aberdeen.*

REGULATIONS RESPECTING MEDICAL DEGREES.

1. Every person offering himself as a candidate for the degree of M.D. shall, 1st, Produce satisfactory evidence of his possessing a good character, and of his having attained the age of twenty-five years; and, 2dly, Shall lay before the *senatus academicus* certificates of his having obtained the degree of A.M. in this or some other university, after the usual examinations;* of his having attended courses of lectures on anatomy, surgery, chemistry, materia medica, theory and practice of physic, and botany, in this or some other university, or celebrated school, under professors or teachers of reputation; and of his having attended, for *three* or more years, a medical hospital, containing the average number of at least eighty patients.

2. After the *senatus academicus* shall have been fully satisfied on the above preliminary points, the applicant shall be received as a candidate for the degree of M.D.; and shall be required to appear before the university, at one of their stated terms for granting such degrees, and in their presence be examined, by the medical and other professors, on the different branches of medical science—on his knowledge of the Greek and Latin languages—*and on such other branches of literature* as they shall see proper. If fully satisfied with the qualifications of the candidate, the university shall confer on him the degree which he solicits.†

LITERARY NOTICE.

In the press, a Complete System of Pathological Anatomy; comprising, in one thick and closely-printed volume 8vo, a minute Description of Morbid Structures, with the Symptoms denoting their progressive and individual States.

* As this requisition respecting the degree of A.M. might prove injurious to some medical students, whose education is now in progress, were it to take effect immediately, it is resolved that it shall not come into FULL force till the year 1830.

† We shall offer some observations on the above in our next Number.

NOTICES OF LECTURES.

Dr. COPLAND will commence his next Courses of Lectures on the Principles and Practice of Medicine, Materia Medica, and Chemistry, on Monday the 23d of January, at the Medical Theatre, No. 17, Great Pultney Street, Golden Square.

Dr. GORDON SMITH begins his next Course of Medical Jurisprudence on the 1st of February, at the above theatre.

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

1. Elements of Medical Logic, or Philosophical Principles of the Practice of Physic. By Sir Gilbert Blane, Bart. Fellow of the Royal Societies of London, Edinburgh, and Göttingen, Member of the Imperial Academy of St. Petersburgh, and first Physician to the King. The Third Edition, with large Additions. 8vo. Pp. 330. Underwoods, London, 1825.

2. Further Observations on the Medicinal Leech; including a Reprint, from the Philosophical Transactions, of two Memoirs, comprising Observations on the Hirudo Vulgaris, or common Rivulet Leech; and on the H. Stagnalis and H. Complinata, now constituting the Genus Glossopora, (with illustrative engravings). By James Rawlins Johnson, M.D., F.R.S., F.L.S., &c. &c. 8vo. Pp. 120. Longman, 1825.

3. A Practical Treatise on the Arterial System: intended to illustrate the Importance of studying the Anastomoses, in Reference to the Rationale of the New Operation for Aneurism, and the Surgical Treatment of Hæmorrhage, with original coloured Plans. By Thomas Turner, Member of the Royal College of Surgeons, Lecturer on Anatomy, &c. London, 1825. 8vo. Pp. 205.

4. The Anatomy of the Fœtal Brain; with a Comparative Exposition of its Structure in Animals. By Frederic Tiedemann, Professor of the University of Heidelberg, Member of the Academy of Sciences of Munich and Berlin, &c. &c. Translated from the French of A. J. L. Jourdan. By William Bennett, M.D. To which are added, some late Observations on the Influence of the Sanguineous System over the Development of the Nervous System in general. Illustrated by fourteen Engravings. 8vo. Pp. 324. Edin. 1825.

5. A Practical Treatise on Diabetes, with Observations on the Tabis Diuretica, or Urinary Consumption, especially as it occurs in Children, and on Urinary Fluxes in general. With an Appendix of Dissections and Cases, illustrative of a successful Mode of Treatment; and a Postscript of Practical Directions for Examining the Urine in these Diseases. By Robert Venables, M.D., Physician to the Henley Dispensary, &c. &c. 8vo. Pp. 215. Underwoods, London, 1825.

6. Guilielmi Harveii Exercitationes de Motu Cordis et Sanguinis; quas notis pauculis instruendus curavit Thomas Hingston, M.D., Societatis Regiæ Medicæ Edinburgensis Socius, nunc ex Collegio Reginæ Cantabrigiensi. 8vo. Pp. 260. Edin. 1825.

7. Medical Report of the Fever Hospital and House of Recovery, Cork Street, Dublin, for the Year 1825; with Observations on the Contagion of the Plague and Typhus Fever. By Richard Grattan, M.D., A.B. T.C.D., Fellow of the College of Physicians; Physician to the National Eye Infirmary; Permanent Physician to the Fever Hospital, &c. 8vo. Pp. 54. Dublin., 1825.

8. Contributions towards the Medical History of the Waters, and Medical Topography of Cheltenham; containing Directions for Drinking the Waters. By John Fosbroke, Resident Surgeon at Cheltenham. 12mo. Pp. 200. 1825.

9. A Short Description of the Bones; together with their several Connexions with each other, and with the Muscles. By John F. South, Lecturer on Anatomy at St. Thomas's Hospital. 18mo. Pp. 140. Jackson, London, 1825.

THE METEOROLOGICAL JOURNAL,

From the 19th of NOVEMBER to the 20th of DECEMBER, 1825.

By Messrs. HARRIS and Co.

Mathematical Instrument Makers, 50 High Holborn.

November.	Moon.	Rain Guage.	Therm.			Barom.		De Luc's Hygrom.		Winds.		Atmo. Variation.		
			9 A. M.	Max.	Min.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	2 P. M.	P. M.
20			38	43	43	30 06	30 01	80	80	WNW	SW	Fine	Fine	Fine
21			53	53	38	29 68	29 72	85	76	WSW	W	——	Rain	——
22		,22	40	45	34	29 76	30 02	76	75	WNW	NW	——	Fine	——
23			40	43	47	30 16	30 05	75	90	WSW	WSW	——	——	Sleet
24		,4	49	51	41	30 08	29 87	93	95	W	W	Fog.	Rain	Clo.
25			43	46	38	30 14	30 22	84	77	WNW	W	Fine	Fine	Fine
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27			46	51	50	29 85	29 62	67	85	W	SSW	——	Fine	Rain
28		,29	44	53	42	29 21	29 08	87	84	SW	SW	Rain	——	Fine
29			43	53	40	28 90	28 81	78	80	SW	SW	Fine	——	——
30			39	40	32	29 30	29 58	80	78	N	N	——	——	——
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2			44	45	40	28 84	28 96	91	82	W v	SW	Rain	Clo.	Fine
3	☾	,71	40	45	39	29 10	29 12	85	85	SW	SW	Fine	Fine	Fog.
4			39	41	33	29 11	29 31	86	85	N	N	Rain	Rain	Fine
5			35	41	44	29 26	29 18	94	95	NE	SSW	——	——	Rain
6		,96	46	48	40	29 29	29 24	91	95	SW	ESE	Fine	Fine	Fine
7			43	51	43	29 11	29 21	92	85	E	E	——	——	——
8			44	45	44	29 27	29 23	92	95	ENE	NE	——	——	——
9			43	45	43	29 30	29 45	92	85	NE	NNE	——	——	——
10	☾		43	45	42	29 52	29 61	88	85	NW	W	——	——	——
11			43	46	39	29 64	29 72	87	87	W	WSW	——	——	——
12			39	42	35	29 75	29 71	91	95	SW	NW	Fog.	Fog.	Fog.
13			35	45	45	29 67	29 57	95	95	WSW	SSW	——	Fine	Rain
14			47	50	37	29 18	29 16	95	85	SW v	SW	Rain	Rain	Clo.
15		,23	37	42	45	29 43	29 66	80	79	W	SW	Fine	Fine	——
16			47	50	48	29 68	29 72	75	79	WSW	SW	Fine	——	Fine
17	☽	,27	51	52	45	29 58	29 71	95	90	SW	WSW	Rain	——	——
18			50	52	48	29 54	29 45	88	89	SSW	SSW	Fine	——	Rain
19		,12	49	49	41	29 24	29 33	88	79	S	SSW	Rain	Clo.	Fine

The quantity of rain fallen in November was 2 inches 18·100ths.

NOTICES TO CORRESPONDENTS.

The Readers of the Medical Repository may perceive, from this Number, that it is our intention to extend our monthly limits to at least six whole sheets, or 96 pages, and to print the greater part of the work in a closer and more uniform type than formerly, which will be equal to a still farther extension of the limits of the work.

Several Communications are received, and are under consideration.

Literary Notices, &c. cannot be inserted in the body of the work, unless with a very few exceptions, which will rest with the Editors.

Correspondents, and authors of works, or of papers in other Journals, who may wish to have their productions noticed, may send them under cover (post paid) to the Editors, 1 Bulstrode Street, Cavendish Square, or to the Publishers', Fleet Street.

The Index to the preceding Volume will be delivered with the next Number.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the Editors, to the care of Messrs. T. and G. Underwood, 32 Fleet Street.

THE LONDON MEDICAL

REPOSITORY AND REVIEW.

No. 146. FEBRUARY 1, 1826. Vol. XXV.

No. VIII.——NEW SERIES.——Vol. II.

PART I.

REVIEW.

I.

*SYMPTOMS, CAUSES, AND TREATMENT OF PHTHISIS.**

[Second Article.]

Recherches Anatomico-Pathologiques sur la Phthisie. Par P. Ch. A. Louis, Docteur en Médecine des Facultés de Paris et de Saint-Petersbourg, &c. A Paris, chez Gabon et Compagnie. 8vo. 1825.

Anatomical and Pathological Researches concerning Phthisis. By P. Ch. A. Louis, M.D., of the Faculties of Paris and St. Petersburgh, &c. Paris. Gabon and Co. 8vo. 1825.

The anatomical details already entered into have sufficiently shewn that the term of phthisis cannot be understood in general to signify a simple disease of the lungs. In scarcely any of the hundred and twenty-three cases examined by M. Louis, was the pulmonary disease uncomplicated with affections of the larynx, trachea, epiglottis, or of some of the abdominal viscera, or with some recent disease of an inflammatory character; and in describing the symptoms of phthisis, these complications, whether necessary or accidental, require, from their frequency if not from their universality of occurrence, to be included. M. Louis follows Laennec in dividing the disease into two stages; the first stage being that previous to the softening and discharge of the tubercles; the second, subsequent to those changes.

The duration of the disease in the above cases, according to a table given of it in those in which it could be ascertained, varied from twenty-four days to twenty years, one case being

* Continued from page 19.

marked at each of these extremities. In a hundred and fourteen cases, rather more than two-tenths died before the disease had existed six months; four-tenths died between the sixth and twelfth month; not quite one-fourth in the second year of the malady; and not quite one-fifth between the second and the twentieth. The duration did not seem to depend on the age of the patient; but the proportion of deaths in female subjects was greater than that in men. The proportion of cases of phthisis to others, received indiscriminately into M. Chomel's wards, during the period of M. Louis's researches, was as one to two; but if the cases in which, though the patients died of other maladies, tubercles were found in the lungs be taken into the account, the proportion is increased to no less than one-half!

We shall now accompany M. Louis in his examination of particular symptoms, with relation to their frequency, period of occurrence, and other circumstances; first as chiefly regards the disease of the lungs, and afterwards the principal and most common complications.

Cough, though a frequent, was yet a very variable symptom, sometimes disappearing for some time without any evident cause; sometimes slight; sometimes only supervening in the last days of the patient's life, although tubercular disease seemed to have existed from the commencement of the complaint; but more frequently troublesome, particularly at night. There was, however, a general proportion between the violence and frequency of the cough and the rapidity of the disease.

Expectoration. — We so frequently see practitioners very positive, and, as we conceive, very much in error, as regards the expectoration peculiar to phthisis, that we shall give M. Louis's account of it in his own words.

'The passage from the first to the second stage was marked, as has already been said, by a remarkable change in the aspect and form of the expectorated matter; which, from being white, mucous, and more or less mixed with air, became green, opaque, destitute of air, and striated with yellow lines, which sometimes gave it a variegated appearance. If auscultation was tried at this time, the sound of the voice was heard with greater or less distinctness in the upper part of the lungs; pectoriloquism, or a very strong respiratory sound, resembling the tracheal, often mixed with a gurgling, and sometimes with a dry rattle. Fragments of white opaque matter sometimes occurred in the expectoration, resembling baked rice (as observed by Bayle); but this appearance was very rare.

'After an uncertain length of time, the striated lines and the white fragments were no longer observed; the expectorated matter became homogeneous, of a round shape, or as it were with torn edges; of a dull appearance, and of variable consistence; but it did not always sink in water; frequently, on the contrary, float-

ing on the surface of a clear fluid simultaneously ejected. After being for some time of a greenish-yellow it became greyish, and had a dirty look, not unlike that of the matter contained in tubercular excavations of some date: this appearance was seen sometimes for two or three weeks, but more commonly only for some days before death. The consistence of the expectoration was then lost, it became flattened in the crachoir, forming a kind of soupy fluid, now and then mixed with blood, or surrounded by a rose-coloured areola. The latter admixture would, doubtless, be seen more frequently if the patients were always able to expectorate in the last twenty-four hours of life, for the bronchial mucus is generally found more or less red after death.'—P. 187.

The distinctive marks of tuberculous excavation in the lungs are to be found, according to M. Louis, in the striated lines, the white fragments, and the round form of the expectorated masses; and he is disposed to think the latter circumstance particularly valuable as a diagnostic. These appearances, he conceives, sufficiently distinguish it from the greenish, homogeneous, opaque expectoration of pulmonary catarrh. We cannot see the value of these observations. The white fragments rarely appear, and the round form, we should say, is by no means peculiar to phthisis, so that the striated lines are all we have to trust to, as far as the expectoration is concerned. On the whole, perhaps, the utility of the expectoration, as an assistance to diagnosis, is exceedingly small.

The quantity of the expectoration was generally greatest in the first stage of the disease. In some patients it was very scanty; in two cases it was wholly suspended for some days; and in one instance, although there were large excavations in the lungs, there never was any expectoration at all.

Hæmoptysis.—The degree of importance to be attached to a spitting of blood is often a source of great responsibility to practitioners, who are required, perhaps, to give a decided opinion in circumstances full of doubt. Hæmoptysis was a symptom in fifty-seven cases out of eighty-seven observed by M. Louis, but by no means equally marked in all; although in twenty-five of these, large quantities of blood were suddenly brought up. In twelve cases, the hæmoptysis preceded the symptoms of cough and expectoration, and was excessive in eight of these. M. Louis regards the symptom altogether, at whatever stage it appears, as indicative of tubercles in the lungs, not indeed invariably, but for the most part. Even thus limited, the deduction is perhaps needlessly alarming. In most of the cases, the attacks of hæmoptysis came on without any warning symptom; it was, indeed, only rarely the consequence of a violent coughing fit. The female patients were the most frequent subjects of it.

Dyspnœa. — This appears to have been less common than we should have expected: but it was observed in several of the patients, and, in about a tenth of the cases, was perceived before the cough signalised itself; coming on in some of these instances when the first attack of hæmoptysis took place. Except in three cases, the patients referred the oppression to the sternum; in the three exceptions, the uneasiness was greatest on the side of the chest most affected by disease.

Pain.—When pain was felt, which was by no means invariably the case, it was generally found to be in proportion to the adhesions which had been forming, and not in proportion to the tuberculous excavations; the tubercles being, for the most part, formed in the lungs, as in other parts of the body, without pain; although, as pain sometimes attends the tubercular process in the glands of the neck or axillæ, it may reasonably be supposed sometimes to originate in similar causes within the lungs. Twenty-two of the patients suffered no pain, and in most of these the adhesions were chiefly at the upper part of the lungs.

Fever.—The report of the patients themselves being the principal means the practitioner has of ascertaining changes which have their course extended throughout a great part of the 24 hours, any remarks on the constancy or infrequency of the several parts of the hectic paroxysm require to be received with much caution. We are disposed to think the fever less incomplete, in most cases of undoubted phthisis, than M. Louis seems to have found it in the cases under his care. In a sixth part of his cases there were no shiverings; and in the rest they, for the most part, only occurred in the evening, and in some instances at very uncertain hours of the day. Perspirations were wanting in several cases, though in others they were most profuse. M. Louis did not observe any alternation of this state with diarrhœa; but both were frequently contemporary. In two-fifths of the cases, the febrile symptoms came on in the first stage; in the rest not until the second, and often not until near the end.

Thirst was a very uncertain symptom, and always had more connexion with the attendant fever than with the state of the stomach or intestinal canal.

The *Appetite* was very variable, and generally dependent on the state of the mucous membrane of the stomach.

Diarrhœa was present in almost every case. In an eighth part of the cases it occurred early: and a general proportion was observed between its duration and the size and number and apparent age of the ulcerations in the intestines; and the

diarrhœa was no less violent when ulcers were found in the small intestines than when they were seated in the colon. In those examples in which diarrhœa existed the longest, the small intestines appear also to have been ulcerated quite as often as the large.* Softening of the mucous membrane was not unfrequent in these circumstances; but this appearance was most common in the large intestines. The diarrhœa was always most severe when softening was present together with ulcerations.

Emaciation began early in two-thirds of the cases, before there was any loss of appetite, any fever or diarrhœa, dependent, it would seem, on the primary lesion of the lungs.

The *colour* of the face was generally pale, as well as that of the external surface of the body.

It is by no means surprising that in the preceding observations M. Louis should have added very few particulars to our knowledge. The symptoms are all matters of daily observation; but these remarks do not apply to the part of the work which remains to be examined, and which treats more particularly of symptoms referrible to morbid states complicated with phthisis, and hitherto not clearly understood.

Diagnosis.—The symptoms peculiarly indicative of phthisis, or of the formation of tubercles in the lungs, in the first stage, are, according to M. Louis, cough, continuing for some time without expectoration, but afterwards accompanied with white frothy expectoration, continuing longer than in catarrh; pain in the side, rather than under the sternum; hæmoptysis. When with these symptoms there is an obscure sound on percussion under one or both of the clavicles, with a feeble respiration, and a mucous, sonorous, or crepitating rattle, the disease may be considered as certain; and a case is given in which, by the aid of the latter circumstances, the malady was decided to exist when it had only lasted seventeen days. Other symptoms, as dyspnœa, emaciation, rigours, &c., are alluded to as confirming the diagnosis; but no mention is made of the pulse.

The diagnostic marks of the second stage are such as, with the exception of the expectoration, are only to be known by percussion and auscultation. The expectorated matter becomes thicker, of a greenish colour, striated with whitish

* In two cases of fatal purging, recorded by Dr. Baillie, and published in the first volume of his works, by Wardrop, p. 210, no ulcerations were found: the small intestines were inflamed in these cases; the great intestines were contracted, but not inflamed.

lines, in the commencement of this stage: it becomes by degrees more formed and round, with a sort of torn edge. Percussion in several cases discovered a loss of sound in the upper part of the lungs exactly corresponding to the extent of the disease. Auscultation gives no less distinct evidence of the changes peculiar to this stage: the respiration is found to be stronger and more tracheal under the clavicles, answering to the extent of the excavations: a dry crepitating rattle is heard, resembling the sound produced by twisting a dry osier twig or leather sole; or a gurgling is perceived: then a sound of the voice — then pectoriloquism, first in a limited space only, afterwards to a greater extent; and the progress and force of these manifestations are found to be decreasing from the summit to the base of the lungs. It is to be kept in mind that pectoriloquism, *confined to a limited space,* may be occasioned by dilation of the bronchi: a case is given in which M. Louis was deceived by this circumstance. Nothing is said of the pulse in the second stage; and we have already remarked the same omission when speaking of the first. Few cases present much difficulty to the practitioner in the second stage; and we cannot think that M. Louis has diminished the uncertainty often attending the first. Though fully impressed with the value of the stethoscope, every day makes us more and more apprehensive of its general inapplicability in private practice in this country; and we yet desiderate some certain signs, independent of those to be gained through the medium of that instrument, for the determination of the character of incipient phthisis. We believe such signs do really exist, and may without great difficulty be recognised; but it is not the business of this article to advance opinions requiring further confirmation.

Peripneumony and Pleurisy, occurring a few days before death.—The first is recognised by an increase of pain in one side of the chest; the respiratory murmur being at the same time feeble, mingled with a slight crepitation; and percussion producing an obscure sound. When pleurisy occurs, the pain is more acute, and there is generally an increase of the dyspnœa; with greater heat, thirst, and quickness of pulse in some cases. Hægophonism (indicative of effusion) was perceived in two cases, and probably would have been heard in others, but the patients were of course at this time seldom in a state to bear prolonged exploration. When peripneumony occurs earlier in the course of phthisis, it seems often to be entirely cured: pleurisy almost always leaves adhesions.

Ulcerations of the Epiglottis, Larynx, and Trachea.—The

whole of this chapter of M. Louis's work, including several cases, possesses great interest, and will well repay a careful perusal: our limits compel us to condense the contents as much as possible. The symptoms peculiar to ulceration of the epiglottis seem to consist of pain at the upper part of the thyroid gland, or immediately above it: sometimes, although the pharynx and tonsils remain unaffected, deglutition is painful, or fluids are returned through the nose: the latter symptoms do not attend ulceration of the larynx, unless the epiglottis and pharynx are affected likewise. The distinctive symptom of ulceration of the epiglottis would appear to be the pain above mentioned. In some of the examinations the disease had made more or less progress downwards; and other symptoms were progressively added, as hoarseness, &c., when the larynx was affected; and in these cases the pain was not only aggravated by swallowing any thing, but by moving the neck. Ulcerations of the larynx were attended with symptoms readily indicative of the seat and extent of the affection: long-continued pain, not very severe, with hoarseness, were produced by superficial ulcerations; more severe pain and loss of voice accompanied those which were deeper. In some of the cases in which there was no attendant affection of the epiglottis, ulceration of the larynx was signalised by severe pricking and lancinating pains, with a sense of heat: the pain was increased by speaking, but sometimes disappeared for a few days altogether. It is remarkable that ulcerations of the trachea produced no symptoms peculiar to the affection. M. Louis found only one exception to this; in a patient in whom a great part of the tracheal mucous membrane was destroyed, and who complained of a sense of obstruction at the upper part of and behind the sternum. Paroxysms of dyspnœa, which have been described as among the symptoms of this disease, were only observed in one case. But although ulcerations of the trachea gave rise to no peculiar symptom, inflammation of its mucous membrane, *without* ulceration, was in some cases attended with more or less pain and heat along the course of the neck; and some of the patients referred the pain to the larynx or throat, although those parts were not at all affected. M. Louis compares these results with the pain felt in croup, and thinks the deceptious sensation just noticed is analogous to the irritation felt at the extremity of the urethra when there is a stone in the bladder.

Softening and Tenuity of the Mucous Membrane of the Stomach.—The symptoms of these changes in the stomach generally came on two, four, or six months before death, sometimes earlier, but seldom at the commencement of

phthisis; and consisted of pain, accompanied or preceded by nausea and vomitings. These symptoms ordinarily came on one after the other, and gradually increased in severity. In some cases they were preceded by various manifestations of disturbed digestion; whilst in others the lighter kinds of food continued to be taken without inconvenience after the symptoms had appeared. Some of the patients could only take food in the morning. The pain was of a sharp lancinating kind in most of the cases, and attended with increased heat; and aggravated by the slightest pressure. There were occasional examples in which, notwithstanding serious disease of the mucous membrane, the appetite became good again, and continued so for several weeks. M. Louis says, that every day shews him that when the symptoms above noticed continue for three or four weeks, it may with certainty be concluded that the gastric mucous membrane is in a state of tenuity and softening.

Inflammation of the Mucous Membrane of the Stomach, limited to its anterior portion.—In all the examples under this head, there was a perceptible resistance on pressure of the epigastrium: the liver was found to descend below the ribs, and the part of the mucous membrane which had become inflamed answered to that part of the stomach over which the liver thus projected. The symptoms indicative of this affection did not differ much from those of the more serious one last spoken of: their duration, however, was generally shorter, and their intensity less. Anorexia, pain, and heat of epigastrium, nausea, and sometimes vomiting, were the consequences of it. The pain was increased by pressure, but had occasional remissions: vomiting was not a frequent symptom: the lightest kinds of food produced a feeling of suffocation.

Mucous Membrane of the Great Curvature of the Stomach red and softened.—Neither in cases where this condition existed without complication, nor in others in which there were small ulcers, or a mammillated (tuberculated) state of the mucous membrane, were there any peculiar symptoms which could be ascribed to it. In a few instances only anorexia, epigastric pains, and nausea, were remarked.

Simple Ulceration of the Mucous Membrane of the Stomach.—Ulcerations of the mucous membrane of the stomach were most commonly combined with a thickened state of the membrane in the interstices of the ulcers, and with a tuberculated or mammillated appearance; but in the present division, the colour, thickness, and consistence of the membrane were natural, and the ulcerations looked as if a part had been

removed by pincers (*par un emporte-piece.*) Only two cases of this kind were met with by M. Louis, and in both there were only general symptoms of gastric uneasiness; pain, particularly after eating, gradual loss of appetite, nausea, &c.; nothing, in short, at all distinctive of this state from some that have been described.

It is to be observed, that anorexia was not a symptom peculiar to any morbid states of the stomach: it was a common symptom in almost all the cases, even in those in which the gastric mucous membrane was found to be perfectly healthy in every respect.

Redness of the mucous membrane of the stomach, without any change of thickness or consistence, was found in those cases in which pain, nausea, and other gastric symptoms, had come on only a few days before death.

Concerning the symptom of vomiting, which so generally adds to the discomforts of phthisical patients, M. Louis makes the following observation:

'The facts which have been mentioned appear to me to shew sufficiently clearly the light in which we are to regard the vomiting which supervenes in the course of phthisis, and which has hitherto been looked upon as a part of the disease. When it has been for some time preceded by more or less diminution of appetite, and is accompanied with pain at the epigastrium, as is most commonly the case, it is to be considered as generally indicating a severe lesion of the mucous membrane of the stomach. More rarely the vomiting is attributable to the cough; but in that case there is no pain at the epigastrium, the appetite is good, the digestion undisturbed; and the symptom has come on in the beginning of the complaint, instead of at a later period, as usually happens when it depends on disease of the stomach.'—P. 324.

Several cases are comprehended in this section; and they will be found to possess great interest both with relation to phthisis, and to simple gastric affections.

State of the Tongue.—Although the appearance of the tongue was very different in different cases, its condition had generally very little apparent connexion with the state of the stomach. Thus it was observed to be particularly red in at least half of the cases in which the gastric mucous membrane was healthy; whilst this appearance was wanting, and the tongue remained moist, in the majority of cases of softening with tenuity. The same uncertainty of appearance prevailed during the presence of the other morbid states to which the mucous membrane of the stomach is liable during phthisis. In the latter stage of the malady, often within ten days of death, the tongue became partially covered with an

albuminous exudation; sometimes in patches two or three lines in breadth, which occasionally coalesced so as to cover the whole tongue, and sometimes only in small granular spots. This exudation was easily removed, and when removed readily renewed; and it appeared sometimes on the lining of the cheeks, on the gums, and even on the palate: the tongue itself was generally in these circumstances, though not always, red, hot, and affected with pungent pains; indicative, in M. Louis's opinion, of an actual inflammation of its mucous membrane, supervening, like some inflammatory affections of the pleura, peritoneum, and gastric mucous membrane already alluded to, in the latest stage of the disease. This condition of the tongue, like its redness, seemed to have no specific connexion with the existing state of the stomach.

Functions of the Male Organs of Generation.—There is, we think, an opinion very prevalent respecting an increased propensity to venereal pleasures in the subjects of phthisis. In the early stage of the disorder, when the weakness has only so far advanced as to disable the patient from full occupation, M. Louis believes that such a propensity may be more apparent; but after many inquiries relating to this matter, he is pretty well convinced that the desire for venereal indulgence diminishes with the declining strength, and nearly in the same degree as in patients affected with other diseases. The question is of very little consequence; but we have no doubt that in some examples of phthisis both the propensity, and the power to gratify it, have existed up to the very day of the patient's death.

Functions of the Female Genital Organs.—The menstrual discharge continued to the last in one case only out of all those observed; and in that case was scanty, irregular, and towards the end of the disorder recurred every ten days. In the other cases, although (as was remarked in the article contained in our last Number) the uterus was found to be healthy, its functions first underwent interruption, and then suspension, at different periods of the disorder. When phthisis ran its course in less than a year, menstruation was ordinarily suppressed about the middle of it: when the disease was protracted two or three years, suppression commonly occurred in the last year: but this was not a constant rule.

'When the progress of phthisis was slow, we could discover no cause of which the operation was to hasten or retard the suppression of the menses; but when the malady was fatal in less than a year, the suppression was for the most part coincident with the appear-

ance of fever—that is to say, when the influence of the principal malady became more sensible over all the functions.'—P. 350.

M. Louis calls in question the commonly-received opinion, that the progress of phthisis is suspended by pregnancy. The opinion certainly requires explanation, and appears to us only to be tenable under certain limitations. The facts seem to be these. Pregnancy, when it takes place after the commencement of phthisis, generally does so in the first stage of the disorder, before the uterine functions are suspended, or even materially debilitated. Consequently, when pregnancy and phthisis are conjoined, the progress of the disease, even in the worst cases, can seldom be so rapid as to destroy life before the period of utero-gestation has expired. There is some reason to believe that the march of phthisis is often rather accelerated than retarded by the accidents of pregnancy, for death is frequently known to take place in a short time *after* delivery; but whether or not there be really a kind of exemption from death in phthisis, and other chronic disorders, *during* the continuance of pregnancy, we shall not take upon us to say. We are a little inclined to think that something of this kind does truly prevail, as it were out of a solicitude on the part of Nature to accomplish and complete her great work of perpetuating the species. Viewing the arrangement in this light, we could readily understand why the exemption should be limited to the time when the office of a mother could not be done by deputy, and should be taken off at the earliest period when the preservation of the life of the offspring could be entrusted to another. But the principal point to be determined is the accuracy of the assumed fact.

Cerebral Symptoms.—Almost all the patients enjoyed the free use of their understanding to the last. Cerebral symptoms at all remarkable were only noticed in some of the cases in which there were partial and pulpy softenings of the brain, and traces of inflammation (probably of recent date) in the arachnoid lining the lateral ventricles, or the subjacent tissue; and in these the symptoms only came on within a few days of death; such as somnolency, a partial loss of consciousness, insensibility to external impressions, contracted pupils, rigidity or spasmodic action of some of the muscles, &c. A case is given (p. 352), which affords a good illustration of these effects, and in which the appearances of inflammation were confined to the portion of the arachnoid lining the lateral ventricles—a circumstance, according to MM. Parent and Martinet, of extremely rare occurrence. Softening of parts of the brain sometimes existed with-

out the symptoms of pain, or rigidity, or paralysis of the limbs, which are usually considered as its effects; but the subjoined case, which is briefly related, affords a good example of that peculiar lesion of the brain uncomplicated with any other affection of the organ or its appendages.

'A clock-maker, aged 19, of delicate health, and considerable sensibility, came to the hospital of La Charité on the 29th of October, 1823, having had a cough with expectoration for four months. He was in the last stage of marasmus, presented all the symptoms of phthisis, and complained of heavy pain in his head, pains in the legs and in his loins, sleepiness and extreme debility. His intellectual faculties, which were considerably developed, remained perfect; and the expression of his countenance, making allowance for the emaciation, natural.

'During the two following days there was nothing to remark; but on the 2d of November the patient's strength had undergone a great diminution: when he was spoken to he did not reply, although he signified by signs that he understood what was said to him. He was unable to sit up.

'In the night of the 2d and 3d, almost constant delirium and loquacity.

'About ten in the morning of the 3d, his eyes were fixed, his face had very little animation, the limbs of both sides were equally weak, almost incapable of movement: the patient comprehended questions, but the exercise of speech seemed very painful to him; and it was not until the question had been repeated several times that he said he had a little pain in his head. The whole day was passed in a state of lethargy without convulsions.

'On the 4th, the limbs were spasmodically contracted, particularly on the right side; the pupils dilated, especially the left; the head was turned to the left side: there was total loss of consciousness, a wild expression of countenance: the pulse (which had been 94 the day before) 114: respiration plaintive. These symptoms continued in a greater or less degree until eight o'clock in the evening, when the patient died.

'*Examination of the body* 36 *hours after death.*—*Head.*—There were several *éraillures* in the dura-mater, allowing a passage to granulations arising from corresponding points of the arachnoid, which membrane was thickened and opaque: cerebral veins a little distended: pia-mater moderately injected: the right hemisphere of the brain firm, and considerably sprinkled (*très-sablé*) with blood; the left much less so, and rather soft: the septum pellucidum very much softened, and as if pulpy: similar softening of the fornix, and particularly of the left pillars, without any change in their natural white colour: two spoonsful of serum in the left ventricle; rather less in the right: the arachnoid in the left ventricle thickened: about the same quantity of serum in the lower occipital fossæ.

'*Chest.*—Some tubercular excavations in the upper portion of

the left lung—the anterior part of which, to the extent of two inches and a half, was almost wholly transformed into tubercles, or into grey semi-transparent matter.

'*Abdomen.*—The mucous membrane of the stomach, in a great part of its extent, softened and become thinner. Some ulcerations in the small intestines. Very marked softening of the mucous membrane of the colon.'—P. 364.

M. Louis regards the effusion into the ventricles in this case as the effect of the ramollissement, rather than as a complication: he observes, that the intensity of the cerebral symptoms was remarkably contrasted with the extreme debility of the patient; and concludes this chapter with the following observation:—

'In conclusion, it may be remarked, that we have observed simple softening (*ramollissement*), and partial softening of the brain, at the end of chronic diseases, equally often; but that we have never found apoplexy to have taken place at the close of long-continued maladies; a fact which establishes an additional line of demarcation between softening of the brain and apoplexy, and an additional analogy between cerebral hæmorrhagy and hæmorrhagy of other organs, which is rarely seen to take place in states of extreme debility.'—P. 367.

Phthisis Latent.—In 8 cases out of 123, pulmonary tubercles, as proved by their progress, must have existed from six months to two years before any cough was complained of. Six of these cases are fully detailed in this section, with the appearances after death; and to these we would strongly recommend the attention of the reader, not because we imagine that in actual practice the nature of all these cases would have been mistaken; but because a consideration of them must tend to awaken the vigilance of those who pass too hastily over the slight symptoms by which this fatal malady is sometimes ushered in, and because they illustrate pathological facts of extreme importance.

In the first case related in this section, the subject of which was a woman aged 32, and of very clear understanding, the patient had been an invalid for three years. Her first complaint was of rigors, heat, and perspirations, with diminution of appetite, and increase of thirst, and incipient emaciation, *without any other symptoms for the first year.* After this, cough, expectoration, and the usual symptoms of phthisis, supervened. Strong adhesions were found in the right side of the chest, and numerous and considerable excavations in both lungs: and as there did not exist in any part of the body any indication of disease more ancient than that of the lungs, M. Louis deems that he may justly ascribe

the symptoms of the first year to the formation of pulmonary tubercles. It is to be remarked, that the stomach, the functions of which had been disturbed so early, was not in the slightest degree diseased. The case next related, though in many respects very analogous to the first, is so far more decisive, that cough came on only six weeks before death, although febrile symptoms, anorexia, emaciation, and debility, had come on and been progressively increasing for nine months. In this case there were adhesions, tubercles, and immense and irregular excavations in the upper portion of the right and left lungs, crossed by bands, and lined with a semi-cartilaginous membrane, the pulmonary tissue being also considerably changed; alterations which are well known to require at least four or six months for their completion. In this case there had been hæmoptysis even two years before the appearance of the febrile symptoms; and if M. Louis's belief be well founded, that hæmoptysis is indicative of tubercles existing in the lungs, these morbid productions must have been formed at a very distant date. It is probable that the stethoscope would have indicated their existence, in the absence of all other symptoms; at least, we are willing to hope other practitioners are more fortunate than ourselves, for we can seldom convince ourselves of the degrees of diminution of the respiratory murmur in a sufficiently satisfactory manner. In the fourth case related by M. Louis, phthisis seems not to have been suspected until six days before death, and then only from the expectoration; partly from the disease of the lungs being masked by disease of the liver, and partly from the absence of cough, except occasionally, until fifteen days before the termination: the patient was a delicate woman, always troubled with dyspnœa, frequently affected with cough from slight causes, subject to irregularities of menstruation, pains of the chest, &c. The remarkable part of the case is, that although considerable tubercular excavations were found in the left lung after death, she had not at the time of her admission into the hospital (only eight months before that event, and when she had already been long and variously indisposed), either cough or expectoration, or any want of sonorousness in any part of the chest, or any thing remarkable in the respiratory murmur, except a slight increase of it under the left scapula. In this instance, also, M. Louis believes that tubercles had existed for many years.

'The structure of the pulmonary excavations in this case merits consideration. The most considerable of them were lined by a false membrane resting on almost perfectly healthy pulmonary tissue. Cases of this kind are rare; and it is only in these cases, where the

tubercles also are few in number, that it is possible to conceive the curability of phthisis by the approximation of the walls of the excavations. The bronchi also, if we except a faint rose-colour in those nearest the cavities, were perfectly healthy, and, together with the history of the symptoms, discredited any idea of chronic pulmonary catarrh being the cause of tubercles.'—P. 394.

In the fifth case, pectoriloquism was ascertained before the existence either of cough or pain of chest. It is unnecessary to dwell longer on examples of this kind, as we believe few practitioners have not occasionally seen something like them. We are accustomed to consider frequency of pulse as no unimportant symptom in the diagnosis of phthisis: it is not particularly spoken of by M. Louis, and does not seem to have been at all constant.

Acute Phthisis. — Five cases, supposed by M. Louis to illustrate the rapid march of phthisis, are related in this chapter. Four of the patients were not more than twenty years of age; the fifth was in his forty-sixth year. In one of these examples, the disease is said to have been fatal in thirty days. None of them, however, appear to us to be conclusive. In all of them, either the history of the case is doubtful, and the probable duration of the disease greater than what the patients acknowledged, or the appearances after death are unsatisfactory; or there is some complication of acute disease to which the fatal event may be attributed, or which, at all events, caused its acceleration without a correspondent progress in the tubercles. We shall consequently pass over this chapter, as being of no practical importance, as far as phthisis is concerned.

Perforation of the Pulmonary Parenchyma in consequence of a Tubercle bursting into the cavity of the Pleura.—This accident may take place both with and without any communication existing between the tubercular excavation and the bronchi, and is in either case marked, in general, by severe and peculiar symptoms. Perforation of the lungs is spoken of by Laennec;* but the cases related by that author were not, it would appear, signalised by the symptoms observed in M. Louis's patients; the accident being rather ascertained by the indications which percussion and the stethoscope afforded of its effects, the accumulation of air, or fluid, or both, in the cavity of the chest. Thus the presence of air in that situation was known by the increased sound on percussion, and the diminished sound on auscultation being performed, and also in some instances by dilatation of the affected side of the chest; whilst the super-addition of fluid gave rise

* Forbes's translation, pages 203 and 342.

to the phenomenon called metallic tinkling, which was distinctly heard also in M. Louis's cases, during inspiration, expiration, or when the patient spoke; and this sound was only heard when the tubercular cavities communicated with the bronchi as well as with the cavity of the pleura, as remarked by Laennec.*

The examples of perforation occurred at a more or less advanced stage of phthisis. The patients were *suddenly* attacked with violent pain, generally accompanied with extreme difficulty of breathing and inexpressible anxiety: these symptoms were succeeded by those of acute pleurisy, continuing with variable severity to the patient's death, which took place sometimes the day following, and in some cases not until a month afterwards. The morbid appearances in all the cases were, more or less, air, pus, or bloody serum, in the side of the chest on which the pain had been felt; a perforation of the parenchyma of the lung on that side, caused by the opening of a tubercular excavation into the cavity of the pleura. Six cases of this affection are very fully detailed, of which we can only give a brief general account in this place. The pain was not always severe, but its attack was invariably sudden, and attended with a sense of suffocation and anxiety. Most of the patients preserved a sitting posture after the occurrence of the perforation, and the face was commonly pale. The different periods at which death followed are not at all explained by the severity of the cases, or indeed by any other circumstance: in some of the severest examples of disease, the patients lived longer after the accident than some of those in whom the extent of disease in the lungs was very small. There was an uniformity in the place at which the perforation occurred in five cases out of six which are related, in all of which it took place opposite the angle of the third or fourth rib, a part corresponding with the usual seat of pain; and in seven cases out of eight which are noticed, the perforation was on the left side, in which also M. Louis rather more frequently found tubercles than in the right, as well as very often in a more advanced stage. There is reason to believe, that this accident would be of much more frequent occurrence if it were not prevented by the formation of adhesions.

Sudden Deaths.—Death took place in some of the patients suddenly and unexpectedly. Two examples are given; in one of which life appears to have terminated in consequence of very rapid hepatisation of the left lung, and in the other from œdema of the glottis, an affection which seems to occur very rarely in the course of phthisis. In other instances the

* Page 345.

suddenness of the fatal event could not well be accounted for; and in some a general softened state of the brain was complicated with extensive pulmonary disease.

Of the Causes of Phthisis. — M. Louis has not added much to our knowledge, as regards the causes of the disease of which he has so industriously noted the symptoms and effects. He thinks that women are more liable to phthisis than men, and denies the frequent influence of peripneumony and pleurisy in causing the disorder. A very small proportion of his patients had at any time had inflammation of the lungs.

'The cases which have been mentioned, not only do not prove that peripneumony is a cause of tubercles, but the history of that inflammation seems to prove quite the contrary. In fact, peripneumony most commonly proceeds from the base to the summit of the lungs,* tubercles almost constantly proceed from the summit to the base; peripneumony seldom affects both sides of the chest, phthisis almost always; phthisis is less frequent in men than in women, peripneumony less frequent in women than in men. . . . The same remarks are applicable to pleurisy.'—P. 524.

The influence of pulmonary catarrh, according to M. Louis, is equally doubtful, and for the same reasons.

'Whether we study the inflammation of the pulmonary parenchyma, or that of the mucous membrane of the bronchi, in relation to phthisis, we come to the same result: *that sex which seems to be most obnoxious to phthisis is least subject to both these inflammations, and that in the proportion of one to three.*'—P. 526.

We shall not dwell longer on this chapter, which has apparently been a little expanded by the author, in order to disprove and discredit the famous doctrine of *irritation*, which need not be discussed here; and shall merely append his observations on the

Influence of Age. — 'This is well established. The number of individuals who die of phthisis is more considerable between the ages of twenty and forty, than between forty and sixty, although the general mortality is less in the first than in the second of these periods. Bayle noticed this fact, and our observations have confirmed it, although the results present some slight difference. Thus, according to our observations, the following was the proportion:

Age.	Number of Deaths.	Age.	Number of Deaths.
'From 15 to 20.....	11	From 40 to 50	23
From 20 to 30.....	39	From 50 to 60.....	12
From 30 to 40.....	33	From 60 to 70.....	5

* Bayle.

'According to the observations of M. Bayle, the proportion was as follows:

Age.	Number of Deaths.	Age.	Number of Deaths.
'From 15 to 20.....	10	From 40 to 50.....	21
From 20 to 30.....	23	From 50 to 60.....	15
From 30 to 40.....	23	From 60 to 70.....	8

Treatment. — The treatment of phthisis in the wards of La Charité appears to be generally simple and judicious, and, we need scarcely add, almost limited to the relief of symptoms. If there was very little appearance of fever, and no inflammatory complication, demulcents and the weaker anodynes were prescribed, the infusion of lichen, mucilaginous mixtures, and the syrup of poppies. When the fever was more considerable, though still without inflammatory symptoms, it was generally abated by a careful regulation of the patient's diet. If the patients were seen early in the disease, and there were any acute symptoms, bleeding was had recourse to according to circumstances; or if the patients were females, and the catamenia were suppressed or scanty, leeches were applied to the vagina, and mucilaginous medicines or the infusion of violets were administered. Cough was found, as too frequently happens, a very intractable symptom: the syrup of poppies was generally tried first, and given in the dose of half an ounce; after which, opium was had recourse to, and the dose often increased to three grains without success. The acetate of morphine and the extract of belladonna were not more serviceable: the latter was given, in the dose of one or two grains in the course of the day, to some of the patients without relief, and was productive of so much pain and dryness of the throat, sometimes with hoarseness and difficulty of swallowing, though without any redness of the pharynx or amygdalæ, as to be of necessity discontinued. Symptoms of pleurisy were combated by venesection, leeches, or blisters, according to the severity of the symptoms. Bleeding was often had recourse to, and sometimes we think too freely, in hæmoptysis, without any apparent advantage. In one case in which bleeding and a large blister had seemed to do no good, the hæmoptysis was checked, when half a drachm of rathany root was given in mucilage; though, even in this case, the hæmorrhage was not wholly suppressed until three days afterwards. Slighter cases of hæmoptysis were, however, decidedly benefited by a small bleeding. Attempts were made to relieve the dyspnœa by venesection, blisters, and sometimes by an issue in the arm, but seldom with the least success. Where ulcerations of the larynx were suspected, leeches and blisters were

applied, but without any advantage. Vain attempts were sometimes made to check the shiverings, by sulphate of quinine, as well as endeavours to restrain copious perspiration, by the acetate of lead: twelve or fifteen grains of the latter medicines were occasionally given in a day, but, except in one case, quite fruitlessly; nor was the infusion of bark or of mint more useful to the patients. When the stomach was the seat of pain and heat, and the patients were not much reduced, leeches were applied, with temporary advantage: if the patients were much debilitated, the symptoms were met by regulation of the diet, and by emollient applications; and attempts were made to allay thirst by various drinks, but all of them soon became disagreeable, and were refused. No form of opium was found efficacious against the pain and vomiting, which were commonly the effect of softening and tenuity of the mucous membrane of the stomach.

No accident was found more difficult of remedy than diarrhœa. The means employed to alleviate it were, a spare diet, chiefly consisting of rice; the syrup of quinces; a decoction of bread and cornu cervi; the old preparation, called diascordium, with or without opium; rathany root; opium; and a decoction of catechu: of these medicines, the latter alone seems to have had the contemplated effect; but the production of this effect was followed by so much uneasiness, thirst, heat of throat, &c., that the patients, so far from being relieved, felt themselves worse than before. Such must necessarily be the result of measures which interfere too forcibly with symptoms, which are occasioned by causes that the measures do not reach; and the best rule to be observed in these deplorable cases is that with which M. Louis concludes his book; to avoid the too free use of stimulants, and to be cautious in the administration of active remedies of any kind.

Our analysis must here end. We truly believe, that an attentive perusal of M. Louis's book, of which we have presented a brief but fair abstract, in this and our preceding number, will enable those who take so much trouble to detect phthisis in all its forms, and to understand the malady in all its varieties and complications, better than those can do who are unacquainted with the facts therein detailed. If little is to be gained from a perusal of the chapters on the causes and treatment of the disease, the fault is not so much in the author as inseparable from the subject in the present state of knowledge. Our improvement in the treatment of this and of other confessedly incurable diseases would seem to keep pace with our conviction, that the less we interfere the better; and, however little agreeable to us it may be, to think, that

after the most zealous investigation of the morbid appearances and pathology of any disease, the causes remain equally obscure, and the treatment equally hopeless, to this conviction, as regards phthisis, we must probably long be compelled; and we have, at least, no reason to shrink from a confession which has been made by men distinguished no less by their enlightened observation of disease than by their candour. Yet let us not despair, or sink under difficulties which may be intended but as incentives to greater industry, and, above all, to a more intimate acquaintance with the productions of nature. Numerous as are the articles of the Materia Medica, and insignificant as some of them may be, we should beware of thinking that new agents will not be added to them, of new or of more extensive powers. Even the worst and most fatal diseases, phthisis and cancer, shew in their changes a kind of tendency to spontaneous or natural cure; and if the frame sinks under the process, the fault may, probably, be in the want of not unattainable means of supporting it until the dreadful conflict has passed. We cannot bring ourselves to think, that nature would make a constant effort towards an end which could *never* be accomplished.

II.

THE MEDICAL DOCTRINE OF M. BROUSSAIS.

Conversations on the Theory and Practice of Physiological Medicine, or Dialogues, etc.; containing a concise Exposition of the New Medical Doctrine, and a Refutation of Objections brought against it. Translated from the French. 8vo. Pp. 326. BURGESS and HILL. 1825.

Lettres à un Médécine de Provence, ou Exposition Critique de la Doctrine Médicale de M. Broussais. Par A. MIQUEL. Paris, 1825.

Exposition des Principes de la Nouvelle Doctrine Médicale; avec un Précis des Thèses soutenues sur ses différentes Parties. Par J. R. A. GOUPIL. Paris, 1824.

THE doctrines of Broussais appear not unlikely to mark an epoch in the medical science of France, somewhat similar in its circumstances to the period of Brown in our own country. Like the highly-gifted Scotchman, Broussais unites to considerable ability no small share of self-conceit, and a most thorough contempt of the intellects of all his opponents. Like Brown, too, he seems to have the art of conciliating, though this is perhaps an improper term, a number of the students, and imbuing them equally with his arrogance and his medical doctrines. Indeed, the assertions he perpetually makes, that his doctrines are immoveable truths, his opinions

incontestable facts, render it almost necessary that whoever shall accede to his medical dogmas, will participate in the spirit that dictated them. They cannot believe themselves infallible, without believing their opponents ignorantly or dishonestly prejudiced. The first work at the head of this article has every mark of being the production of M. Broussais himself, though his name does not appear in the title-page. It speaks of much which we can suppose no one but the author of the doctrine knew, and exhibits the same self-sufficiency that characterises his acknowledged writing.

M. Miquel's 'Exposition Critique' is a well-written, and generally candid work; and which, though by no means agreeing in every point with M. Broussais, is very far from denying him the praise of much ability, industry, and some real improvements in the practice and science of medicine. The first letter very well notices some of the arts by which M. Broussais has been able to push his doctrines into fashion, as the title of Physiological Medicine, which he has imposed upon them; and the reproaches, which he has cast upon other medical systems, as inculcating ontology. On this part of the subject our readers perhaps may not unwillingly receive some information.

In a science, says M. Miquel, in which so much depends upon terms, we cannot mistake the intention of a reformer, when he thus attaches to himself the praise of alone converting physiology to the service of medicine, while he asserts that other theories teach the existence of diseases as real beings, exerting a peculiar influence over the animal functions. The events of all times have shewn how much the choice of a term operates in procuring adherents to a system, and M. Broussais's success is but an additional illustration of the fact. We are not, however, to suppose that the Professor of Val de Grace has really proved his point; but then, in compensation for this deficiency, he is bold and decisive in assertion. 'I am not ignorant,' he says, 'that medicine ought to be physiological; but I have proved that hitherto it has never been so.' We may, however, examine a little into his proofs, and we shall thus be enabled to see that, by reproaching his opponents with ontology, he has sacrificed justice to the anxiety of founding a system.

By ontology, Broussais understands a real existence, and ontologists, he avers, entertain the opinion that diseases are real beings; and, in order to support this accusation, he repeats continually that this or that secretion, this or that disease, 'is not a living being, endowed with a will, capricé, and free to abandon one part, and to rush furiously on another.' Thus also of gout, because many practitioners

consider the inflammation of gout to be peculiar, he says, that when it was no 'longer a morbid tumour, it was at least a special being, that possessed nothing of inflammation but the name.' Now, that this is very unfairly treating the matter is evident; and yet it is upon no other nor better proof than this, that he rests his accusation. As M. Miquel well remarks, when we say that phthisis destroys the lungs of an individual, we understand by the term a series of diseased actions, and not a malevolent being, a voracious animal. 'No one surely ever had such an idea. But I am mistaken. The New Zealanders say, when an individual is attacked by an incurable disease, that he is possessed by Octua (their god), who under the form of a lizard devours their entrails.' M. Broussais's arguments would be excellent in New Zealand; but they can have no application among civilised nations. Our readers, we think, will join in this conclusion of M. Miquel; and may perhaps feel a little indignation, that any man of science should attempt so unworthily to stigmatise his adversaries.

The last work which heads this article, however, is a proof that M. Broussais judged rightly of the influence that the terms he has chosen would have upon pupils, and that many would be content *jurare in verba magistri*, without troubling themselves to inquire into their justice. The charge of ontology is frequently made by M. Goupil, against those who dissent from his leader's opinions, without any attempt to prove it, and, indeed, he appears to consider it too evident to be questioned. The work altogether appears to be a faithful though rather a lengthy exposition of Broussais's opinions, by means of analyses of the various theses that treat of the individual parts of the Professor's system. He states, that no source is more pure, from whence to derive the doctrines of the new sect, than these theses; and that having himself been instructed by Broussais, he has the assurance of having never altered the opinions of the 'créateur de la Médecine Physiologique.' From these sources, therefore, we now propose to lay before our readers a succinct statement of this new medical doctrine.

As M. Broussais terms his doctrines physiological 'par excellence,' it will be proper to commence this statement with an exposition of his physiological principles. These, however, are to be collected from different parts; for though, as M. Miquel observes, he has written every thing, he has arranged nothing.

The composition of the animal body, and its distribution into organs, has nothing in it, as described by the Professor, to call for particular remark; but having as usual been over

this point, he proceeds to the consideration of vital properties. Bichat, following the regular route of reasoning from things known to things unknown, has, after recognising sensibility as corresponding to sensation, and contractility to motion, and terming these animal sensibility and organic contractility, inferred that the molecular movements of the various organs must be attendant upon analogous phenomena, and hence deduced organic sensibility and organic contractility; and though the application of the word sensibility may be objected to, where there is no sensation, it must be allowed that it clearly indicates the author's meaning. Now these properties, logically deduced, Bichat termed vital properties, and from these explained the *quo modo* of the different functions of the animal body. M. Broussais, however, not content to reject the two latter properties, in the quiet and candid manner of Majendie, as useless and dangerous, proposes at once to reject them, and to provide a substitute. 'These isolations,' he says, 'of vital properties are mere chimeras; there exists but one, of which the modifications are various, but the nature is essentially identical; and I defy the conception of physiology in any other mode.' This one vital property is contractility. For while in reality he comprehends under this one term, sensibility, which is the source of contractility, he professes entirely to reject that property, because, according to M. Goupil, we cannot see it, but only its result in the power of contraction, and consequently to say it is sensible, is to say it is contracted. That this is strange reasoning must be allowed; and it is the first time that we have ever known that cause and effect could be defined in one word. We shall not, however, stay to discuss this point—for in reality it is not worth discussion; and of the more theoretical part of Broussais's system our object is to give a simple exposition. This one vital property, contractility, is the source of all the mechanical actions of the body, or in fact of every action which is not concerned in the composition and decomposition of bodies. Accordingly sensibility itself is but a functional result correspondent to the exaltation of contractility (un résultat fonctionel correspondant à un exaltation de la contractilité). The composition and decomposition of bodies is the effect of an animal chemistry, which is itself under the influence of the vital power — (force vitale). Such are Broussais's notions of the vital properties, and their office in the animal functions. It is clear that he adopts one vital power, teaches the existence of one vital property, which is contractility, and which may be considered mechanical; and in contradistinction to which, he admits the existence also of a vital chemistry, dif-

fering from known chemistry in its laws and modes of action; agreeing with it in being the source of the composition and decomposition of the corporeal organs.

In his theories of diseases, M. Broussais appears entirely to neglect those which may proceed from aberrations of the vital chemistry, and to derive all from modifications of contractility. Whenever, he says, the organic motions of contractility are augmented, the fluids are attracted to the affected part, and its density and often its volume are increased. This is *a vital erection*, which varies infinitely in degree, and is always the consequence of an influx of fluids. To this, according to its state, he has assigned the name of *irritation, super-irritation*, or *super-excitation;* and M. Broussais's great merit is, if we believe M. Goupil, in having given, or rather created a history of irritation. 'After having studied it under all its forms, and in every tissue, M. Broussais has, as it were, created the history of irritation, and science is now possessed of a complete theory.—(Après l'avoir etudiée sous tous ses formes, et dans tous les tissus, M. Broussais a crée, pour ainsi dire, l'histoire de l'irritation, et aujourdhui la science en posséde un théorie complète.) We now proceed to the consideration of this foundation-stone of the new medical doctrine.

We have already seen that M. Broussais admits but of one vital property, and that this is contractility. Contractility stimulated gives rise to contraction; and without stimulus the latter cannot have place, consequently all we see of life is supported by stimulants—(la vie ne s'entretient que par les stimulants.) This is a truth, observes the Professor of Val de Grace, discovered by Brown; and, though his deductions were erroneous, is in itself the most important and fruitful in physiology.

Brown taught that excitation was one and indivisible throughout the body; and herein he differs materially from Broussais, who maintains that excitability, or the liability to excitation from stimulus, is never uniformly expanded, but that one part has always more and another less excitability; and that this is not only naturally so, but that in disease when one part has more excitability, another has always a proportionably smaller quantity. The whole quantum of excitability does not only differ in individuals, but it is variously modified by age, sex, climate, and habits of life. In infancy, the excitability of the brain is greatest; in adults, the organs of respiration and generation; in old age, the brain again predominates.

If our readers remember the exposition we gave in a former number of the opinions of Stahl, it will occur to them, that that celebrated man appealed to these very facts

in proof; that the circulating system merely predominates in different organs in different individuals and periods of life.—Have we gained any thing by the new language of Broussais?

In the explanation of the temperaments, excitability still plays the principal office. It is to its greater or less predominance over the whole system that these are owing; and if only a particular organ is affected, it is the source of an idiosyncrasy. In the greater number of cases, the temperaments and idiosyncrasy determine the seat and character of irritations. In fact, when the organic activity of a part is already greatly exalted it may the more readily be acted upon by stimulants, and hence we are compelled, says M. Goupil, to deduce that those organs where action is the most energetic, are the most exposed to diseases arising from too much excitability, and these are the most numerous. If, accordingly, several organs at once are submitted to the influence of stimulants, that organ wherein vitality is the most predominating will be irritated, and this will be manifested by the phenomena of nervous, sanguineous, or lymphatic irritation, as this or that system prevails. Accordingly they are not, as it has been hitherto inculcated, the weakest organs that are most liable to disease, but those whose excitability is the most exalted, in fact, the strongest. Upon all this we do not feel inclined to make many observations. We cannot, however, pass it over entirely without remarking, that in the use M. Broussais makes of excitability he fully as much deserves the name of ontologist as his opponents, that is, not at all; while, with regard to the liability of different organs to disease, it is very manifest, that no difference exists but in the language employed. To take one instance as an example, how little the theory signifies, or how little difference it makes in practice, let us consider inflammation of the lungs under the different doctrines of increased vitality or debility. In either case we may premise, that there is no discordance in the treatment.

M. Broussais then will say, that the lungs have an excitability exalted above other organs, that therefore they are easily excited; that an afflux beyond the healthy state of blood is the consequence of this excitation, which, unless arrested by art, will proceed onwards to inflammation. That therefore, you must diminish this excitability by withdrawing the vital fluid, thus reducing the quantum in the lungs to the degree consistent with health.

The other theory urges, that the lungs being more liable to disease than other organs, must naturally be weaker,—that their vessels admit more easily the influx of blood when driven from other parts, and that from this first step inflammation is quickly formed, if the vessels are not relieved of

their burthen. Hence, therefore, the necessity of bleeding, &c. We need scarcely add, we think, that the latter is at least more consonant to our usual notions, though considering the practice to be similar, it is not very important which we adopt.

We have slightly anticipated in this illustration the next part of the history of irritation, viz. the manner in which excitability becomes its source. As stimulants are the support of life, to a certain degree their influence, of course, is not only consistent with, but necessary to, the healthy performance of the animal functions; if, however, they are carried too far they induce a greater afflux of fluid, giving rise to a morbid congestion. It is this state which M. Broussais terms *irritation*. When, on the other hand, excitation is feeble and the action of the part is languid, M. Broussais names it *debility*. From this increase or decrease of excitation in one or more organs an irregularity in the functions ensues, or a morbid state. Consistently with this theory, or rather necessarily connected with it, the author of the Medical Reform affirms, that 'the lesions which are observable in the functions of the sick man are but modifications of the functions in health;' in other words, that there is no difference in the quality of the excitation, but that this is always the same, and the difference that is perceived lies in the quantity.

M. Goupil appears to be somewhat aware, that this majus and minus mode of regarding disease will scarcely suffice to explain the phenomena of all diseases, for though where mere inflammation or debility are concerned, it will serve to explain them, this is by no means the case when we arrive at the exanthemata. He asks, therefore, whether excitation is capable of any further modification, or whether, 'in one word, it may experience specific modifications;' and the manner in which he has answered this interrogatory is an excellent specimen of the shifts to which the zealots of a theory must be sometimes forced. M. Broussais, it seems, had neglected to answer it, yet, at the same time, he admitted the existence of specific diseases; but, says M. Goupil, 'what is specific is only in the mode of action of their causes,' 'ca n'est que dans le mode d'action de leurs causes.' And he quotes the language of Broussais himself, as corroborative of the doctrine. We have in vain tried to understand this language, and we must therefore leave it to our readers in its native obscurity.

It is, however, upon this point that M. Miquel seems to us most successfully to have laboured, and to have shewn, not only that it is not consistent with the physiological tenets

of Bichat, to whose essays Broussais refers as to a text book, but that it is but a revival of the medical dichotomy of Brown. He remarks, that the extreme facility with which the theory may be comprehended has contributed to its adoption, although little reflection is necessary to shew its insufficiency.

We return, however, to the history of irritation. The causes productive of this state are, the too energetic action of stimulants, directly applied,—the sympathy with an organ in a state of irritation,— the subtraction of the usual stimulants, as gastritis, the consequence of hunger illustrates, — and lastly, the diminution of excitation in one or more parts. His last source of excitation M. Goupil considers more at large.

It has been already stated, that the excitation of one part of the body, if carried beyond the healthy state, is always made at he expense of another, and the reverse is equally the case. Certain tissues, however, have peculiarly a reciprocal action, as the mucous membrane of the air passages and the digestive canal with the skin. If by cold the perspiration of this latter tissue is impeded, the two former will be excited, according, in the jargon of the school whose tenets we are relating, to the diminution of the cutaneous exaltation. Thus, consequently, we have simple catarrh or slight diarrhœa, or violent inflammation of the lungs and dangerous enteritis. Now it is from instances like these, which, after all, bear a very small proportion to the whole diseases contained in the nosological table, that the principles of the new school are drawn; and they are carried on into the nature of remedies, as a necessary corollary to the principles thus exposed of the nature of irritation.

For since the excitability of the parts are never equal, and that the excitation of one part is always exalted while that of another is always diminished, and yet remedies restore health; it follows, that there can be no general excitants nor debilitants, but that every agent must act upon one part by exciting, and on another by enfeebling. Thus, accordingly, the sorrowful affections, as nostalgia, produce languor in the limbs, and inflammation of the mucous membrane of the stomach. It is necessary to remark here, that Broussais considers almost every stage of dyspepsia as inflammatory, and consequently, comprehends very many diseases which are scarcely regarded as the offspring of an inflammatory action. Purgative medicines exalt also the vitality of the mucous membrane, diminishing at the same time that of the locomotive muscles. To this we shall return, however, again hereafter.

The impression of stimulants is first perceived upon the nerves, whether primarily or by sympathy; they are the parts first irritated, and the irritation may either be confined to them, or be communicated to the blood vessels. It rarely happens that this impression is confined, however, to the nerves; and when the blood vessels are affected, it gives rise to irritation merely, to inflammation, sub-inflammation, or hæmorrhagic irritation. These terms appear sufficiently significant without additional explanation. After the account given above, of the nature of irritation, its confinement to the nervous fibrillæ seems impossible, and M. Broussais appears inconsistent with himself. Of this inconsistency M. Miquel has taken much notice, and has fairly proved it upon him. M. Goupil, however, equally conscious of the professor's vulnerability on this point, makes for him a defence, which has its foundation in actually modifying the doctrine of irritation as laid down by the professor, or, perhaps, to speak more correctly, by denying the possibility of simple nervous irritation.

'These distinctions of the different modes of irritation would pass for subtilties, if we supposed that the author of the *Examen* isolated the affections of the vascular and nervous capillaries from each other. But it is not so. When M. Broussais says, that inflammation is irritation of the sanguiferous capillaries, he means only that irritation predominates in the red capillaries, at the same time that it affects the white vessels and the nerves. But as in other cases the lymphatic and nervous capillaries only appear irritated, that there is no afflux and accumulation of red fluid, it was necessary to distinguish the irritated tissues; more especially, as in each of these forms, the local and general results of irritation, as well as their treatment, exhibit the most striking differences.'

We have hitherto done no more than explained the general principles and phenomena of irritation; as its dependence upon excitability, its unequal distribution, its never existing over the whole body in an equal degree, the afflux of fluids by which it is marked, and its division general into inflammation, subacute inflammation, hæmorrhagic irritation and nervous irritation. The next division of this new medical doctrine contains much that is both true and serviceable in practice, but much also, which, if true, cannot at least as yet be considered as proven.

It is no new remark, that the definitions which have been given of inflammation are exceedingly imperfect, and of this M. Broussais makes no inconsiderable, and we are sorry to add, no very honest use. For, not content with again impressing their inadequateness, he maintains, that before him no one had recognised their imperfection. Yet, as M. Miquel

observes, the terms of subacute inflammation, chronic, and latent inflammation, were not first invented by him; and the only discovery to which he is entitled, if indeed it is a discovery, is that inflammation can exist without either the usual signs or the usual results. Not, however, that M. Broussais has in any part of his works laid down in direct terms the doctrine, but that he gradually arrives at it by singly excluding each usual symptom.

It will be readily supposed, however, that this assertion is made at random. It has, indeed, a special reference to the following dogma, and which though too exclusive, would if more qualified be admitted by most observant practitioners.

'Nearly the whole of those who digest with difficulty, whose stomach before possessed much energy, become capricious and require to be coaxed with certain aliments; they who are obliged to attend continually to the stomach; they who are unable to support hunger, contrary to habit, without suffering acute pain; they who are obliged to walk or drink to assist digestion; they who pass restless nights, with troubled dreams, and awake with a foulness of the mouth, the limbs fatigued, a heaviness of the head; nearly the whole of those individuals, I dare assert, are labouring under chronic gastritis.'

Though there is something problematical in the doctrine that would upon this case, or one or two somewhat similar, inculcate as a general truth, that inflammation is somewhere always present, yet it is certainly correct that we cannot always look for guidance to the usual indications. Thus, for instance, in carditis, the symptoms are frequently so obscure that they are entirely overlooked, and in the weak pulse, frequent syncope, and freedom from pain, even a tolerably informed practitioner sometimes misses the nature of the disease. So far therefore as M. Broussais has urged that the usual symptoms are insufficient, and that we must frequently look not to the point inflamed, but to other accompanying phenomena, medicine is indebted to him, and would have been much more, had he not united to correct observation, contradictory theories.

We conceive, too, that M. Broussais is perfectly correct in laying down as an axiom, that inflammation may have existed during life, without leaving any traces in the dead body. We have ourselves not unfrequently witnessed cases of this kind, the symptoms during life having been exceedingly urgent, and the treatment very active. It is indeed manifest, that unless we allow, when the accustomed symptoms of inflammation are present in an organ, that that organ is really and truly inflamed, we can never bring medical science to any thing like a practical conclusion. We shall have no cer-

tainty, but what the *post mortem* examination affords us, that is, when too late to be beneficial. M. Goupil, however, has quoted in his exposition some experiments made by M. Jeunesse and contained in a thesis upon peritonitis, which renders the matter as certain as the best medical proof ever can make any thing.

'I made,' says this author, 'some experiments upon some Guinea pigs; and by irritation upon the peritoneum, I produced an afflux of blood and real inflammation; the redness being intense, the heat manifestly augmented, and, in fine, the characters of a violent inflammation being present, I killed the animals, without hæmorrhage, and I saw to my satisfaction the peritoneum become colourless, and re-established in its natural conditions.'

The terminations of inflammation, M. Broussais necessarily admits to be the same with those usually described by authors, viz. resolution or gradual disappearance, deliterance or sudden disappearance, suppuration and gangrene. But it is in the course and product of what he terms sub-inflammation, (subacute scarcely expresses his meaning,) that we find the greatest difference from generally received opinions.

Hitherto we have been accustomed to believe that certain processes have place in the diseased body, which are neither exaggerations nor diminutives of the processes of the healthy body, but are new in kind. In this view, also, we are supported by Bichat, who, far from considering with the author of the New Medical Doctrine, that diseases are but modifications of functions which are present even in health, states that they become so much altered as to be denaturalised. (dénaturées.) Now, founding upon this new doctrine, which is at least peculiarly his own, M. Broussais affirms, that all organic changes are but the consequence of chronic inflammation, that they spring from the same causes and require the same treatment. Thus, consequently, healthy pus, secreted in a common abscess, is produced by actions of the *same kind* with the cheesy matter of a softened scrophulous tubercle; and the structure of scirrhus has the same origin with a common inflammatory tumour, that may either be resolved by antiphlogistic remedies, or terminated in suppuration.

This part of the new theory may require perhaps a little more explanation. In many parts of this system we meet with contradictions, and some, we doubt not, that our readers will have already noticed. In the case before us, however, we meet with it in a very remarkable degree. In speaking of irritation, M. Broussais has defined it as an extraordinary afflux of fluids, and consequently that it is the

same thing in every kind of structure. Yet in entering upon the explanation of organic maladies, M. Goupil tells us, that chronic irritation produces different results, according to the structure of the organ in which it appears; and necessarily, that it undergoes some modification according to its situation. Thus, in what have been termed the parenchymatous structures, chronic irritation produces an increased density, as in the lungs, and in the membranes that contain many blood vessels, thickening and induration as in the mucous tunics and the peritoneum. (We would, en passant, remind our readers, that the mucous membranes become scirrhous, as well as indurated, without the scirrhous organisation). The first stage in organic lesions is then termed the *red induration.* But when the chronic inflammation has continued for some time, the heat and redness disappear, and the white vessels are alone the seat of irritation. We have then as the result the formation of new tissues, melanosis, tubercles, scirrhus. After having thus explained his master's doctrine, M. Goupil concludes, that organic maladies can no longer be considered as *primitive affections,* that is, not as the result of actions, the original and sole tendency of which were to produce a peculiar organic alteration. On the contrary, they are always the result of mere irritation, not at all differing in result from every other irritation. It would be really very useless to fatigue our readers with the whole pretended proofs of the truth of this doctrine. Suffice it to say, that they consist in the adoption of the antiphlogistic treatment in tuberculous and cancerous affections, where such remedies appeared to have removed the disease. We are not by any means disposed to question such facts; and we can well believe that even scirrhus may have been removed by the frequent application of leeches, but we cannot see how this would establish the doctrine that irritation giving rise to cancer is not of a peculiar kind. In some of the late experiments of M. Magendie, he appears to have shewn very satisfactorily that the subtraction of blood increases the action of the absorbents; and therefore, were there no other reason for questioning this doctrine, the fact just noticed would be sufficient to justify us in denying that it had been proved. For whatever might have been the nature of the irritation, we could only infer that its product had been absorbed in consequence of the depletion, but its disappearance from the treatment would by no means lead us to a knowledge of its nature. The fact is, however, that we have just as much reason for believing that the irritation which is followed by suppuration is different from that which

is followed by the formation of cancer, as we have for believing that paper is manufactured by a different process from broad cloth. While in the one case we see a different result, the consequence of a different process, surely all legitimate reasoning would lead us to conclude, that it is equally so in the other.

The hæmorrhagic irritation has already been mentioned, and the very distinction will questionless strike our readers as an inconsistency. Passing over this, however, we pursue the exposition of M. Broussais' doctrines.

First, we have it determined as an incontrovertible truth, that every hæmorrhage is active, and that what have been called passive hæmorrhages have no foundation in fact; and this is decided in so summary a manner, that, if it carry not conviction, it is at least not due to the want of positive assertion. If, contends M. Goupil, hæmorrhage proceeds from weakness, the weakest parts ought most frequently to suffer from it. But this is so far from being the case, that in the limbs of a paralytic person, or of an old man, we find the tissues pale, shrunk, and bloodless. Far from giving rise to congestion, sedatives, as cold for example, in diminishing the irritability of the parts to which they are applied, prevent the blood from flowing to it, even in its usual quantity. The feebleness of tissues can never, therefore, occasion hæmorrhage. It is impossible to suppose, that the debilitated capillaries can be distended by blood, and that their orifices permit a passage for the fluid. Here is one of the difficulties to which every system, which admits only of plus and minus, must fall. It is found impossible by this alone to explain the occurrence of hæmorrhage from debility; and it is, therefore, denied altogether, and the denial is supported by bold assertion, and rested upon false analogy. We know so little of the ultimate structure of the human body, and even less of the processes carried on in the extreme vessels, that it is clearly impossible to demonstrate any opinion in which they are concerned as utterly erroneous; yet it is equally certain that the present doctrine not only cannot be proved, but is really at variance with those manifest phenomena, to which, in the reasoning above given, we are referred. For hæmorrhages most certainly do occur in cases of extreme general weakness; they do often terminate consumption, when the patient is arrived at the very lowest state of debility: it is quite possible to conceive that congestion may take place in the capillaries, that they may be much enfeebled, and that even then the natural action of the preceding series of vessels may distend the capillary orifices.

To this we may add, that tonics, those medicines, and that diet, which are calculated to restore the general strength, will frequently remove hæmorrhage, and thus we arrive at an equal presumption on the other side. The truth is, that M. Broussais indulges in this hæmorrhagic doctrine, in those very subtleties, that he strongly condemns; and having once said that irritation is an exaggeration of *a vital erection,* is determined to apply it to every case; fairly, if he can—if he cannot, by main force.

Nervous irritation, again, is another instance of the inconsistency of this new theory. After having had irritation explained in the manner we have above related, we are told, that nervous irritation always precedes the afflux of fluids, and that the latter is but a consequence of the former. The neuroses are divided into active and passive; the active comprehending all those in which there is an afflux of fluids, and the passive those in which the sensibility or power of motion are diminished. The active neuroses vary both in their phenomena, and the manner of their production, according to the different portions of the nervous system in which they are situated; and may be divided into irritations of the sensitive apparatus or the brain, of the external sensitive apparatus or spinal medulla and nerves, and into irritations of the nerves of organic life. To the first section belong hemicrania, globus hystericus, many of the phenomena of mania, and hypochondriacism, &c., and these may be either primitive or sympathetic. In the second section are the neuralgiæ, which ensue from cold, injuries, &c., but more commonly from sympathy with a visceral inflammation; and in the third are the proper neuroses of authors, as periodical dyspnœa, palpitations of the heart, hysteria, nymphomania, &c. The purely nervous diseases, however, though thus a place has been made for them, are almost dismissed entirely from nosology, by M. Broussais, most of them being referred to inflammation, and particularly to gastro-enteritis.

One of the most important parts of this physiological medicine relates to the doctrines of sympathy. Most or perhaps all the facts relating to this circumstance have been long recognised; as the mutual relations of the brain and digestive canal, the lungs, &c.; but in the explanation of the manner in which sympathies arise, there is some difference.

According to M. Broussais, whenever irritation is developed in any one organ beyond a certain point, it will always be transmitted to other organs; and the intensity of the irritation will always determine the intensity of the sympathy. Thus it is by the violence of the fever that we judge the extent of the gastro-enteritis, &c. Sympathetic irritation is

always of the same nature with the original irritation; but in making this proposition, it is not intended to assert that the organ sympathetically affected exhibits the same morbid character with what the originally suffering organ exhibited, but only that there is an exaltation of irritability. Thus the suppression of the catamenia occasions an hæmoptysis, an hæmatemesis, &c. Inflammation more frequently excites inflammation than a neurosis or an hæmorrhage, and the nervous excitation of one part, to the nervous excitation of another, than to an inflammation or an hæmorrhage; although in each case the less frequent phenomenon may sometimes be noticed. In some cases the sympathy may be transmitted with the precise characters of the original affection, as in cancerous diseases, and to this we are told M. Broussais has assigned the name of diathesis, as if he were the first so to have employed the term.

With regard to the manner in which sympathies are affected, M. Broussais attributes it to the nervous communications, in common with most physiologists; but particularly insists, that it is made in the same manner as mere healthy excitation. This, of course, it would be useless to argue against; for we have no facts of any importance either to refute or confirm the doctrine. A far more necessary, nay, a really essential knowledge, is, that of the particular sympathies; but to this M. Broussais has made no important additions. Founded upon the knowledge of sympathies is the employment of revellent medicine. The old authors seem not to have made any very clear distinction between revellents and derivatives, and to have considered them both as remedies calculated to draw away the peccant humours. This was partly, perhaps, owing to the prevalence of the humoral pathology at the time that these terms came into general use. But the new medical doctrine having abjured all fault in the fluids, has yet retained these terms, and of course has altered their signification, or at least of one of the terms. By revulsion, therefore, they no longer mean the abstraction of the peccant humour, but the metastasis of morbid irritation by artificial or natural means. By derivatives, the abstraction of the fluids in the same manner. The fluids, however, according to the new sect, only erring as to quantity, never as to quality. What have hitherto been termed crises, are only revulsive irritations, and cure diseases by transmitting the original irritation to another and less dangerous organ. Thus perspiration in gastro-enteritis is the transmission of the irritation from the mucous membrane of the digestive canal to the skin; and the formation of abscess is of a similar nature. Sometimes, however, these

metastases may arise in parts which particularly sympathise with the originally affected organ; and then there is frequently an aggravation of the primitive disorder. Thus gastro-enteritis gives rise to erysipelas, and erysipelas by sympathy increases the gastro-enteritis. These are false crises. The proper employment of revellents of course depends upon an accurate knowledge of sympathies.

Another character deserving of notice in irritations is, that they are always intermittent. The truth of this proposition, understanding the word irritation in the common acceptation of the term, is too true to need comment. Of the cause of these intermissions, it does not seem that M. Broussais has set forth any explanation. By a M. Mongellaz, however, they have been referred to the intermittent nature of the exciting causes.

We here close the present article, having given a mere general outline of Broussais' doctrines: in a future Number we propose pursuing the subject into its application to particular diseases. We have abstained heretofore from comment, because we have been concerned with merely general propositions, but by no means agreeing with him in the exclusiveness of his doctrines.

III.

THE EPIDEMIC CHOLERA OF THE EAST.

Sketches of the most prevalent Diseases of India: comprising a Treatise on the Epidemic Cholera of the East; Statistical and Topographical Reports of the Diseases in the different Divisions of the Army under the Madras Presidency; embracing also, the Annual Rate of Mortality, and Practical Observations on the Effects of Calomel on the Alimentary Canal, and on the Diseases most prevalent in India. Illustrated by Tables and Plates. By James Annesley, Madras Medical Establishment, lately in Charge of the General Hospital, Madras, and Garrison Surgeon of Fort St. George. London. 1825.

Report of the Epidemic Cholera, as it has appeared in the Territories subject to the Presidency of Fort St. George (Madras), drawn up by Order of the Government, under the Superintendence of the Medical Board. By William Scott, Surgeon and Secretary to the Board. Madras. 1824.

Observations on the Cholera Morbus of India: a Letter addressed to the Honourable the Court of Directors of the East India Company. By Whitelaw Ainslie, M.D., M.R.A.S., late of the Medical Staff of Southern India. London. 1825.

We gave, in our preceding Number, a full account of the *Pathology* of Epidemic Cholera: we now proceed to give a

succinct account of the *Treatment* recommended by the authors before us.

Mr. Annesley considers that, as there generally exists from the commencement of the disease some degree of inflammatory action in the internal surface of the small intestines, as indicated by the sense of heat and pain between the umbilicus and epigastric region, and by the appearances on dissection, and as the vital powers are rather oppressed than debilitated, the treatment should not be directed with the single view of removing debility, but with the additional intention of removing this inflammatory action, and the oppression under which the lungs and circulating system are labouring. He is of opinion, that the cause of the disease overpowers the vital energy of the system, and destroys the balance of the circulation. 'Hence the blood is imperfectly propelled to the surface of the body, accumulates in an unusual quantity in the right cavities of the heart, in the large venous trunks, and in the lungs; and owing also to its high state of carbonization, or defective state of oxygenation, overpowers the remaining energy of the heart and lungs, and deprives them of the power of performing their functions with regularity.' 'If this view of the subject be correct,' he proceeds to observe, 'to remove oppression from the venous system, and restore the balance of the circulation, are the chief objects we should propose to accomplish.'

'*Bleeding*, therefore, when it can be effected, should never be lost sight of. The object of resorting to it is to diminish the quantity of this fluid, in order to relieve the heart and lungs from oppression, and to enable them to perform their functions.

'This object, however, can only be attained in the early stage of this disease, and before the circulation ceases at the wrist; the necessity, therefore, of early assistance is manifest, because, after this period, blood will seldom flow from the veins, and when it does flow, it is generally in too small a quantity to afford relief.'—P. 167.

The propriety of employing blood-letting upon the appearance of the premonitory, or invading signs of the disease, is particularly inculcated by Mr. Annesley, who asserts, that if it be resorted to at this period, the practitioner will seldom lose a patient, particularly if other judicious means be used at the same time. But he by no means restricts this treatment to the early stage of the disease; but recommends it at every period of its progress, if it have not previously been instituted to a sufficient extent. When the disease is far advanced, blood will seldom flow from the vein, or, if it does, it always flows in drops, and is thick and black. In such cases, the practitioner is advised to attempt to rouse the

action of the heart by internal stimulants, external warmth, and frictions with stimulating substances, and by sinapisms. By these means the flow of blood will, in many cases, be promoted; this fluid will gradually become less dark, and as the bleeding proceeds, it will change to a more florid or redder colour; at the same time the pulse will rise, and the spasms will generally be relieved.

Mr. Annesley, as well as Mr. Scott, discusses, under separate heads, the other means of cure which have usually been employed in this disease. Of the use of opium Mr. Annesley does not speak favourably. He states, that it generally increased the cerebral symptom, which, in our opinion, more than other symptoms, marks this as a disease distinct from any other form of cholera. On this account he discontinued its use early in his practice, and never gave it, under any circumstances, unless in combination with large doses of calomel. Mr. Scott considers that it was more beneficial amongst the natives affected with the disease.

'*Rubefacients.*—I have always used, with decided benefit, spirits of turpentine as an embrocation for spasms of the extremities, &c. &c.; and I have applied sinapisms to the legs and soles of the feet, and sometimes covered the whole trunk with them, from the clavicle to the pubis. I have also applied blisters occasionally; but I think sinapisms act more quickly and more certainly on the skin, and for this reason I have generally resorted to them in preference.'—*Annesley*, p. 176.

Of the warm and vapour baths Mr. Annesley does not speak favourably; and Mr. Scott's evidence respecting them is nearly similar to his. Mr. Annesley states, that he has derived more benefit from frictions with hot flannels, and that he generally adopted this means in his hospital. Calomel, camphor, ammonia, ether, and opium, in various doses and forms of combinations, in order to suit the circumstances of the case, seem to have been the internal medicines most frequently prescribed by Mr. Annesley. In order to procure a discharge of bile into the duodenum, to remove spasm from the gall-ducts, and to detach the viscid secretion, which he found in his dissections, covering the mucous coat of the intestines, he employed large doses of calomel combined with opium, and washed them down with a draught of camphor, ammonia, and ether; and these were followed by a large dose of castor oil. The following is a *résumé* of the treatment which Mr. Annesley usually adopted in this disease:

'A patient is admitted into the hospital, I shall say at noon, with all the symptoms of cholera: a vein is immediately opened, and one scruple of calomel and two grains of opium are given in

the form of a pill, and washed down with the camphor draught. The body and extremities are well rubbed with dry flannels made warm, and bottles filled with hot water are applied to the feet and hands; but if the spasms are severe, spirits of turpentine are used as an embrocation. In an hour, we generally perceive the effects of these remedies, and whether the disease be in any degree arrested, or be proceeding in its progress. If the former, nothing more is to be done till evening, when the calomel pill may be repeated, and an enema exhibited. The following morning the bowels should be again fully evacuated, and then the patient may be considered safe.

'When blood, however, cannot be drawn from the arm, and the spasms continue; when severe pain and burning heat are felt at the umbilicus and scrobiculus cordis, and are distressing; when the skin is cold, and deluged with a cold, clammy dew; and when there are oppression in the chest; and difficulty of breathing—excessive pain and confusion about the head, with great intolerance of light; no pulse, or a pulse scarcely to be felt, and a cadaverous smell from the body; twenty or thirty leeches should be applied immediately to the umbilicus and scrobiculus cordis; the calomel pill should be repeated, and the turpentine embrocations continued. Leeches ought likewise to be applied to the temples and base of the skull.

'When the leeches bleed freely, the application of them is always attended with decided advantage, and they should be allowed to remain till they have fulfilled their duty; after which, a large blister or sinapism should be applied over the whole abdomen. Sometimes the leeches fasten, but do not draw blood. In this case they should be removed immediately, and the sinapism or blister applied in their place. When the bowels are very irritable, and constantly discharging a watery fluid, small anodyne enemas, with camphor, may be given; and the drogue amère, a nostrum used by the Jesuits, is found very useful in assisting the operation of calomel, which latter should always be repeated every two hours, till three or four scruples have been taken.

'Whenever we fail in checking the disease at first, we have no resource but to treat urgent symptoms, and they must always be met with decision as they occur. The patient ought never to be left a moment without an attendant who is capable of acting according to circumstances, and who may take advantage of every change.

'An opportunity sometimes offers, in the advanced stage of the disease, to abstract blood: this is indicated by a struggle or effort of the circulating system to overcome some resisting power, and is a most auspicious symptom, which should never be overlooked. This re-action indicates that the constitution is making an effort to restore the circulation, but is unable to do so till assisted by the abstraction of blood, which abstraction aids in removing that oppression which it has not power of itself to overcome. This is a circumstance in the treatment of epidemic cholera of the greatest im-

portance, requiring both tact and judgment; but the change in the circulation indicating both the propriety of adopting and the time of performing it, should always be expected and taken advantage of as soon as it occurs.' * * * *

'A favourable change is always accompanied by relief from the bowels, in the form of a blackish, grey, feculent, and tenacious discharge. Whenever this takes place there is hope, and the exhibition of calomel should be followed up with a smart purgative, if the stomach will receive it; if it will not, enemata should be administered, and repeated till motions are procured. The purgative I have generally found to answer best at this stage of the disease, and to sit most lightly on the stomach, is the following draught: —

℞ Pulv. Jalap. Comp. ʒss.
Aq. Menth. Pip. ℥ij.
M. ft. haust.

and, as it is a matter of the very first consequence to act upon the bowels freely as soon as possible, if this draught has no effect in two or three hours, it should always be repeated.' * *

'The subsequent treatment is now to be considered; and the indication in this stage is, to guard against congestion in the abdominal and thoracic viscera, and in the brain; each of which suffers in a greater or less degree, and sometimes the whole are attacked at the same time.

'There are generally observable, in the advanced stages of the disease, an unusual stupor and heaviness of the patient, and at times an obstinate sullenness that is exceedingly annoying. Patients affected with these symptoms seldom or never complain of pain; but, on examining the abdomen, a very great fulness and doughy feel is generally found all over it, as if the intestines were completely overloaded; pressure made upon the liver obliges the patients to shrink from it, and shew symptoms of uneasiness, though they positively and obstinately assert that they have no pain. The eyes are sometimes peculiarly bright, with contracted pupils, and there is an evident intolerance of light; yet those patients insist, that they have no uneasiness in the head, and that they can look at the light with perfect freedom. The pulse is often oppressed and labouring, notwithstanding a very large quantity of blood may have been taken during the first stage of the disease.

'These are symptoms that require immediate attention, and, when urgent, blood should be taken from the arm; but, in general, leeches* will answer every purpose, and I consider them a safer remedy in this stage of the disease than general bleeding; because they appear to me to empty the capillary vessels, and aid in regulating the circulation, without destroying power — a point of

* From a number of experiments, made in order to ascertain the quantity of blood usually taken by leeches in the East Indies, and alluded to in another part of his work, Mr. Annesley found that each leech drew ten drachms of blood.

great importance where the constitution has already suffered so severely.' * * * * * *

'When the patient shrinks from pressure on the abdomen, leeches should be applied over it in considerable numbers, and particularly in the neighbourhood of the liver; and, when the head is affected, they should be applied at the temples and base of the skull. I prefer the latter situation, and I think I have observed greater advantage to arise from their application on this part, than when applied on the temples.

'Purgatives should, as a matter of course, be used in aid of the above remedies; but the congestive symptoms ought to be overcome before we can adopt any regular plan of treatment to re-establish the general health. Whilst these symptoms of oppression and congestion require the most minute attention, we must not lose sight of the state of the alimentary canal, of the secretions of the small intestines, and of the alvine discharges.

'Though the irritability of the stomach sometimes continues till a very late period, yet in general it is subdued early, and this organ retains all that is given, both as medicine and nourishment; but as the whole line of the small intestines exhibits, on dissection of fatal cases, a most peculiar appearance, from the duodenum to the cæcum; as the bowel itself is very much contracted in its diameter, thickened and pulpy in its appearance; and as, when laid open, it is found filled with cream-coloured, thick, viscid, and tenacious matter, exactly like old cream-cheese, which glues the gut together, and obstructs its passage; and, moreover, as this matter is to be found in every fatal case of cholera, so it may be inferred to exist, in some degree, even in all that recover; and therefore the removal of it must be a primary consideration.

'Purgatives do not seem, however, to act upon it at first, for they merely produce watery dejections; so long, therefore, as these continue, we may be sure that all is not right, even although they be reported copious and free. The dejections should always be examined with great care: until the above-described matter is brought away, I never consider that I have made much advancement in the cure.

'Calomel, in scruple doses, I have always found most useful in removing this particular matter. Sometimes I have combined it with aloes, and continued it every night and morning till the dejections become of a blackish grey colour, substantial and tenacious.* The purging draught and the enema may then be had recourse to with the best effects.

'This practice was followed up regularly every day with leeches, blisters, &c. &c. according to circumstances. In a day or two the motions were usually observed to become dark-green, which colour always indicated an approach to healthy action. The calomel and purging draughts were still continued, however, for five or six days

* 'Three, four, and even five scruples of calomel were usually taken, before this effect was produced; and the black-grey colour seemed always indicative of the action of calomel, being precisely the colour which is produced by calomel combined with ammonia.'

longer, till the dejections became more natural, and a visible improvement was observed in the appearance of the patient. He was then put upon an alterative course of medicine for a month or more, according to circumstances. This latter measure is absolutely necessary to prevent a relapse, which is very common, and always dangerous. I have frequently witnessed, both in this and in other diseases, where men have been returned to duty before the organic functions were restored to healthy action, a state of disease produced, which, if it did not affect their lives, disqualified and rendered them unfit for service, before they had been many years in India.'—P. 177—188.

Mr. Annesley proceeds to state, that he found the *drogue amère,** a medicine already alluded to, serviceable in aiding the calomel to expel the viscid and tenacious substance covering, in this disease, the mucous surface of the intestines. He gave it in doses of ʒss. to ʒj. in the camphor mixture. The usual drink prescribed by him during the disease was, the nitric acid, agreeably diluted, and this was generally relished by the patient, and found to relieve the burning sensation at the stomach, which was one of the most urgent and distressing symptoms of the malady.

Of the numerous opinions as to the treatment of the disease contained in Mr. Scott's report, it is impossible for us to give any account. They consist chiefly of very brief statements of their ideas of the subject made by a great number of medical officers, in the course of their official returns to the Medical Board of Madras. Mr. Scott does not attempt to draw any general inference from the whole; but leaves the inexperienced reader to form his own opinions from the mass of jarring and contradictory materials which he has collected. This, perhaps, will prove the more satisfactory measure to the few matured and thinking minds who may peruse the work, inasmuch as it furnishes them with some useful sources whence they may draw their own conclusions; but the mass of readers, and particularly the inexperienced, the unthinking, and the undiscriminating, will be altogether be-

* This medicine, which is much employed in the native practice of India, is composed as follows:—

℞ Aloës Socot. ℔j.
Gum. Myrrhæ
—— Mastich. } āā ʒviij.
—— Benzoës,
Rad. Calumbæ,
Croci Angelicæ,
Rad. Gentianæ, āā ʒiv.
Brandy ℔.xxxvi.
Hollands, ℔. xij. M.

To stand forty days, and filter through paper for use.

wildered in the maze into which it introduces them: and, if they take the right path of the many which it opens to their view, they will be chiefly indebted to their good fortune for the choice.

Respecting Dr. Ainslie's little work at the head of this article, it will not be necessary to offer many observations. It contains, however, much interesting matter, and displays the usual learning and research of this well-known writer. Dr. Ainslie had, during his long residence in India, considerable experience of sporadic cholera, and he now states as the result of that experience, that he found large and repeated doses of calcined magnesia, given chiefly in warm milk, with powdered ginger or pepper, and exhibited also in the form of enemas, as particularly beneficial in arresting the disease. He strongly inculcates the necessity of repeating this medicine, notwithstanding the frequent rejection of it from the stomach—a circumstance, indeed, which must at first be looked for from the nature of the disease. He conceives that the malady is intimately connected with, and kept up by, an ascescent matter secreted upon the mucous surface of the digestive canal; and that, whilst the magnesia neutralises this matter, it tends to promote the excretion of it by stool. It does not appear that this medicine has received a trial in the epidemic cholera; and, therefore, Dr. Ainslie, judging from the benefit he has derived from it in the most severe cases of the sporadic disease, strongly recommends it to the attention of the medical practitioner of India for this destructive epidemic.

We must now conclude our observations on the epidemic cholera; but we cannot do so without strongly recommending Mr. Annesley's work (the first of those at the head of the article) to the perusal of our readers. The treatise on the epidemic cholera, which constitutes a large portion of this volume, is the most complete, most methodical, and most instructive of the several publications which have appeared on this alarming disease; and the treatment which its author recommends appears to us as the most judicious, and the most successful, that has hitherto been employed. Mr. Annesley deserves great praise for his zeal in having made so many *post mortem* researches into the minute changes produced by the disease upon the different organs and textures of the body, as the dissections and pathological details which he has furnished prove that he has done; and he equally deserves recommendation for having attended more than any who has gone before him, to the premonitory symptoms of the disease; and for having founded upon the information he thus obtained a prompt,

rational, energetic, and hence successful method of cure. We shall on a future occasion devote an article to the two remaining parts of his work, which consist of 'Statistical Reports of Diseases,' with remarks on those peculiar to the different districts of India; and of 'Researches into the Modus Operandi of Calomel in Disorders of that Climate.'

PART II.

COLLECTIONS OF MEDICAL FACTS, WITH OBSERVATIONS.

Section I.—Original Papers.

Notices concerning the Use of the Chlorate of Soda in Medicine. By George Darling, M.D., Member of the Royal College of Physicians, London.

The chlorate of soda was introduced to my notice as a medicine eighteen years ago, by the late Dr. Helenus Scott, when I had the pleasure of becoming acquainted with him in India. He had employed it in secondary syphilis, and in pseudo-syphilitic affections, but in these only. By his advice, I gave it at the time in some cases of that description, and with so much success that I resolved to make a full trial of its powers whenever a favourable opportunity occurred. Circumstances, which it is unnecessary to mention, deprived me of the opportunity desired till some years afterwards, when I entered on practice in London. I began then to administer it internally, in chronic diseases of the skin, and in those bilious, or rather dyspeptic disorders, for which pure chlorine was recommended by Dr. Scott. I soon found that it was a valuable medicine in these complaints,—equal if not superior to chlorine in its effects, besides having the advantage of being a much more agreeable, as well as a more manageable preparation.

Having satisfied myself of the efficacy of the chlorate as an internal remedy, I was led to try it as an external application; and my principal object in making this communication is to draw the attention of the profession to its merits, when used in this manner.

To attempt to particularise all the varieties of cutaneous disease in which I have prescribed it with advantage, would be inconsistent with the limits of this sketch. For the purpose in view it will suffice to state, that it is well adapted to all those chronic affections of the skin for which stimulating lotions are usually recommended; and in particular, that in cases of sloughing in the erythema, from local irritation to which children are particularly liable, in impetiginous, and in pru-

riginous affections, it has proved successful in many instances, after the failure of all the remedies in common use.

In affections of the mucous surfaces, which admit of its application, it is still more efficacious than in complaints of the skin. Of its good effects in those of the mouth, of the eyes, and of the vagina, I am enabled to speak from ample experience. Hitherto I have not directed it for the urethra, although disposed to think that it will be found of no small service in the chronic inflammatory disorders to which that organ is especially subject.

It is strikingly beneficial in erythematous inflammation, and in ulcerations of the throat. As a gargle I have employed it in numerous examples of this description during the last ten years; and I am justified in saying, that it has been rarely used without advantage, and, that when the state of the constitution permitted a cure by local applications, it has never failed to give speedy and complete relief.

Recently I have ascertained, that it is no less effectual in controlling the inflammation of the mouth produced by mercury. Indeed, I know of no remedy at all comparable to it in this very troublesome affection. Applied diligently at the commencement, it seldom fails to arrest the progress of the salivation; and in the worst cases, when the flow of saliva has been excessive, the ulceration extensive, and the pain so severe as to prevent sleep, it has given comparative ease in a few hours, checked the inflammatory action, and enabled the patient to take rest. With this preparation at hand, salivation is no longer an object of dread to me; and, consequently, I can prescribe mercury with much less apprehension than formerly, whenever the free use of that remedy is desirable.

In idiopathic ptyalism, I have also employed the chlorate with much benefit; and I may add, that I have seen two or three cases of this complaint annually for several years past, although its existence is still a matter of doubt with some of our ablest writers.

The inflammatory and irritative affections of the vagina yield to this remedy sooner than to any other with which I am acquainted. As an example, I may give the particulars of a case of prurigo pudendi muliebris, for which I was consulted three years ago; and in which it afforded almost instantaneous relief, after every means that could be thought of had been resorted to in vain. The patient was a married lady, 36 years of age, and the mother of four or five children. In the seventh month of pregnancy she was suddenly, and without any assignable cause, attacked by this complaint in a degree surpassing any thing I had witnessed. Purging, topical bleeding, the acetate of lead, nitric acid, calomel, and lime water, oxymuriate of mercury and lime water, besides other forms of lotion, and various unguents, had been tried in succession without the smallest benefit. The situation of the patient was truly distressing. For a week she had not been able to close her eyes; and, in fact, she did not enjoy a moment's ease. In this state of things the chlorate was applied; and in two hours the relief was so effectual that she fell into a refreshing sleep. The disorder re-

turned at intervals for some days; but it was invariably subdued by the steady application of the lotion for the space of ten or fifteen minutes—proving that the relief obtained was attributable to the remedy, and not to a spontaneous cessation of the disease. In less than a week the cure was perfect.

It was, and still is my intention to introduce a detailed account of this remedy, illustrated by a variety of cases, into a work on which my leisure hours have been for some time engaged. I hoped to have been enabled before now to submit this to the profession; but when my purpose was formed, I was not fully aware of the difficulty of conjoining literary exertions with much employment in practice; and as the completion of my task is still at some distance, I have thought it incumbent upon me to publish these brief notices as a small contribution to the stock of medical knowledge, and as a reply to the inquiries of those medical men who have happened to witness some of the cases to which they refer.

It is hardly necessary to observe, that the chlorate is used in solution only. That which I have prescribed of late years has been prepared either by Mr. Garden, of Oxford Street, or by Messrs. Waugh, of Regent Street—by passing a stream of chlorine gas through a dilute solution of the subcarbonate of soda, in Woulfe's apparatus. When intended for internal exhibition, care must be taken that there be little or no excess of chlorine in the solution. For external use, a slight excess of the chlorine seems to be of service. At one time, indeed, I was disposed to attribute the virtues of the preparation entirely to the chlorine; but subsequent experience did not verify this supposition. As a dose, I have given from one drachm to two ounces of the saturated solution in a glass of water three times a day. For a lotion or gargle, I generally order equal parts of water and of the solution which contains a slight excess of chlorine, to be mixed by the chemist—and instruct the patient to make such further dilution as may be necessary, according to the irritability of the surface to which it is to be applied: occasionally it may be used undiluted, with the best effect.

II. *Cases of Encysted Formations, with Remarks.*—By F. Bailey, M.D., late of Sydney College, Cambridge; Member of the Medical Societies of London and Edinburgh; and one of the Physicians to the Reading Dispensary.

Case I.—*Encysted Dropsy of the Abdomen, or Hydatid Ascites.*—Sarah Reade, aged 26, became one of my patients at the Reading Dispensary, in February 1821. She appeared emaciated; and complained of pricking pains, which extended over the abdomen. The abdomen was tense, and much enlarged, and gave some proof of partial fluctuation. The pulse was rapid, and the respiration quick. The secretions were all regular. During a twelvemonth previously to my seeing her, she had been distressed a good deal

with lethargic feelings, to which supervened the enlargement of the abdomen. The tumour being continually on the increase, she sought advice at the charity just noticed.

After ineffectually attempting the removal of the swelling by means of diuretics and hydragogue cathartics, I proposed that she should be tapped. Three gallons of fluid were accordingly drawn off, by which the sufferings of the patient from distension were considerably mitigated. The evacuation of this fluid at once convinced me, that the opinion I had formed respecting an encysted dropsy was well founded; for by its removal the figure of several contiguous cysts became manifest. In four months afterwards she was again tapped in two places; and a third time was the operation performed. After each operation, she again quickly filled, until, being at length worn out by continual pains and exhaustion, she died on the 14th of April, 1822.

On the 16th of the same month the dissection took place. The body appeared in a state of extreme emaciation, except the abdomen, which was prodigiously distended, and measured in the girt a yard and two inches, and from the tip of the ensiform cartilage to the symphysis pubis two feet and one inch. On dividing the skin, it immediately retracted, and became corrugated in a most extraordinary manner. The fat of the adipose membrane had almost wholly disappeared; and the abdominal muscles looked paler than usual, and very thin. These being dissected carefully away, the peritoneum was exposed, and to its inner surface were evidently attached a multitude of cysts. Several of the largest were then tapped in succession.

The first, extending transversely from the right to the left hypogastrium, yielded one gallon of a yellow albuminous fluid, and was coated internally with a layer of coagulable lymph, resembling that which Hunter describes as circumscribing abscesses. On separating this lining, a very vascular surface, studded with an almost infinite number of bloody points (apparently produced by the rupture of very minute blood-vessels) became exposed.

The second cyst contained a pint of clear albumen. Its internal surface was smooth, with some degree of vascularity, but devoid of any lymphatic lining. This cyst was much thinner (its membranes being almost transparent) than the former, and gave origin to a number of minute cysts, varying from the size of a pin's head to a pea, and appearing to be interposed between its membranes.

The third cyst occupied more than the whole of the left hypogastrium. It yielded seven pints of serous, and about two of purulent matter, and was possessed of a lymphatic coating internally, which exhibited numberless small perforations, correspondent to similar small points of ulceration in the highly vascular (or rather inflamed) membrane below.

The fourth cyst yielded a pint of albuminous fluid of the colour of coffee. On its very vascular surface, also, were observed numerous bloody points, and several small cysts.

The fifth cyst, situate in the right hypogastric region, contained

eleven pints of fluid, composed of nearly equal parts of pus and albumen. The pus much resembled that from a scrofulous abscess. This cyst had likewise a lining of lymph adhering to its inner and very vascular surface, and was perforated in the manner already described.

Having thus evacuated the more remarkable cysts, there still remained an immense mass of hydatids occupying the central part of the abdomen. They varied in size from a pin's head to a goose's egg, and appeared uniformly to consist of albumen, enclosed in very delicate membranes, over which blood-vessels were in many instances seen beautifully ramifying. On the removal of this mass, it was obvious that the great abdominal cavity had been wholly occupied, and enormously distended, by this extraordinary hydatidal growth, which evidently originated from the inner surface of the peritoneum. The intestines were consequently driven up from their natural situation under the arch of the thorax. They appeared in some places of a dark or livid colour; and here and there exhibited patches of effused blood and lymph. The displacement of the bowels necessarily forced the liver into a proportionally high situation in the chest; and it was accordingly seen lying immediately under the right mamma, smaller and somewhat paler than usual. After separating the diaphragm from its attachments, the lungs were sought after; but being exceedingly reduced in their dimensions, were not immediately discovered. Their anterior edge reached scarcely so low as the second rib. The heart, also, was small, and exhibited on its surface one or two broad spots of effused lymph.

This dissection appears to me a remarkable example of the nature of an encysted or hydatidal formation in the various stages of its growth. At first, we find it a very minute vesicle, containing a limpid fluid, and afterwards acquiring greater magnitude with proportionally thicker, but still transparent, membranes, beautifully supplied with blood-vessels, and enclosing a fluid of an albuminous consistence. In the next stage, the cyst becomes opaque, and is furnished with a lining of coagulable lymph, its contents being now partly albuminous, and partly purulent. With such indications, the existence of an inflammatory process can scarcely be doubted; and this opinion is still further confirmed by the consideration of the fourth and last stage to which we shall advert. I allude to the numerous small circular erosions which were noticed on the inner surface of the largest order of cysts that fell under observation. Unquestionably these were so many ulcerations, which, penetrating the inner lining of the cyst, (at first merely coagulable lymph, but afterwards an organised substance), had extended to the highly vascular, or rather inflamed membrane below, and caused the rupture of some minute blood-vessels. The admixture of the contents of these vessels with the contents of the cyst would sufficiently account for the coffee-coloured fluid which in some instances was observable.

Of the origin of that very curious production, the hydatid, many opinions have been entertained; but, I fear, they amount to little more than mere conjectures. With its anatomical structure we are likewise still very imperfectly acquainted. The impossibility of influencing it by remedies which possess a manifest power over the absorbents generally, would seem to favour the idea, that it is destitute of this description of vessels; while, on the other hand, the extensive ulcerations noticed in the dissection of my patient, do as forcibly incline (at least, if ulceration be an absorbent function) to the opposite conclusion. At all events, it may be fairly presumed, that the hydatid, in common with other morbid growths, is less perfect in its fabric than the original solids from which they spring. Leaving speculation to others, the case before us, I think, establishes the existence of inflammation, in all its various stages, upon the strong evidence of facts. Whether such phenomena are merely anomalies in the history of the hydatid, or generally conformable to its nature, are points which must be left for future inquirers to determine.

I have only further to remark, that the quick respiration and rapid pulse of this patient, are at once accounted for by the extraordinary diminution of capacity to which the lungs were reduced.

Case II.—*Hydatids in the Cerebellum.*—Feb. 20th, 1825.—Mr. William Francis, aged twenty-four, of middle stature, not corpulent, and of temperate and active habits, became, about two months ago, so much troubled with a lethargic complaint that he could never sit down, even for ten minutes, without falling fast asleep; and, during the night, also, his sleep was deep, stertorous, and uninterrupted. This symptom, unaccompanied by any other mark of indisposition, continued for two months, when, on attempting to lift a heavy weight, he suddenly experienced a violent pain in the back part of his head which never after entirely left him, and was soon followed by strabismus and double vision. By the advice of his medical attendant, he was bled generally and topically, blistered and well evacuated with purgatives. This discipline he repeatedly underwent, but with no permanent advantage. About six months ago I was first consulted. The patient then complained of headach and giddiness. The head felt hot, and experienced a painful jar from the slightest concussion of the body, even from the act of sitting down in his chair with all imaginable caution. The pulse was quick and bounding, but would not bear much compression: the skin was not hotter than usual; but the tongue, though moist, was white, and he occasionally experienced rigours unattended by any consequent fever or thirst. He slept soundly at night, and generally enjoyed what food he was permitted to take. The strabismus continued, and the bowels were obstinately costive. A full trial having been already made with bloodletting, I proposed the use of mercury, so as to affect the constitution, a blister to the scalp, with some diaphoretic, and a purgation every alternate morning:—the gums became affected, but no material benefit ensued. On the

contrary, the pains in the head were rendered even more urgent, and, at intervals, excruciating; and were, occasionally, attended by sudden agitations and convulsive shiverings. Not unfrequently, also, the patient was attacked with severe vomitings, which would continue, sometimes, for several hours.

On one occasion, I was advised to try the effect of an opiate: I did so, but with manifest inconvenience to the head.

About this period, I ceased to visit the patient regularly; but the convulsive motions or shiverings recurring soon after, the gentleman in attendance with me reverted to the use of the lancet with marked, but only transient, relief. Again and again he had recourse to this remedy under similar circumstances, and with precisely the same result, until the supervening debility forbade the farther use of it.

The pains in the head were now excruciating, and almost constant; the convulsive rigours of frequent recurrence; the pupils also much dilated, and the vision greatly obscured; with some evidence of defective sensation in the olfactory nerves. In addition to these symptoms, the patient was wont to complain of a hammering and other distressing noises in the head, and the bowels scarcely obeyed the most drastic purgatives. Mustard cataplasms were applied to the calves of the legs with some suspicion of benefit, but it did not continue. In this almost hopeless juncture salivation was once more induced, and vigorously persisted in; but it availed not in arresting the progress of the disorder. At length he became wholly blind, and exceedingly deaf; the memory also shewed some tokens of failure; but otherwise the intellectual functions seemed unimpaired, except, indeed, certain mistakes he would now and then make as to place, may be considered as proofs of defective judgment.

It is worthy of remark, that the strabismus ceased as soon as the amaurosis took place. On the 10th of February, and in a state of extreme emaciation, he expired whilst sleeping.

Dissection.—On the removal of the scalp, nothing unusual could be detected on the outer surface of the skull. The skull-cap was with difficulty detached, in consequence of its very firm adhesions to the dura mater. On separating it from this membrane, it proved to be unusually light and thin; and, on its internal surface, exceedingly rough and scabrous, giving to the touch the sensation of scouring paper, only with more prominent asperities. At the squamous portion of the temporal bone it did not exceed the one-thirtieth of an inch in thickness, and its medium thickness was about the one-tenth of an inch: it weighed only ten ounces. The *dura mater* appeared much loaded with blood, and was, externally, coated with a thin layer of bloody lymph; but its inner surface was in every respect natural. A small quantity of serum escaped from between the membranes. In the *pia mater* there was nothing remarkable. The substance of the brain was both denser and firmer than ordinary, and its ventricles were distended with about four ounces of a pellucid fluid, which yielded traces of albumen on the application of heat. The

plexus choroides was paler than usual, and floated in the fluid. On opening *the fourth ventricle*, a round, semi-transparent substance was observed projecting into that cavity. Suspecting it to be a cyst, great caution was used in dissecting away the surrounding medullary substance; and, at length, a large hydatid was exposed to the view. It was of an oval figure, and stretched obliquely across and through the left lobe of the cerebellum to the right. In the long diameter, it measured three inches; in the short, two. At each end it had a coating of brain not thicker than a wafer. On evacuating a portion of the contained fluid, this single cyst resolved itself into two others, the larger of which measured two inches by one and a half, and to the lower extremity of the other a cluster of small cysts, varying from the size of a pea to that of a small bean, was found attached. The two large cysts yielded half an ounce of pale, straw-coloured fluid, which, on the application of heat, coagulated like the white of an egg.

Such is the faithful account of Francis's disorder, together with the appearances of the brain on dissection. A case perhaps at once so curious and instructive is a circumstance of rare occurrence. It is curious, inasmuch as it is exceedingly uncommon. Morgagni relates not a single instance of an hydatid *in the substance of the cerebellum;* and neither Dr. Baillie, in the course of his extensive observation, nor any other author with whom I am acquainted, except Lieutaud, has any thing upon the subject. Of the origin of the cysts nothing satisfactory has been advanced hitherto. All that the anatomist can say, is, that they consist of a transparent fluid enclosed in a vascular membrane. In point of magnitude, they vary from the size of a pin's head to that of a large distended bladder. Sometimes they are found solitary, but more generally in clusters: sometimes they adhere to the parts from which they grow by a broad basis; at others, they are suspended by long and slender filaments. In one instance which occurred to my observation (the case of Sarah Reade), they completely filled and distended the abdominal cavity, being in number incalculable. But the case of Francis is not a matter of curiosity merely; *it affords room for instructive reflections.* And the first thought that occurs is, the *magnitude of the cyst found in the cerebellum.* Doubtless, the lethargic tendency which ushered in the disorder of this patient proceeded from a slight pressure of this hydatid, in its nascent state, upon the substance of the cerebellum: soon afterwards the strabismus supervened; that is, the increased magnitude of the cyst produced such a pressure as, through the medium of the crura cerebri and cerebelli, partially to affect the optic nerve at its origin. At length the dimensions of the cyst became so augmented as to occupy *a very large proportion of the cerebellic space.* A condensation of the medullary matter of the cerebellum was the necessary consequence, which, therefore, offered a mechanical resistance to the ordinary influx of blood into the vessels of this portion of the brain. To the other branches of the cerebral vessels blood would therefore flow in proportionally greater quantity. Hence a gradual accumulation in the ventricles, and the subsequent gradual obliteration of the senses. This is the

best explanation I can give of the leading symptoms in Francis's case; there are, however, other symptoms well deserving consideration. In particular we may notice the vast disproportion in the injury done to the *senses* and the *understanding*, by this extensive lesion of the *cerebellum*—the former destroyed, the latter scarcely at all affected, and that only just previously to death.

The next point worthy of remark is, *the frequent recurrence of vomiting*. This fact is another illustration of the intimate sympathy which subsists between the head and stomach.

The *spasmodic rigours*, repeatedly noticed in the history of the case, next claim a moment's attention. These rigours were essentially different from the febrile kind, never having been followed by any increased temperature of the surface. At first, I was disposed to augur from them suppuration in the brain; but a little consideration was sufficient to divest me of this opinion. They were truly of a spasmodic nature; and, I should judge, were the effect of a certain degree of pressure on the brain, intermediate to the slight pressure of epilepsy and the extreme pressure and derangement of structure of apoplexy. A third reflection, interesting as a physiological fact, is suggested by the *sudden cessation of the strabismus on the formation of the amaurosis*. Strabismus is not unfrequently the effect of insensibility in a certain point of the retina. To remedy this inconvenience, nature so adjusts the eye, that the images of objects may no longer fall on the insensible point, but on some contiguous point possessed of the degree of perceptive power; and by this adjustment, the axis of the eye must lose its parallelism with its fellow axis. But suppose every physical point of the retina to become equally insensible; the reason for the obliquity of the axis ceases, and the organ resumes its wonted position.

There is only one other reflection which appears to me especially deserving attention, and that relates to the extreme *tenuity of the skull of this patient*. Could the pressure from within the cranium contribute to this effect? or was it merely the result of the free use of mercury? or, finally, did it proceed from the conjoint action of these two causes? However the question may be answered, it is certain that the fact is extremely curious, and may serve to account for the *severe pains* so constantly *referred to the whole surface of the skull*. Of the pain which is said to have been the effect of a great muscular effort, I can frame to myself no satisfactory explanation; but the obstinacy of the bowels throughout a great part of this person's illness may very fairly be referred to the pressure that existed at the source of the nerves.

Case III.—*Hydatids in the Cavity of the Uterus.*—Sept. 1st, 1824.—Mrs. Smith, aged forty-six, has for some months been afflicted with severe pain across the sacrum, and extending forwards and downwards to the lower part of the abdomen. Latterly they have been excruciating, and accompanied, on several occasions, with attacks of uterine hæmorrhage. The constitution thereby became much debilitated; the countenance being leucophlegmatic and puffy; the legs dropsical as high up as the trunk;

and the respiration difficult, with a quick and irregular pulse. In this state I visited the patient: I recommended a diuretic draught, consisting of infus. digitalis, with other remedies of a similar character. The kidneys secreted plentifully, and presently removed the dropsical accumulation; but a sudden and very violent attack of vomiting (most probably the accumulated operation of the foxglove) ensuing, the body perspired profusely. From exposure in this state she contracted a cold with fever. The pains in the sacrum and lower part of the abdomen recurred again with intolerable severity, and were followed by so enormous an uterine hæmorrhage as to threaten the immediate extinction of life. With the blood thus discharged, there passed a large compact mass of hydatids, resembling very closely a fine bunch of hot-house grapes. It weighed full a pound, and the cysts were plentifully supplied with blood-vessels. The sufferings of the patient were no longer heard of; but the hæmorrhage did not entirely cease for several days. In a month afterwards this person was able to resume her wonted occupation, and has continued in good health ever since.

Reading, December 25th, 1825.

III. *Case of Mania.*—By WILLIAM MILLIGAN, M.D., Physician to the Royal Infirmary for Children, and Lecturer on the Principles and Practice of Physic, &c. at the Anatomical and Medical Theatre, Chapel Street, Grosvenor Square.

THE following is one of three cases lately under my care, that have been successfully treated on similar principles. This success I chiefly attribute to the 'cold affusion' used after moderate bloodletting and purging.

As the cold affusion has been described as injurious in this disease by some late authors, you will oblige me by inserting this case in your valuable Journal, as it is some proof of what I am inclined to believe, that this want of success depended on previous evacuations having been neglected.

The other two cases were not at all connected with parturition. In one of them almost every other remedy usually recommended for the disease had been previously used, without any abatement of the symptoms.

CASE.—Mrs. W., aged 17, of a slight figure, much given to reading, had previously enjoyed good general health. She miscarried of her first child, on the 13th November, at the period of six months, when she had but little hæmorrhage.

Ten days afterwards she was attacked by a severe fit of hysteria, which was succeeded by mania the same evening.

Mr. Anderson, a respectable general practitioner of Tyssoe Street, was called to see her (November 23d.) He applied ten leeches to the temples; ordered a purgative, and a blister to the nape of the neck. The following day the purgative was repeated, and brought

away several dark-coloured stools. The head was shaved, and cold lotions of vinegar and water applied to it.

November 25th.—I was requested to see her this morning; she had passed a very restless night; was very noisy, talkative, and obscene in her conversation. She uttered violent screams at intervals, and talked wildly and incoherently; she spoke ill of her mother, who a short time before had given her offence; wanted to get out of bed, and bit her attendants when they attempted to restrain her; pulse 120; tongue white and dry; heat of skin little increased; several dark-coloured stools yesterday.

Admoveantur hirudines decem temporibus.

℞ Hydrargyri Submur. sub. gr. ij.
Pulv. Antimonialis gr. iij.
Conserv. Rosarum, q. s. ut ft. bolus, statim sumendus.

℞ Infusi Sennæ ℥iss.
Magnesiæ Sulp. ʒij.
Mannæ optimæ ʒi. M.
Ft. haustus, post horam sumendus et repetatur 2da quaque hora ad alvi solutionem.

℞ Camphoræ (Sp. Vin. Sol.) gr. iij.
Extr. Hyoscyami gr. iss.
Digitalis Pulv. gr. ¼.
Conserv. Rosarum, q. s. ut ft. pilula; habt. sex tales: capiat unam 4tis horis.
Continuetur lotio frigida capiti.

26th.—Got about two hours' sleep during the night; symptoms much as yesterday; two dark-coloured bilious stools.

Repet. haustus aperiens ad alvi solutionem.
Appl. emplast. cantharidis inter scapulas.
Continuentur pilulæ et lotio frigida.

27th.—Passed a very restless night; still violent delirium; pulse 120; tongue white and moist; is unwilling to take food; blister rose well.

Curetur pars vesicata.
Continuentur pilulæ.
App. affusio frigida vespere.

28th.—The cold affusion was applied yesterday evening. She submitted to it with great reluctance; was much more calm during the night, and got six hours' sleep; pulse 108; tongue clean and moist; bowels regular; is less noisy and turbulent.

Continuentur pilulæ 5tis horis, augendo digitalem ad semi-granum, et repet. affusio frigida vespere.

29th.—Got several hours' sound sleep; is very tranquil to-day; answers more rationally to questions put to her; pulse 94.

Continuentur pilulæ et affusio frigida.

30th. — Passed a good night; is very tranquil; takes some food.

Cont. pilulæ, omitt. digitalis.
Repet. affusio frigida vespere.

Under this treatment she gradually improved; and was so well on the 6th December, as to be able to go out in a gig with her husband. She still continues in good health.

Portman Street, 27th December, 1825.

IV. *Case of Spina Bifida.* By JAMES LINDSAY, M.D., and Surgeon in the Royal Navy.

[Communicated by WILLIAM BURNETT, M.D., Medical Commissioner of the Navy, and Member of the Royal College of Physicians, London.]

I HAVE taken the liberty of sending you (Dr. Burnett) the following extraordinary case of spina bifida in a male child, the son of a poor planter, in the vicinity of Trinity, Newfoundland.

The patient having been mentioned to me as an object of much wonder, owing to the length of time life had lingered under a disease of such magnitude, I determined on seeing it without delay, especially as he was then said to be in a dying state. I arrived at the house on the 3d of February last, and was considerably disappointed at finding he had expired on the preceding night. I was permitted, however, to examine the body externally, and obtained every information from the neighbours and from his own mother, whose painful and laborious duty it had been to nurse her son for a period of nearly thirteen years, during which time he had lived in a state of infant helplessness.

The mother is a short, but stout, healthy, middle-aged woman; has had several children older than this, who was the youngest; the others were all healthy and well formed.

This child was born at the full period of gestation, and appeared healthy and full-sized; but the spine was rather arched, and there was found near the termination of the lumbar vertebræ, and at the commencement of the sacrum, a small sac about an inch in breadth, and somewhat more in length, resembling a small pear, lying across the spine, and partly filled with a thin transparent fluid, which fluctuated from one side to the other according to the movement of the infant.

As he advanced in age, the sac became gradually distended, and increased very much in size till small openings appeared in it, through which escaped a thin, whitish discharge; the tumour then slowly collapsed till the perforations closed, when it again became distended as before.

From the time of birth the inferior extremities had hung in a

useless paralytic state, destitute of both sensation and heat, and their growth was suspended, whilst the superior extremities grew as in a healthy child. The appetite was moderate, and the excretions natural; but he never appeared to have enjoyed any power of retaining them, or sensation respecting them.

Between the fourth and fifth year of his age the tumour had attained the size of the largest pear, when it ceased to give vent to any further discharge; but shortly after this occurrence small sores, resembling boils, appeared in the inferior part of the belly, extending, in various places, across from one lumbar region to the other; and these boils discharged a thin ichorus fluid, in colour and consistence similar to that which had issued from the tumour—as if, after the exudation from it had ceased, the ichorous serum had insinuated itself between the cellular membrane and abdominal muscles, and escaped through small, scrophulous-looking openings, which it had occasioned by its acrimony; for when this happened the tumour was observed gradually to collapse; and thus it continued during life.

The genital organs were also affected with these sores, which extended down the thighs as far as the knee joints, from which there was a continual discharge; this became more and more turbid and consistent, and at last extremely offensive.

The emaciation of the limbs was so great, that the bones could be perceived shining through the integuments; and the ligaments of the knee joints had become so completely relaxed as to allow the bones to slide out of their sockets, and to hang as if suspended by the small tendons of the muscles alone.

In the course of this decay, the organs of generation finally disappeared, leaving nothing except a small prominence around the orifice of the urethra to discriminate the sex. During this diseased action the child felt no pain whatever, neither did he appear to feel what was going on in the inferior region of the body: according to the belief of the mother, he never possessed any sensibility from the navel to the extremities of the toes.

Some time previous to death, the superior parts of the body likewise partook of the general decay; the muscles wasted, and the integuments became so attenuated as to render them almost transparent. Such a condition evinced a wonderful tenacity of life; for the child might truly be said to have lived till it assumed the form of a skeleton. His mother informed me that, during the last year of his life, he was occasionally afflicted with nausea and a weak stomach, till a diarrhœa and strong palpitations at the heart shewed the approaching dissolution, which took place in the thirteenth year of his age.

The body exhibited a continued mass of diseased surface from the umbilicus down to the knees, which emitted a most offensive effluvia; the tumour was quite flat, and about three inches in breadth, and four in length.

The want of growth in the inferior extremities gave the body a very singular appearance when stretched out, as the fingers lay nearly parallel with the toes.

It would appear, from the wasting of the genital and corresponding organs, and the loss of sensibility from the abdominal centre downwards, that the spinal marrow had been diseased from above the lumbar vertebræ, and thereby rendered incapable of affording any nervous influence to the lumbar nerves, and thence to the branches of the great sympathetic, as from the former the latter may be said to receive a supply of nervous power in their course downward, in order to enable them to dispense vital energy to these parts.

The countenance of this boy appeared extremely intelligent, and his mental powers, it was said, far exceeded his age; his memory was very retentive, and his remarks so sensible as to astonish his friends. As the disease, from the first, had been considered incurable, little surgical assistance had been afforded it; indeed, none, except the simple dressings which were applied to the sores by his mother; therefore, no rational information could be obtained from the medical person here respecting the progress of the malady.

That any practical advantage can be derived from the history of this case; is not to be expected but the symptoms here detailed, and the time that life continued, may serve to illustrate more fully the pathology of spina bifida, and to shew what power the medulla spinalis exerts over the system in general.

It may not be altogether out of place to mention, in order to give some idea of the superstition which prevails among the poor here respecting congenital disease, that during the early period of pregnancy, having been seized with a longing for a piece of fresh beef of a bullock that had then been killed in her neighbourhood, and not having her desire gratified, the mother, and indeed all about her, attributed this disease to her disappointment; for they fancied the tumour bore a striking resemblance to a bullock's heart!—*Newfoundland, March* 29, 1825.

Section II.—Abstracts of Practical Facts, British and Foreign, with Remarks.

I. *Artificial Anus.—Interesting Case.**

A stout man, aged forty-four, and healthy, became affected, in the spring of 1824, with severe pains in the bowels, and great difficulty in passing his stools, which were at the same time observed to be compressed. To these symptoms obstinate constipation succeeded, with severe tenesmus; and at length complete obstruction of the bowels, notwithstanding the active use of the most drastic purgatives, and most stimulating injections.

* *Case.*—Extracted from a long article in the Edin. Med. Journ. Oct. 1825, p. 271, by Dr. R. Martland, of Blackburn.

His belly now enlarged considerably, and sent forth a loud rumbling noise, particularly on pressure, which, however, occationed no pain; but there was no disturbance of the urinary functions, nor any fever as yet; the pulse being moderate (between eighty and ninety), the appetite seemingly good,* the tongue moist, though whitish, and the thirst not great. This was in the early part of July.

On examination *per anum* a large tumour was now felt projecting into the rectum, as it were from the neck of the bladder—in the centre of which, or rather nearer the sacrum, a small fissure or orifice like the *os tincæ*, was discoverable.†

Bougies of different kinds and various sizes were now introduced, and warm water was strongly injected by means of a powerful syringe, in the hope of removing or forcing a passage through this obstruction—but ineffectually; so that at length it became manifest the patient must perish, if some more decided step were not taken for his relief; and it was determined, therefore, to perform the operation for an *artificial anus*. Accordingly, on the 24th July, Dr. MARTLAND, assisted by several of his friends, proceeded to execute this determination in the following manner:‡—

An incision, nearly four inches in length, was made in the *left iliac* region, and the peritoneum exposed.‖ This membrane then being cautiously divided, to the extent of between two and three inches, the *colon* presented itself, and was immediately secured to each end of the wound by ligatures.§ An opening, one inch and a half in length, was now made in the gut, through which a large quantity of liquid fæces and wind were instantly expelled with considerable force. The propriety of having secured the colon before making the opening into it became now observable; as from defect of power in the abdominal muscles, caused by over distension, it seemed probable that the gut would otherwise have receded from the external opening, and that some of its contents must in consequence have escaped into the general cavity of the abdomen. The cut edges of the *colon*, and the sides of the external wound, being now connected together by two other ligatures, the part was covered with a light dressing, and the patient left to his repose.

* The patient, however, was at the same time, it appears, very abstemious in his diet for prudential reasons.

† Dr. Martland is inclined to believe, and with him we agree, that this tumour and obstruction in this case were caused by the descent into the *rectum*, and permanent invagination there of the lower portion of the *colon*.

‡ At this time a good deal of fever had come on; the spirits were depressed; and the belly was enormously distended and tympanitic. The obstruction, we may observe, had now existed, as it would appear, at least for twenty-two days—perhaps for twenty-three or twenty-four.

‖ This incision, as it appeared, was much too long for any useful purpose; and it soon became necessary to close the upper part of it by a suture, to prevent a troublesome protrusion of the *omentum*.

§ To each end of the *external* wound we presume.

It is not necessary for us to enter into any minute detail with respect to the subsequent proceedings or occurrences in this case Suffice it to say, that the patient was immediately relieved by, and ultimately survived the operation; and that the wound, after some untoward accidents,* had its edges perfectly skinned over about the beginning of September, so as to form a smooth cicatrised opening, or *artificial anus*, through which the contents of the bowels have since been regularly discharged.†

On this opening, however, the patient does not appear to possess any voluntary power; so that great care and attention are necessary on his part to keep himself comfortable, and restrain the irregular and inconvenient discharge of fæces, &c. After various trials and contrivances for this purpose, the following method of dressing the part has, we are told, been found the most effectual—we give it, therefore, as likely to be of service to others, who may from accident or otherwise be reduced to the same unfortunate situation.

To the opening a small piece of cotton (calico?) is first applied, and over this a piece of waste paper rather larger. Three or four folds of linen or cotton still larger are then laid on, and the whole firmly bound down by a cotton roller, six inches broad. Over all this a *truss*, on the plan of the self-adjusting, is applied, the pad of which, furnished with a circular piece of boxwood, two inches and a half in diameter, bears directly upon the opening itself.

II. *Purulent Discharge from the Bladder, &c.—Case successfully treated by Injection.*

Case.‡—A gentleman, aged about twenty, was affected, as it is said, with an *ulceration of the bladder*, and had been ill for some weeks when first seen by the reporter.

At this time he passed daily, and as it would appear with his urine, a quantity of fœtid *purulent matter*, equal to between two and three ounces in the twenty-four hours. He complained also of pain in the region of the bladder, which was augmented when

* Some inflammation and sloughing took place about the edges of the wound, occasioned probably by the daily feculent discharges through it.

† It is proper to mention, that at the time of the operation, and again after the wound was cicatrised, attempts were made to pass an elastic tube downwards from it into the *rectum*, but ineffectually. It appears, however, that some time after, a natural effort was made to restore the original passage; something like 'blood and skins' having been voided *per anum* on the 30th October, and subsequently for a time a small quantity of feculent matter was discharged daily in this way. This discharge, however, gradually ceased; and the patient a year after the operation (July 1825) appears to have had no passage for the contents of his bowels but through the *artificial anus*.

‡ From a communication by Dr. Crowther, of Wakefield, in Edin. Med. Journ., Jan. 1826, p. 48.

he voided his urine: was much emaciated, and was suffering under irritative fever.*

Laxatives, diluents, demulcents, and anodynes, with the *uva ursi*, had been given for some weeks without any benefit; and were continued, as it would seem, for some time longer (about ten days) with equal inefficacy; when one day, on decanting the clear urine from the purulent sediment which had been deposited, a number of transparent *crystals* were discovered in the latter. These crystals were from three to four eighths of an inch in length—narrow, of an irregular shape, with an edge at one end, and one side very sharp.†

Upon pouring some *boiling* water on the sediment, it was observed that the crystals contained in it were readily dissolved. This circumstance struck the reporter, and induced him to have a pint of *tepid* water injected into the bladder of the patient twice a day. The effects produced by this simple proceeding were, we are assured, striking and instantaneous—the pain in the bladder, and that felt on passing urine, ceased—the crystals entirely disappeared; and in one week the purulent discharge was at an end; in fine, in three weeks more the patient was perfectly restored to health, and has never, so far as is known, had any return of the complaint in his bladder.

Observations.—We have here a valuable *fact*—a piece of information relative to the treatment of a very distressing and dangerous disease; and as such we submit it without further comment to the profession. But the inferences and remarks by which this fact is accompanied on the part of the reporter, are not of the same character; and require, therefore, for the sake of our younger readers, one or two corrective *observations* from our pen.

First, the disease under which this patient laboured is represented, and indeed affirmed to have been, an *ulceration of the bladder;* and this simply, as it would appear, because *purulent* matter was discharged from that viscus. But Dr. Crowther ought to have known that *pus* may, and is every day, formed upon secreting surfaces without *ulceration;* and ought to have considered, that an ulceration capable of discharging between two and three ounces of matter in one day, would not in all probability have been quite healed up in six or seven. The existence or non-existence of *ulcers* in the bladder of this patient, therefore, should have been left by him, as it will probably ever remain, a matter of uncertainty and doubt.

But Dr. Crowther is not only quite certain, that ulcers did exist

* In addition to these symptoms, it further appears, that he had for a time *constantly*, and still occasionally, passed blood with his urine.

† Unfortunately none of the crystals met with in the first instance were saved for examination; and after the use of the injection, no more appeared. We have no analysis of the salt therefore; and although Dr. Crowther has waited since 1814, when this case occurred, in the hope of being able to supply this deficiency, no opportunity has been afforded him of doing so.

in the bladder of this patient; but he is further satisfied, as it appears, that these ulcers proceeded from wounds made in the coats of the bladder by the sharp spiculæ of the salt or gravel deposited from the urine.* Whence we learn, that the *crystals* found in the cold and decompounded urine, had, in the opinion of this gentleman, been really formed in the bladder of the living man; and had been passed, with all their sharp edges and angles, innocuously through the urethra—opinions upon which we do not feel it necessary to make any particular remarks in the present day.

III.—*Compound Dislocation of both Ankle Joints, &c.—Case.*†

A SAILOR, aged twenty-three, on board a merchant-ship, bound (1820) from New South Wales to Batavia, fell, during a gale of wind, from the maintop to the deck. He lighted upon his feet, and the result of his fall was as follows:—

Both ankle-joints were dislocated and wounded. The *right* was dislocated inwards, several of the tarsal bones being at the same time displaced, and a small wound inflicted on the inner part of the foot, under the ankle-joint. Through this wound one of the tendons protruded, and a considerable quantity of arterial blood also was discharged.‡

The *left* leg was more severely injured, the *fibula* being broken in the centre, and a lacerated wound, four inches in length, inflicted at the outer ankle, through which the lower end of the *fibula*, with the greater parts of the *astragalus* attached to it, were protruded; the tendons and muscles around being at the same time torn up.

The *right* leg being reduced and adjusted, it was proposed to amputate the *left*, as its shattered state excluded all hope on the part of the surgeon of being able to save the limb,—but the piteous entreaties of the patient, and the probability, as it appeared, of his death under any circumstances, occasioned this project to be abandoned.‖ The broken part of the *astragalus*, therefore, which had been protruded attached to the *fibula* being removed, the latter bone was reduced;§ and the limb being then bound up, and supported as well as circumstances permitted, the case was in a manner committed to nature.

* Some of the crystals here alluded to had one side, we are told, 'as fine as the sharpest lancet.'

† From an article by Mr. J. Mitchell, Surg. R. N. (by whom the case was treated) in the Edin. Med. Jour. Oct. 1825, p. 305.

‡ No explanation is given of the manner in which the wound was produced: nor is any thing said of the *fibula* having been broken in this leg, as might from the circumstances of the case have been expected.

‖ The man, it appears, was of a 'phthisical habit,' and the means of accommodation on board the vessel for a person in his situation were very scanty; as generally is the case in merchantships.

§ The broken astragalus 'was dissected away,' under the notion that if returned to its place in the joint, it would act as 'a foreign body.' We doubt the correctness of this notion under the circumstances.

In three weeks after the accident, the vessel was exposed, as we are told, to a succession of storms, which rendered the situation of the unfortunate patient peculiarly deplorable, and prevented all chance of union in the broken bones. During this time, also, high inflammation came on ' in the extremities,'* accompanied by fever and delirium; and when these affections were reduced by suitable measures, symptoms of *gangrene* appeared in the parts, which required an opposite mode of treatment, and still further retarded the cure.

At length, about the end of the fourth week after the accident as it would appear, the parts began to unite,—after which the cure proceeeded so favourably, that in about eight weeks more the wounds were quite healed, and the joints so strong, that the patient was able to walk about the deck of the vessel, with the aid merely of a stick.

During the progress of the cure, various collections of matter took place in the feet; some of which were punctured, whilst others burst spontaneously; and from the openings thus made, some small pieces of bone came away. It appears, also, that throughout, the only dressing made use of for the wounds, was lint steeped in, and kept wetted with a mixture of spirits and water, of each equal parts.

IV. — *Dysentery — successfully treated by Injections of Cold Water.*

Whatever opinions may be entertained with respect to the remote or proximate causes of dysentery, one thing is very certain in its history; namely, that during the first stage of the disease, the villous or mucous coat of the large intestines is, in general, in a state of inflammation, often very severe.

Viewing dysentery in this light, an American† writer states, that he was led, in the summer of 1823, to employ injections or clysters of *cold water* in this disease; and that he has since that time (that is, for about two years,) continued the same practice, and with ' undeviating success.'

'I use very cold water,' this gentleman says, (rendered so even by ice) 'which is thrown up the bowels in the form of an enema, every half hour. This course in some instances is continued for twenty-four hours or more, without intermission. The effect has more than

* From this phrase, and from one or two others subsequently employed, it would appear, as if both legs or feet had been attacked with this inflammation, &c.; whilst other expressions would lead us to imagine that the left leg or foot alone was the part intended by the author. This, to say the least of it, is a very slovenly mode of writing in a medical man.

† Mr. W. Baker, of Bladensberry, in a letter to J. Kent, M. D. dated July 10, 1825; and published (from the National Intelligence) in the Philadelphia Medical Journal for August 1825, p. 410.—In our own justification it is necessary to mention, that the editors of the Edin. Jour. of Med. Science, have erred in attributing the communication here referred to, to Dr. J. Kent instead of Mr. Baker. — Vide No. 1. of that journal, p. 15.

equalled my expectations. Every distressing symptom is speedily alleviated; the tenesmus subsides, the fever abates, and the dejections assume a better aspect.'

Our author, however, states, that he never relies upon this remedy alone; but employs it merely as a part of his plan of cure. Thus he bleeds, gives calomel and other purgatives freely, exhibits diaphoretics, and employs the warm bath, and every thing else, in fine, which particular symptoms may call for; the injections of cold water being continued all the while.

Under these circumstances it may, to some persons, seem doubtful, whether the *cold water* be really entitled to all the praises bestowed upon it by the gentleman from whom we quote; but as the remedy is strongly recommended, as it is simple in itself, and easily employed, and not likely, moreover, to be productive of much injury if cautiously exhibited,—we hope some of our readers may be induced to give it a trial in this country, and to report the result.

V.—*Epileptic Convulsions, &c. and Death;—with Tumour and Effusion of Blood in the Brain.—Case.**

A LAD, aged sixteen, fell, while employed in the repair of a house, from a twelve-step ladder, and received, in consequence, a severe blow on the head; this was in June 1823. He was stunned for a time by the fall, but nothing particular seems to have occurred for about six weeks afterwards, when he is stated to have had a severe *epileptic fit*. For this he was bled and blistered, and by proper treatment so far recovered as to be able to resume his usual employments.

He was, however, it appears, at this time and continued afterwards comparatively feeble, and suffered much from headach; until the 8th May, 1825, (nearly two years after the accident) when he had a second *epileptic fit*, of great severity. This was followed in June and the succeeding months, by several others of nearly equal violence; until the 17th October, when death put a period to his sufferings.

During the last two months of his life he was entirely confined to bed, miserably emaciated and reduced in strength. Latterly, the excruciating pain in the head, from which he had so long suffered, diminished in violence;† but a relaxation of the bowels at the same time appears to have come on, and the stools and urine were passed involuntarily. A few days before death (13th and 14th October) he had a succession of epileptic fits; and life finally terminated in a paroxysm of the same kind.

Examination of the Body. — Thirty-three hours after death the

* From an article by Dr. G. Gregory, in Lon. Med. Journ. Dec. 1825, p. 461.

† This pain appears to have been confined to the *fore-part* of the head; and was only allayed at times by strong pressure with the hands applied to that part.

body was carefully examined ;* when the following morbid appearances, the only ones met with, were discovered in the cerebrum.

In the right and left lateral ventricles a considerable quantity of bloody serum and coagulated crassamentum were formed.† The blood in both ventricles was in communication, the *septum lucidum* having been ruptured ; and this blood was further in communication with an additional quantity, effused into a cavity formed in the *left* anterior lobe of the brain. This cavity was filled with coagulated blood, which adhered rather firmly to its internal surface ; and was furnished, as it is stated, with a *distinct cyst*, which could be separated from the surrounding medullary substance.‡

In addition to these appearances, comparatively no doubt of recent origin, *a hard fleshy tumour*, fully as large as a nutmeg, was found in the anterior horn of the *left* lateral ventricle, just in front of the corpus striatum. This tumour was enveloped in a cyst, and presented when divided a laminated appearance. A small cavity also was found in the centre ; and after immersion for a time in alcohol, it resembled, in some measure, a portion of coagulated blood, treated in the same manner.

VI. *Secale Cornutum—Cases illustrating its Efficacy in Lingering Labours.*||

Case 1.—A strong athletic woman, thirty-eight years of age, was delivered of a living child about eight o'clock in the morning. This washer third labour. On examination about half an hour afterwards, the abdomen was found very hard and tumid, and suspicions in consequence arose that there was a second child ; but no presentation could be discovered per vaginam. About noon however some slight *pains* came on, and the head of another child was discovered ; but these *pains* soon ceased, and the patient, though in good spirits and not fatigued, experienced no change for some hours.

At four o'clock therefore, the woman being at the time perfectly

* This examination took place in the presence of Dr. Gregory himself and others, to whom the case was known.

† It is stated in the original that this blood was 'apparently of *recent* effusion, and the immediate cause of death.' No reason however is assigned for these conjectures, which are moreover rendered rather improbable by the discovery of a *chronic* cavity, filled with coagulated blood, in communication, as it appears, with that contained in the ventricles.

‡ 'The *parietes* of this cavity or cyst were distinct, and could be peeled from the medullary substance,' &c.—hence we consider it as not of *recent* origin.

|| The three *cases* which follow are extracted from a communication by Mr. Clark of Bristol, given in the Lon. Med. Journ. for Jan. 1826, p. 30. To this communication there is no *date*, nor are there any correct *dates* annexed to the cases themselves. We should therefore be entirely at a loss with respect to their chronology, had it not been for an accidental allusion made by their author, to the *cases* published by Dr. H. Davies in the above Journal for July and August last, (and reported fully in the Repository for September) which leads us to refer them to the latter part of last year.

easy, and the parts fully dilated, twenty grains of the *secale cornutum* were given in a little tea—and in twelve minutes precisely after its exhibition, as we are told, *a pain* came on, which caused the head of the child to descend into the pelvis.

This *pain* was soon succeeded by others, which continued with some little intermission for nearly two hours, when the child was expelled; and in about fifteen minutes afterwards the two *placentæ*.

oth mother and child did well.—*No date given.*

Case 2.*—A woman, aged thirty-eight, had been in labour (of her second child) from about six o'clock on Saturday morning, to about noon on Sunday.

At this time the *os uteri* was fully dilated, and the *waters* had been long discharged; but the labour did not advance, for the *pains* though sharp and frequent were wholly inefficient, and only served to weary the patient. Twenty grains therefore of the *secale* were now exhibited; and in less than fifteen minutes after, *a pain* came on, of greater force and bearing than any she had before experienced; and was followed by others, which remitted but little for about an hour and a half, when the child was expelled.†

Case 3.‡—A stout woman had been in labour for upwards of three days, and the head of the child had not yet descended into the pelvis. The woman also was now anxious, and the *pains* though frequent were tiresome and inefficient.

Twenty grains of the *secale* were therefore given in a little tea; and in about ten minutes afterwards a sudden and violent *pain* came on, which lasted, as we are told, for about seven or eight minutes, and seems to have brought the head low down in the pelvis. To this other *pains* succeeded, (but not so forcibly) for about two hours, when they remitted. A second dose of the *secale* was in consequence then exhibited, which was in like manner followed by a renewal of the labour pains; so that in about an hour and a quarter after its administration the woman was delivered of a still-born child.§

Observations.—These are the only cases, our author adds, in which he has had an opportunity of exhibiting the *secale*, since his attention was favourably directed towards it; and the testimony which they furnish is, it must be admitted, satisfactory, on account of its uniformity.—For in all, the effects produced, or if you please,

* This case bears the date of 'October 22,' but no *year* is specified.

† No intimation is given of the state of the mother or child, whence we are led to conclude that both did well.

‡ To this case the author has kindly annexed the date of *Tuesday the 8th*, but the *month* and the *year* he has left to be discovered by the sagacity of the reader.

§ The *age* of this patient is not given by Mr. Clark, nor does he mention how often she had been in labour before; although he must know, if he reflects a little, that in cases of this kind these are matters of some importance. It appears however, accidentally as it were, that this was not the woman's *first* labour; for we are told, that 'her *last* was exceedingly protracted and alarming,' and that the child then produced 'was still-born also.'

the events which followed the exhibition of the *secale*, were perfectly similar; namely, the speedy accession or supervention of *efficient* bearing-pains, *unaccompanied* by any other perceptible change in the state of the patient.

It must however at the same time be observed that the value of these cases is much lessened by the omissions pointed out in the preceding notes—for these omissions, independently of other considerations, indicate on the part of the author a degree of *carelessness*, not at all creditable to a professional man.

For some interesting details relative to the *origin* of the Secale Cornutum, the reader may turn to an article in the subsequent section of our present Number.

VII. *Morbid Anatomy.—Biliary System.*

Case I.*—A male subject, about forty years of age, and extremely emaciated, was examined. Both lungs were found hepatised, and adherent to the pleura costatis; but the appearances met with in the liver were of a more unusual kind.

This organ contained a great number of tumours, differing in magnitude from the size of a hazel nut to that of a middling apple. These tumours were whitish and firm, but rather softer in the centre than at the exterior. They projected above the surface of the liver, and were easily separated from its substance; leaving a clean bed, without shreds or patches of attachment. In consistence and colour, some of the largest among them might well be compared to a rotten apple.

No other unusual appearance was observed, nor was any thing known with respect to the history of the man.

Case II.†—The body of a female, about twenty-five or thirty years of age, was examined; the whole of which was most perfectly imbued with the colouring matter of the bile—the bones, tendons, liguments, brain, and in short every part that could be seen, being of a *deep bright yellow* colour.

Contrary to all expectation, however, there were no biliary calculi found, nor any obstruction in the ducts, nor any disease or peculiarity in the liver itself; or, indeed, in any other organ.

It seems nothing was known with respect to the history of this person either during life.

VIII. *Neglected Peritonitis.*

In looking over some recent Numbers of the Bibliothèque Médicale, a very respectable French Journal, we were deeply struck with the narration of a case illustrative of what our neighbours are pleased

* From Godman's *Contributions, &c.* in Philad. Med. Journ., No. 1, N. S. p. 94.

† From the same, p. 95.—These two bodies appear to have been met with in the dissecting-room, which accounts for the want of any knowledge with respect to their previous histories.

to call ' *la médecine expectante*,' a kind of practice, if doing nothing can be called a practice, which, however prudent, it may sometimes be in chronic disorders, cannot be too strongly reprobated in many of those which are acute.

A young woman is admitted into the Hôtel-Dieu, ' with strongly marked symptoms of abdominal inflammation :' ' belly tumid, tense, inflated, painful on the slightest pressure; diarrhœa; vomiting of ingesta; great thirst; tongue covered with a white coat, and rather dry; face red, and expressive of pain; head-ache; heavy pain in the limbs; pulse hard and frequent; skin very hot, but moist.'

In such circumstances, what was the first thing done? Is there an hospital student in London, Edinburgh, or Dublin, who does not know what *should* have been done?

' The catamenia being present and abundant, perspiration appearing to establish itself, *it was thought best to respect the work of nature, and to confine the practice to the expectant method.* Consequently the diet was restricted; mucilaginous rice drink was ordered, and emollient enemata!'

The expectant method had a temporary triumph; the poor girl was discharged from the hospital a week afterwards convalescent, but, after many returns of suffering, died about three months afterwards, with all the symptoms of chronic peritonitis with effusion. ' When the abdomen was laid open, the peritoneum was found closely, and almost universally adherent to the viscera, and much thickened. The omentum was matted with a layer of disorganised serous membrane between the viscera and the abdominal parietes. At the lower part of the abdomen, on each side there was a collection of several ounces of clear lemon-coloured serum—the peritoneum surrounding which was thickened, black, and scattered over with numerous yellowish granulations. The whole mass of the intestines was connected together by old adhesions.'—

It is unnecessary to proceed with this most deplorable detail, which is given with great frankness by M. Guilbert. Such is an illustration of practice according to ' the expectant method' in one of the principal hospitals of Europe! If these are the means of improving our acquaintance with pathological anatomy, long may we, English physicians, be behind our neighbours in that department. The case is not given as a solitary one; and is, doubtless, only one of many thousand instances of a life sacrificed to the most contemptible scruples; but the *sang-froid* with which it is given and commented upon is truly surprising.

IX. *Extract from the* Report of Diseases *in M. Recamier's Wards, in the Hôtel-Dieu, in the third Quarter of* 1825.

Diseases of the Chest.—*Pulmonary Catarrh.*—' Five of these cases were chronic, and seven acute; but none of great interest. Venesection was resorted to in two cases; and in another a blister was applied to the sternum; and these measures, with demulcent and mucilaginous drinks, were found sufficient to relieve the acute symptoms in a short time. Considerable advantage was derived in

three of the chronic cases from laudanum given in a mixture, and the application of blisters to the legs. Two patients, both young, died of bronchitis, affecting the extreme ramifications.* In one of them, aged twenty, in the beginning of his complaint there were symptoms of slight pneumonia, requiring bleeding; and after some days, during which the disease remained stationary, the uneasiness returned; the expectoration, which was opaque, whitish, fluid, but not frothy, became much more copious, without any change in the sound of the chest; his strength daily diminished; and the patient died on the fifteenth day, the dyspnœa not having been at all relieved by blisters applied to the thighs.† The second of these unfortunate patients only lived a few hours after he was admitted into the ward, although not in a stage of the disease which led to an expectation of his dying so soon. On examination after death, an *ascaris lumbricoides* was found in the larynx, by which the patient, who had in fact died with symptoms of asphyxia, had been suffocated. The mucous membrane of the larynx, trachea, and bronchial ramifications, was of a more or less deep red colour; and there were some traces of inflammation in the lining membrane of the small intestines.'

Hæmoptysis.—'Three slight cases of hæmoptysis, which had existed only a few days, were treated by bleeding. There was very little fever, and the lungs were yet permeable to air. Under this plan of treatment they soon got well. Nitrate of potash was administered in one instance, in the proportion of half an ounce to four ounces of mucilaginous syrup: a strong sensation of heat (in the stomach) followed the ingestion of this medicine; and the urine was increased by it—but the alvine evacuations were in no degree affected.'

Pleuro-peripneumony.—'Cases of pleuro-peripneúmony were very frequent during this quarter, owing to some very sudden changes of temperature. The practice of Professor Recamier was attended with considerable success in this disease; for he only lost one patient out of eighteen. In three of these patients a *lanage*,‡ with tartar-emetic was premised, or had recourse to subsequently to bleeding, according as *saburral* symptoms existed together with pneumonia, or appeared secondarily; and all recovered in a short time. In six cases bleeding alone was trusted to, and was in some of them repeated three or four times: the blood always shewed a thick grey coating. In four other patients bleeding was followed by the application of cupping-glasses on the painful side, a measure always productive of local relief. In one case, in which there was every reason to fear a fatal termination, the symptoms of anxiety,

* In M. Martinet's *table*, the cases of bronchitis are, we think, very properly separated from those of pulmonary catarrh.

† Are we to understand, that this alone was trusted to? Is Professor Recamier, also, attached to the *médecine expectante?*

‡ We understand M. Martinet to mean what is vulgarly called a *washing out*. This is truly *hospital literature*.

dyspnœa, and weakness, were relieved by the repeated application of leeches to the thorax, followed by two blisters on the side. Under this treatment the chest became again sonorous, and general improvement soon took place. In several other very severe cases, blisters applied after the period of reaction, and after general bleeding, considerably facilitated the absorption of effused fluid: in one case of this kind a seton was had recourse to, with much success.'

Phthisis.—'The phthisical patients did not appear to be in any degree benefitted by the great heat of July and August. Three cases were admitted, and all were fatal.'

Inflammation of the Lining Membrane of the Heart.—'Amongst the cases of disease of the heart, those most deserving of attention are the inflammations of the internal membrane of this organ, and especially of its valves. In the most marked example of this affection, the pulse was frequent; the pulsations of the heart were tumultuous; and the respiration was very difficult, although nothing particular was discoverable either by auscultation or percussion. These symptoms, which were so severe as to threaten asphyxia, were relieved in a few days by repeated bleedings, practised at short intervals, and by the application of leeches and the cupping-glasses to the region of the heart. M. Recamier took this opportunity of enlarging a little on the diagnosis of this complaint; observing, that when respiration becomes gradually more hurried, the pulse weaker, and more frequent, and the agitation of the heart more considerable, and accompanied even by a whizzing sound (*sifflement*), we have every reason to believe there is inflammation of the lining membrane of the heart, particularly if we are at the same time unable to account for these symptoms by the help of the stethoscope and percussion. If the face is deeply coloured by the congestion of venous blood in the capillaries, and the pulsations of the heart are perceived at the base of the sternum, the inflammation exists in the right cavities of the heart. If, on the contrary, the tumult in the precordial region is particularly felt between the fifth and seventh ribs on the left side; and the dyspnœa is considerable—the inflammation is in the left cavities of the heart. In these cases, success depends upon the promptness and justness of our measures: general bleeding is the only remedy to be depended upon; and from this we are not to be deterred by the smallness of the pulse, if the action of the heart is strong, for it will be found to improve under the loss of blood.'—*Revue Médicale. Octobre* 1825.

X. *Mortality of Small-Pox.*

The deaths from small-pox in Paris during the last year amounted to 1264, which number is in a great measure to be attributed to what is called the floating population, consisting chiefly of work people. More male subjects died than female, a circumstance which the French journalists account for by the anxiety of parents to preserve

the beauty of their daughters by vaccination being greater than their care to preserve their sons from small-pox. We fear that the hopes of benefit from cauterisation become every day fainter. Powerless, indeed, must be this method to save life, since we learn that a sagacious workman, who had been a month in the hospital of La Pitié, and very observant of what was done to those who, like himself, were affected with the small-pox, went out fully persuaded that what he called the *blacking* was only a ceremony performed upon those whose case was known to be desperate.

It is not to be supposed, however, that the friends to the process are yet silenced. One advantage among others on which they insist is, that by cauterising the pustules which are formed on the cornea, its perforation is prevented.

In the mean time, it is gratifying to find that even a small-pox epidemic furnishes new proofs of the value of vaccination. For twenty years Denmark had been almost free from small-pox, when it was once more introduced there during the year 1823, by a traveller from Hambourg. Although the number of vaccinated persons who became affected with varioloid disease was greater than we should have expected, not one death occurred among them. The accounts from Sweden are to the same effect. Seven fatal cases occurred at Stockholm out of forty-nine cases of variola, and none of those who died had been vaccinated. In the Swedish provinces, sixty cases of small-pox occurred, and thirty-five of varioloid disease: of the cases of small-pox, twelve were fatal; of the examples of varioloid disease, not one.

During the epidemic above alluded to, the varioloid disease was not more frequently observed among those vaccinated long before than among these recently vaccinated; thus offering no support to the opinion, that the influence of the vaccination gradually wears out, and at last disappears. The same is reported from Geneva by Dr. Dufresne, who found the date of vaccination in 106 cases to be as follows:

Vaccinated less than two months before	1
——— from two to six months	2
——— from six to twelve do.	4
——— from one to five years	34
——— from five to ten do.	36
——— from ten to fifteen do.	20
——— from fifteen to twenty do.	9

The varieties in this table, on whatever causes they may depend, have no regular connexion with the period elapsed since the persons were vaccinated. Analagous observations must have been made during the late prevalence of small-pox in England.

XI. *Cancerous structure in the heart.*

M. Ségalas d'Etchepare has recently exhibited a heart to the Académie Royale de Médécine, in which the right ventricle was converted into a cancerous substance; and a similar disorganisation

was commencing in the left ventricle. The heart was taken from a child twelve years of age—was much larger than usual, and adhered through its whole extent to the pericardium. M. S. had not seen it during life; but had collected the following particulars of its history. After having suffered from an attack of pleuresy and carditis, the child enjoyed good health for a year, when a gradual augmentation in the size of the abdomen excited the attention of the parents. Medical aid was required, and MM. Lerminier, Jadellot, and Fourcadella, were consulted. They recognised disease of the heart; and the pulse being strong, they had prescribed the application of leeches for the next day. Three hours after their visit he died suddenly, having fallen and died in a moment. On examination after death, the brain was found gorged, but without any apparent disorganisation; and the left ventricle contained nearly a spoonful of clear serum. There was serum also in the spinal canal. In the thorax, the left cavity contained at least ten ounces of bloody serum—the right pleura was every where adherent. The left lung was sound —the right gorged with blood. The bronchi were filled with a frothy and slightly bloody mucus. The pericardium was closely united to the heart. The heart itself was one-third larger than usual—the walls of the right ventricle were entirely disorganised, converted into a fatty substance, and approaching to the medullary sarcoma. The walls of the left ventricle exhibited a similar alteration in different parts of it. The septum was sound. In the abdomen there was an orange coloured effusion—the liver was large and gorged with blood—the spleen was four times greater than usual. The small intestines exhibited marks of inflammation in different parts. The walls of the gall bladder were evidently thickened. — *Revue Médicale, November* 1825.

It is clear, that this was not what in England we understand by cancer. It is, however, an interesting case; for we could scarcely have conceived it possible, that a patient with such an extensive disorganisation of so important an organ, could have lived an hour, still less that his pulse could have been strong enough to have induced his physicians to recommend bleeding. The case is also remarkable as occurring at so early a period of life.

XII. *Cases of* SOFTENING (*Ramollissement*) OF THE STOMACH *in Children, with Reflections.* By Dr. WIESEMAN, of Bonn.—*(Journ. Compl. Sept.)*

'DURING the last summer two opportunities were afforded me, in the hospital of Bonn, of witnessing the disease commonly called softening of the stomach, and which consists, properly speaking, in the destruction of the tunics of this viscus. The relation of these two cases may, perhaps, be serviceable in a diagnostic and therapeutic point of view.

'CASE I.—The first case occurred in a male child nearly two years old, which had not been nursed by the mother, but which had been brought up with care by the hand, and had scarcely ever been pre-

viously ill. The child was attacked with diarrhœa in the beginning of August, and had four or five mucous stools, of a yellowish and sometimes a greenish colour, every day. According to the account of the mother, the child had not suffered any pain; but it lost its appetite, had much thirst, and was not so lively as usual. These circumstances being considered by the mother to depend on teething, the disease was allowed to go on for a fortnight; but on the 18th of August, the child having three times vomited what was given to it, my assistance was required. I found the little patient's face pale; its eyes rather sunk; the pupil moderately dilated; respiration regular, without cough; the abdomen soft, and not painful on pressure. The stools were as above described, and often very offensive. The tongue was white and coated, and the pulse rather frequent. Towards evening there was increased heat and some thirst; the child was more peevish than it had been, slept less, and cried.

'As an epidemic diarrhœa, often of an obstinate character, was at this time prevailing among the children at Bonn, and as I believed this case to be of the same kind, I considered the disease as dependent on derangement of the biliary secretion, attributable to a condition of the intestinal canal characterised in the first instance by erythism, but which had already tended towards asthenia. I consequently prescribed an almond emulsion with oyster-shells, and an appropriate regimen; which measures were continued for two days without any amendment in the state of the patient: the child's peevishness increased, it made continual efforts to push its feet out of bed, had more thirst, and slept with its eyes half open; the alvine dejections were greener, and the evening fever was aggravated. I durst not yet venture on tonics, but continued the same treatment up to the fifth day, only adding a little of the aqueous extract of opium: the diarrhœa was a little diminished, but not suppressed: the thirst continued urgent. On the fifth day I found the child's strength further reduced, and the pulse weaker; the other symptoms remained the same, except the vomiting, which had never returned. The child always cried during my visits, but not, I was informed, at other times. I now judged it necessary to administer tonics, and prescribed a decoction of calumba, which I had found very efficacious in some cases of the prevailing diarrhœa; but no change being effected, I altered this on the seventh day for an infusion of cascarilla. The next morning the diarrhœa was not so troublesome, as there had only been two dejections in the twenty-four hours: the child was rather more lively, but continued to be tormented with thirst. On the ninth day aphthæ appeared on the tongue, gums, palate, and inside of the cheeks: there was some tenesmus, the margin of the anus being red and painful; and there was reason to apprehend that the œsophagus and the rest of the alimentary canal were also aphthous. I caused the infusion of cascarilla to be continued, adding a small dose of sulphuric acid, which did not seem to me to be contra-indicated by the state of the intestinal canal: I also prescribed mucilaginous drinks to be freely given. Mucilaginous and sedative applications were made to the

mouth, and Goulard water was applied to the anus, of which the redness had already disappeared: but although the child had only had two evacuations, its strength was further reduced; it was quiet, and slept almost continually, with its eyes half closed. Towards evening on the eleventh day, respiration had become more rapid, the pulse small and frequent; the child had had three greenish stools that day, the thirst continued very great, and it appeared to have hardly strength to cry. In this situation, musk appeared to me to be indicated. The child was in the same state the next morning, and died tranquilly in a short time afterwards.

'The body was opened twenty-four hours after death, having been kept in a temperature of about 16° Reaumur. The stomach was a little distended with fluid. On pulling the left extremity gently whilst the other was held, it was torn in the situation where it is covered by the spleen, and the fluid, having the odour of the musk which had been last administered, escaped into the abdominal cavity. The external face of the stomach round this point was rather livid; and when I wished to examine the torn portion more minutely, the edges of the laceration gave way between the fingers, and the opening was made wider. All the membranes of the stomach were converted into a soft, pulpy, gelatinous-looking mass, having no longer the appearance of membranes: the peritoneal tunic alone was preserved. At some distance from this point the destruction was not so extensive, the mucous coat only being softened: there was still less change in the rest of the organ, and the right extremity did not partake of it at all. The internal coat was covered with a viscid semi-transparent layer of mucus, which, as well as the pultaceous mass of dissolved membranes, gave a red colour to paper dipped in tournesol. The only odour perceived was that of musk. There was no trace of inflammation or of dilatation of vessels. The mucous membrane of the small intestines was a little red, but otherwise, as well as the intestinal canal, of a healthy appearance. The liver was of a livid or blackish colour, and a little loaded with blood: the gall-bladder and ducts were much distended and clogged up with thick, dark-coloured, resinous bile. The other viscera of the abdomen, and those of the chest, were in a healthy state; and we were not permitted to open the head.

'Case II.—The subject of this case was a male child of eight months, which had been weaned eight weeks, on account of its mother's health; but which was very carefully nursed and attended to. The child had already cut five teeth very favourably. It was attacked on the 5th August, last year, with a blenorrhœa of the intestinal canal, without any evident cause: the disorder was checked for some days by an emulsion of sweet almonds, but reappeared with as much severity as at first, the child having from four to six mucous yellowish stools daily. The dejections beginning to have a greenish colour, I caused prepared oyster-shells to be added to the emulsion; and there was again an amendment for a few days: the diarrhœa then returned; the stools were greener, and of an acid smell. The last emulsion was of no further service, nor another composed of gum arabic with some drops of tincture of

cinnamon; the child remained in the same state for eight or ten days, when vomiting began to accompany the diarrhœa. At first the food only was returned, but after a little while a peculiar brownish-green matter was discharged, having also an acid odour. At this time the child became thinner, was much agitated, particularly at night; cried much, and incessantly demanded drink, although this was almost always immediately returned by vomiting. The urine dyed the linen a yellowish-brown. The pulse was accelerated towards evening, and the cheeks became red. There appeared now and then to be lancinating pains in the abdomen, during which the child complained more than commonly, and drew its legs upward. The eyes were dull, and during sleep half-closed; the edges of the eyelids gummy. The temperature of the body was variable, and there was a general prostration of strength. All the symptoms announced a softening of the stomach.

'A blister was now applied on the epigastric region, and an emulsion was administered, consisting of gum arabic with the watery extract of opium, as recommended by Cruveilhier. By these means, the vomiting, diarrhœa, and other symptoms were sensibly diminished: and this amelioration continued so long as the little patient continued to take these medicines; but as soon as they were left off, even for a single day, the same symptoms returned, and nearly in the same degree. When this state of things had lasted five weeks, the diarrhœa was suspended during the tumefaction of the upper gum on the right side, and never returned in the same excess; but the fever was increased, and the vomiting more frequent. At the end of ten days, the child cut a tooth, and the symptoms, which had been arrested during this process, although the medicines had been omitted, reappeared, but again yielded on the resumption of medicines. A light infusion of cinchona was now selected as the vehicle of the opium, and laudanum was substituted for the extract: and as these measures appeared to have been quite effectual, they were discontinued after a few days. But four days more had scarcely elapsed before all the old symptoms returned. I then prescribed the nitric acid, which produced a permanent amendment; the symptoms were immediately abated, and in five days were removed, and never returned. The child recovered its strength, and has since continued to enjoy good health.

'*Observations.*—In the first of the cases I have thus detailed, the symptoms of softening of the stomach, as described by Jaeger, Fleischmann, and others, and particularly by Cruveilhier more recently, were not sufficiently marked to lead to a suspicion of the disease: the actual symptoms were equally referrible to the affection of the liver discovered after death; and the peculiar character of the stomachic affection was masked by this complication. The diarrhœa might either have been considered idiopathic or connected with the hepatic affection. The disease was in a chronic form in this instance, commencing, as usual, with diarrhœa; but the vomiting, which is so important a symptom in the second stage, only occurred once, and was afterwards entirely wanting. Neither was there the peculiar kind of complaining, or the drawing up of the

legs; and although the child had much thirst, it was not burning and insatiable, as it generally is in this specific affection of the stomach. The emaciation seemed to be accounted for by long-continued diarrhœa, and the peevishness and agitation by the abdominal affection. There was no abdominal tension, nor was the stomach painful on pressure. The stupor which commonly supervenes in the later stages of softening of the stomach was but faintly perceptible, and there were no convulsions. The aphthæ which appeared so abundantly towards the close of the disorder deserve particular attention, since they have not been spoken of by any who have written on softening of the stomach, whilst they are frequently found in disorders of the first passages, and accompanying very different pathological conditions.

'In the second case the symptoms of *ramollissement* were expressed in a characteristic manner. As the disease is commonly fatal, we may presume that it had not, in this instance, made any considerable progress, and that its march was arrested by the medicines which were given, and which finally overcame it. It may be objected, perhaps, that the case was not actually ramollissement, but consisted in the production of an acid, as in the *soda*.* However specious this objection may appear, it will be done away by a comparison of the two affections. In the soda there are no habitual diarrhœa, no such remarkable vomitings, no intense thirst, no peculiar complainings, no fever: the appetite is better, and the patient has acid eructations. It would, however, seem, that there is an affinity between these two diseases, and that they only differ inasmuch as in ramollissement, the morbid secretion exercises an almost caustic action on the parietes of the stomach, and occasions the partial destruction of its tunics by a kind of sphacelus. An acid is engendered in the stomach in both affections, dependent, apparently, on a special dyscracia. Jaeger endeavoured to find out the nature of that existing in the softened mass, and thought that the free acetic acid existing there was the cause of its easy dissolution: he supposes that vinegar constitutes the base of the acids contained in the first passages; an opinion supported by Pemberton in his work on Diseases of the Abdominal Viscera. Zell asserts, that in a case in which the softened organ was submitted to chemical analysis, phosphoric acid was found. Jaeger's opinion is, that the ramollissement is preceded by a disease which, originating in the nervous system, affects secretion and the action of the intestinal canal on its contents: that one of the consequences of this condition is an excess of acetic acid, which in its turn is productive of disease, terminating in the dissolution of membranous organs. The acid may proceed from the stomach itself, or from the contained food;

* The term *soda* is made use of by the French writers to designate a disease dependent on excessive gastric acidity, of which the symptoms are a sense of heat at the epigastrium, burning and acrid eructations, and headach. Its signification is, therefore, somewhat more extensive than that of cardialgia, for which the word soda (said to be from the Arabic *sodar*) has been employed by some of our own physicians.—*Ed.*

though, in the latter case, the stomach must always be in fault; and these circumstances occur more frequently in children in whom the stomach has not power to react on its contents. Cruveilhier found that children suddenly weaned were subject to ramollissement; which is confirmed by the second case above related.

'In numerous cases, as well as in the first I have mentioned, the stomach has presented no marks of inflammation.

'As regards therapeutics, Cruveilhier strongly recommends the extract of opium with gum. The opinion of Dr. Pemberton, that the formation of vegetable acids is suspended by the use of mineral acids, led me to follow him in prescribing the nitric, which appeared to be very serviceable; for at the end of five days the disease was quite cured. It must be supposed, that in this case the disease had made but little progress, and that the destruction which was commencing was combated with success; for, in a more advanced stage, whatever idea we may form of the origin of the degeneration, a cure is not to be thought of. The effect of the nitric acid cannot be looked upon as purely tonic. I sincerely hope it may have equally good effects in analogous cases.'

Remarks.—On these cases it is unnecessary to make many observations. Softening of the stomach can scarcely be entitled to a place as a specific disease; yet the previous morbid action from which it results is not always discoverable. There is reason to believe, that, as well as perforation, it is no very uncommon effect of some chronic diseases, and that it sometimes occurs in those which are acute. The symptoms are too vague to afford certain information; indeed, many of them are of all symptoms those which are most common in the diseases of children. Jaeger, who has been quoted by Dr. Wiesemann and also Chaussier, states, that the affection is often associated with disease of the lungs; and others have noticed its connexion with acute hydrocephalus; but these observations only make uncertainty more uncertain. Most of the foreign authors seem to regard this as the same appearance which English pathologists have noticed as the effect of the gastric juice on the stomach; but the latter phenomenon, according to Dr. Baillie, has chiefly, if not only, been observed where individuals have died suddenly, or after a very short illness.—*Editors.*

The pyrolignous acid has been proposed as a remedy in this affection, by Dr. Pitchaft of Carlsruhe, in the following form:

℞ Orange-flower water, ℥ij.
Pyrolignous Acid, ʒj.
Syrup, ℥j. M.
A teaspoonful to be taken every hour.

He recommends an infusion of fennel seeds to be drank 'in the intervals.'

XIII. *History of a* CHILD DEAF AND DUMB FROM BIRTH, *cured when Nine Years of Age.* By M. MAJENDIE.

IN May 1824, M. Deleau announced to the Académie Royale des Sciences, that he had succeeded in restoring the sense of hear-

ing to a child who had been deaf from its birth. But though, having acquired the power of hearing sounds, a person thus restored is very far from having obtained the real pleasures of hearing sounds of every kind, the words we employ in addressing him, those which he endeavours to repeat, are sources of new and delightful sensations; but they are void of utility. He is ignorant of the advantages of speech, and can scarcely imagine, that by it he may be enabled to express his wants and his thoughts. M. Majendie having shortly stated the difficulties under which an individual thus circumstanced is placed, proceeds to give an account of the patient in question. The account is drawn from a report made by commissioners appointed for the purpose by the Academy.

'Claude Honoré Trezel, at this time ten years of age, born at Paris, of poor parents, was of that class of the deaf and dumb which cannot hear the loudest noises nor the most violent explosions. His countenance had little expression; he dragged his feet in walking, and his gait was tottering. He did not know how to wipe his nose, and he made his principal wants known by a certain number of signs.

'The operation by which his hearing was restored is not new. It consisted in the injection of air, or of different liquids into the cavity of the tympanum. The first few days after the development of hearing, was a season of continual delight to the child. Every kind of noise caused him an inexpressible pleasure, and he sought for them with great eagerness. He was, however, some time before he perceived that speech was a means of communication; this he still attached, not to the sounds that issued from the mouth, but to the movements of the lips. Accordingly, for some days he thought that an infant of seven months old spoke, because he saw the movements of the lips. He was soon taught his error, and that the importance belonged to the sounds.

'It happened, unfortunately, that he heard a magpie pronounce some words,—then, generalising this fact, he thought that all animals could articulate, and actually endeavoured to make a dog speak. He employed considerable violence to make him say, 'papa, —du pain,' the only words which he himself could pronounce. The cries of the poor animal alarmed him, and he desisted from his attempt.

'The earlier period, after the development of hearing, wrought a considerable change in the physical state of Trezel. His walk became firmer, the mournful air of his appearance gay and smiling; he learned to wipe his nose, and ceased from dragging his feet.

'A month elapsed, and Honoré remained almost in the same state. Absorbed by his new sensations and observations, he could only catch the different syllables that formed the words; and he was almost three months before he could distinguish compound words, and that of the short and simple phrases. He required much time also to enable him to distinguish the direction of sounds. A person being confined in a room where there was an infant, and addressing him, it was with considerable difficulty that he could discover the person who spoke and even then, it was rather from

his eyes and reason than from the sound, that he discovered it. The organ of voice is composed of a number of different pieces; among which are muscles, bones, cartilages, and membranes. It would have been admirable, if, without any previous exercise, all these pieces could have acted in concord, so as to have produced the vocal sounds, and appreciable articulations; but this is not the case. The first sounds which Trezel pronounced without difficulty were *a*, *o*, *u*—the other vowels followed later; and the first words which he formed, were, " Papa, tabac, du feu." When he wished to pronounce more complicated words, he made great contusions of the lips, tongue, and all the parts concerned in articulation. By degrees he was able to pronounce the more difficult compound words. When advanced thus far, he believed himself on an equality with other children of his own age; and satisfied with himself, and proud of his new situation, he despised the companions of his misfortune, and refused to see them. Notwithstanding, however, this vanity, Trezel made very little progress in pronunciation. A vast number of syllables escaped him, or he articulated them in an extremely defective manner. Perhaps he would never have liberated himself from this difficulty, had he not ceased to depend entirely upon his ears, and assisted himself by his sight. They wrote several words, and he pronounced them much more articulately, catching with considerable clearness the assemblage of the vowels and consonants, and their reciprocal influence. Another very remarkable fact may also be stated, viz. that the association of the sight, and the movements of the larynx, was always prompt and easy; while that of hearing, and the organ of voice, was always difficultly and slowly exercised. For instance, as soon as Honoré perceived the written syllables, he pronounced them, if at the same time they were repeated to him; but if the writing was removed, the syllables were in vain articulated in the most distinct manner: he could not follow them.

' His pronunciation is very defective, and the *r* rolls disagreeably upon his tongue, and the differences in accent appear unknown to him. He exhibits also a phenomenon which has engaged the attention of the commissioners. When they spoke a word distinctly to him, he repeated it immediately. But if his instructor wished to address his understanding, signs and expressions of countenance were employed.

' It would have been thought, that after having acquired a new mode of expressing his wants and ideas, he would have neglected that which had hitherto served him, and which is inferior to speech; but hitherto the contrary has happened. The natural language of Honoré, *i. e.* by signs, instead of going gradually into disuse, and being replaced by speech, has gained rapidly a striking perfection, much superior to what he possessed before he had acquired the sense of hearing.

' In recapitulation, Honoré Trezel, who was completely deaf, so as not a year ago to be able to hear the loudest noises, understands all kinds of noises, knows when they come from a distance, distinguishes their character, avoids carriages and horses, and proceeds

to open the door when any one knocks. He is pleased with music, and can appreciate and repeat all the articulations of the French language. He obeys the spoken commands of his instructor; but does not yet understand sufficiently other people; and he learns, analyses, and repeats a number of phrases at length.'—*Journal de Physiologie, par Majendie.* Juillet 1825.

XIV. *Natural History.—On the Insalubrity of the Air of Marshes in Communication with the Sea.* By M. Gaetano Giorgini.

The observation of M. Giorgini has been drawn to the state of the atmosphere in the neighbourhood of certain marshes on the borders of the Mediterranean; and by reference to historical data and various documents, he has proved the great importance which attaches to the circumstance of their being, at times, in communication with the sea, so as to have a mixture formed between their waters and that of the sea. Both ancient and modern authors have announced the fatal effects produced in the neighbourhood of marshes by such mixture, and a local belief of the same thing is very common and strong; the opinion has, however, never been supported by any well-ascertained and public fact, until the present paper, which contains a case so much in point, and so interesting, as to induce us to insert it at some length.

On the south of the Ligurian Apennines, is a marshy shore, bounded on the west for twelve miles by the Mediterranean, on the south by the river Serchio, and on the north by the river Frigido, a torrent commencing at the foot of the Apennines, in the state of Massa di Carrare, running three or four miles over the land, and then falling into the sea. The plain is from two to four miles wide, and is traversed by a few short torrents or streams; among these are the rivers Camajore and Pietra-Santa, which divide the plain into three separate basins.

The rain and spring-waters, which flow into the three basins mentioned, are slowly discharged into the sea by natural or artificial canals, penetrating the sand-bank, which exists on the sea side; these are, first, for the principal basin of the lake of Massaciuccoli, the ditch of Burlamacca; second, for the smaller lakes of Torre and Montrone, the ditches of Montrone and Tonfalo; thirdly, for the small lake of Perrotto, and its neighbouring marshes, the ditch of Cinquale. The level of these stagnant waters is between that of high and low water in the neighbouring sea; there being but little difference between these two points in this part of the Mediterranean. In this state of things, formerly, when the waters of the sea rose from any circumstance, (unless the waters of the marshes were very high,) they used to return up the ditches, fill the basins, and inundate the country to the foot of the mountains; and with a north-west wind the waves used to penetrate with force to the interior. The mixture of fresh and salt water, thus formed, and which, in summer, was rarely changed, became corrupt, and spread infection over the neighbourhood of the most destructive kind.

In this way the effects of the malaria were re-produced annually,

in the neighbouring country, with all their peculiar horrors: the population, though small, presented feeble infants and diseased men, old age being unknown there. All attempts to avoid the scourge, by living on the hills, or in the interior, and frequenting the plain when the business of cultivation essentially required it, were vain; they fell victims to the extensive influence, and such being the effects upon the inhabitants of the country, much more rapidly did a stranger suffer from the deleterious atmosphere; one single night, in the months of August or September, causing inevitable death to the incautious traveller who should stay so long in this infested country.

Such was the state of things until 1741; previous to that time, Gemignano Rondelli, Eustache Manfredi, and Bernardino Zendreni, had successively insisted upon the necessity of excluding the sea from these marshes, and in 1740-41, a sluice with folding-doors, competent to give emission to the waters of the marsh, but prevent the sea from entering, was constructed at the mouth of Burlamacca. The most complete and unexpected success immediately followed upon, and has continued with this work. The year after its completion, there were no appearances at Viareggio, Massaciuccoli, Quiesa, nor in parts more distant from the basins of Montrone and Perrotto, of the terrible maladies which previously appeared every year. The inhabitants soon recovered health; and the land being very fertile, the population rapidly increased, and is increasing at this moment. Viareggio has become a considerable town, and so completely has all suspicion of its insalubrity disappeared, that the first families of the city of Lucca have for years built their summer-seats there.

To these strong proofs of the good effects of the means taken may be added others, deduced from the neglect of those means. In the summers of 1768 and 1769, Viareggio and the neighbouring parishes of the lakes of Massaciuccoli were again ravaged by the old diseases. It appears, from the registers, that in these two years, Viareggio had 170 deaths in a population of 1330, making nearly 1 in 15 for each year, whilst in the year following, the deaths were 32, or 1 in 40. The cause was found to exist in the damaged state of the gates in those two years, which permitted the passage of the sea; they were repaired, and the evil disappeared.

A similar circumstance happened in the years 1784 and 1785; in the first year, the deaths were 92 out of 1898 inhabitants, or 1 in 20; and in 1785, they were 103 in 1834 inhabitants, or 1 in 18. The government reports state, that in this population of 1898, there were 1200 sick persons. The epidemic was stopped, in 1769, by repairing the gates.

Notwithstanding the success of the precautions taken at this part of the coast, the neighbouring parts were long left a prey to the destroying influence of the mixed marsh-waters; and the inhabitants around the basins of Montrone and Perrotto were not considered until the year 1804. In the years 1809, 1810, 1811, similar means were taken with the best effects to the inhabitants of Montignosini and the vicinity, and in 1812 a sluice was constructed on the Cinquale, which perfected the arrangements in this part, and

made a large portion of country equally healthy with Viareggio. To complete the arrangement, it was now only required to guard the ditches of Montrone and Tonfala with sluices; the former was finished in 1819, and the latter in 1821.

Since that time the diseases of malaria have ceased so entirely at all points, that no other dangers are now incurred, regarding the insalubility of the atmosphere, than such as may arise from neglect of these sluices, which the inhabitants of the country should regard as their palladium.

Now that it has been well ascertained that the exclusion of the sea from the marshes insures salubrity, and *vice versâ*, a vast field is opened to researches, which, though difficult, delicate, and expensive, are of the highest importance and utility. The following are three points put by the author:—

1st. Is the development of the pestilential miasmata due to the mere mixture of soft and sea water, or is it occasioned by the destruction of vegetable and animal species in the marshes by the introduction of the latter?

2d. In the one or other case, what are the chemical changes effected by the mixture, the nature of the deleterious emanations, the degree of heat requisite for their production, the influence of the sun, and the mud of the marsh, &c. &c.?

3d. What was their action on the animal system? To what distance may they extend? and in general, by what circumstances are they modified? &c.—*Ann. de Chim.* xxix. 225; and *Journal of Science, &c.*

Section III.—Intelligence relating to the Medical Sciences.

1. *Application of Cupping-Glasses to Poisoned Wounds.*—Dr. Barry.

We noticed particularly in our Numbers for September and October last (pp. 289 and 376), an interesting Memoir on the *Motion of the Blood in the Veins*, read before the Academy of Sciences in Paris, by Dr. Barry, an English army surgeon, resident in that city.

We have now to mention, that this gentleman, pursuing the same train of reasoning and experiment which had led him to consider the motion of the blood towards the heart as the result of atmospheric pressure, has arrived at the same conclusion with respect to all other fluids similarly circumstanced; and has embodied some of his opinions upon this subject in a memoir, read before the Academy of Medicine in Paris, on the effects produced by the *application of cupping-glasses to poisoned wounds.*

Of this memoir no particular details have as yet, we believe, been

given to the public;* but the following abstract of the *report*, presented to the Academy by the committee to which it had been referred for consideration, will enable our readers to form some notion of its tendency and value.†

The report commences by observing, that the principal statements contained in the memoir of Dr. Barry may be reduced to the three following, viz. :—

1st. That the immediate application of a *cupping-glass* ‡ to a poisoned wound, will *prevent* the absorption of the poison, and avert all untoward accidents.

2dly. That the application of a *cupping-glass* to a poisoned wound, even after a part of the poison has been absorbed, and has begun to produce its proper effects upon the system, will *arrest* the progress of these events, and prevent their recurrence so long as it is permitted to remain on the part.

And, 3dly. That after the *cupping-glass* has been applied to a poisoned wound for a certain time, the poison may be removed from the surface, and all unpleasant consequences averted, by simply washing the part with a little water.

The accuracy of these statements, the report continues, was fully established before the committee, by experiments performed with various poisons on dogs and rabbits.‖ The influence, therefore, of atmospheric pressure on the process of *absorption*, may now, it is added, be considered as incontestably proved; and the establishment of this fact, for which we are indebted to Dr. Barry, may justly be regarded as a *true discovery*, notwithstanding some vague ideas previously put forth by others on the subject, and the empirical practice of sucking poisoned wounds, which has been so long known to the profession.

In consequence, the report concludes by recommending, among other matters, that Dr. Barry's memoir should be inserted among the Transactions of the Academy, and that his name should be inscribed on the list of candidates for the place of foreign members.

II. *Medical Jurisprudence.—Remarks respecting Dead Bodies.*

There is a circumstance, not in general sufficiently attended to perhaps by persons engaged in the study of medical jurisprudence,

* We, however, are enabled to state, that Dr. Barry is preparing for publication in this country a very full account of his late researches and experiments.

† This committee consisted of Messrs. Adelon, Laenec, and Orfila; whose names are a sufficient guarantee for the accuracy and fidelity of the report.

‡ *A cupping-glass*—that is, an *exhausted* glass or vessel of any kind.

‖ These experiments were, it appears, conducted by Dr. Barry himself, and were repeated several times in the presence of many distinguished persons. The poisons employed were *arsenic*, *prussic acid*, *strichnine*, the *upas tieuté*, and, finally, that of the *viper*—the living viper being made use of.

upon which, therefore, a few remarks may be useful: we allude to the appearances produced by injuries inflicted on the *dead body*, which often very closely resemble the effects of violence committed during life.

Thus we frequently find, in subjects brought into our rooms for dissection, the bones of the head and other parts singularly fractured, or some of the articulations deranged or broken up. Those who are accustomed to these appearances may perhaps be often able to distinguish them, and to say whether they did or did not occur during life; but in general the question is of difficult solution, unless historical evidence can be adduced.

One general rule, however, may be laid down for our guidance in such cases; namely, that almost all serious injuries inflicted on the *living* body must be attended by an effusion of blood into the surrounding parts—a circumstance which can rarely take place in the *dead* body, and never perhaps exactly in the same manner.

Another appearance frequently met with in the dead body, and well calculated to mislead, is caused by the simple destruction of the *cuticle*, either before or after death—the part stripped of this membrane soon drying up in the dead body, and assuming the aspect of a serious injury inflicted during life.—Vide *Phil. Med. Journ. No.* 1, *N. S.* p. 95.

III. *Midwifery.—Face-Presentations—Remarks upon.*

Face-presentations are, it has been said, the most common of all the mal-positions of the head in parturition; and in by far the greater number of such presentations it will be found, it is alleged, that the *pelvis* of the woman is unusually large, or that the fœtus is much below the natural size.

If this were not so, how, it has been asked, could Smellie have succeeded in such cases in turning round the face into the hollow of the sacrum, by counter-pressure merely with his fingers? Dr. John Clarke also assures us, that he succeeded in thirteen out of fourteen such cases, even after the head was considerably advanced; and Mr. Burns states, that he has been equally successful in the same practice, even when the nose was on a line with the arch of the pubes; whilst Dr. Merriman says he has twice known presentations of this kind converted by the pains alone into natural cases.

Such changes of presentation as these could not, it is therefore inferred, be so readily effected, did not, in the great majority of such cases, the capacity of the pelvis much exceed that required for the natural passage of the child.—Vide *Edin. Med. Journ. Oct.* 1825, p. 390.

IV. *Oleum Terebinthinæ—Of its Medicinal Efficacy.*

I am induced to believe, says Dr. Magee of Dublin,* that this valuable medicine has not as yet received the attention, or been

* Dr. J. J. Magee; in Edin. Med. Journ. Oct. 1825, p. 307.

employed to the extent, to which it is entitled. I have been in the habit of using it for some years past, and have always found it a safe and efficacious purgative, and a powerful auxiliary in the cure of some of the most formidable diseases.

In obstinate *constipation* it stands without a rival; in *enteritis*, *peritonitis*, *colic*, and certain inflammatory or spasmodic affections of the abdominal viscera, it acts almost as a specific; and in *dysentery* I have seen, he adds, the most decided advantage from its judicious exhibition.

The dose Dr. Magee is in the habit of employing is, he states, for an adult, half an ounce; given with an equal quantity of the *oleum ricini*, and some peppermint or cinnamon water. Exhibited in this manner, he has found it agree well, he says, with the stomach, even when a tendency to nausea was present; and has even known it to be retained when opiates had been rejected. When given *otherwise*,* however, he has not found it answer so well; and in a smaller dose it generally produces, according to his experience, strangury or other unpleasant effects.

V. *Pinhoen Oil.*

An expressed oil, bearing this denomination, has lately been sent to this country from the Brazils, of which Mr. J. Frost gives the following account in the London Journal of Science, Oct. 1825, p. 59.

This oil is used in the Brazils as an emetic, and acts powerfully as such, it is said, in the small dose of one or two drops. It appears to be procured from the seed of a species of *jatropha*, of which there are several indigenous to South America; — most likely, Mr. Frost adds, from the *jatropha multifida*, the fruit of which has long been known under the name of the French physic-nut.

This opinion Mr. Frost founds upon some experiments made by him, about two years since, upon the seeds of several species of *jatropha*; the expressed oil, of many of which agree in producing both emetic and cathartic effects, (at ended by a sensation of heat about the fauces,) the former when given in a small, the latter in a larger dose.

Secale Cornutum, or Ergot — On its Origin, &c.

In noticing this article in a late Number of the Repository,† we were obliged to omit saying any thing particular with respect to its *origin*, in consequence of the unsatisfactory state of our knowledge on that point. We are gratified, therefore, in having it now in our power in some measure to supply that deficiency, by laying before

* By *otherwise*, we presume the doctor means in a different *form* or manner from that above mentioned; but the expression it must be confessed is rather indefinite. He takes no notice of a Memoir on Terebinthinate Remedies, by Dr. Copland, published in the 46th volume of the *Medical and Physical Journal*, where the oil of turpentine was first recommended, from extensive experience, in these and many other diseases.

† Vide Repository for Sept., p. 265.

our readers the following details; upon which we are inclined to think more reliance may be placed than upon any of the conjectures or opinions hitherto published on the subject.*

The field of rye † upon which the following observations were made, was, we are told, of the kind called in that part of America the *Norway*, or *white rye*.‡ This field was in full blossom about the 30th June (1824), but no appearances of the *ergot* were discovered in it until the 22d July; from which time until the 12th August, when the grain was harvested, it might be found of various dimensions.

Upon minute examination, towards the end of July, it was discovered by Gen. Field that each grain of *ergot*, as it emerged from the glume, had attached to its apex the shrivelled rind of a grain of *rye*, which had once apparently been in a healthy state. This led to the conjecture on his part that the production of the *ergot* might depend upon a previous state of disease in the *rye*, and his attention therefore was more particularly directed towards the grain in its growing state.

It was, in consequence, soon observed that groupes of *flies* were in the habit of collecting upon some of the heads of rye, apparently engaged in search of something within the glumes. Upon examination, it was found that the juices of the grains in many of those heads were oozing out; and, by the aid of a microscope, it was discovered that each grain from which the juices so exuded had a small orifice near one of its ends.‖

It was now pretty manifest that the flies had been engaged in collecting these juices, and that the orifice in each grain had, in all probability, been made by them for the purpose of extracting the same. To ascertain, therefore, how far these proceedings were connected with the production of the *ergot*, the following observation, or experiment, as it may be called, was made.

On the morning of the 1st August, two heads of rye growing near each other were selected; each of which contained one grain which had been punctured, and had discharged a small quantity of

* Of the various opinions formed with respect to the nature or origin of the *ergot*, the three following may be deemed the principal :—

1st.— It was supposed by some to be the result of a diseased action in the grain itself, by which the *rye* was converted, as it were, into the *ergot*.

2dly. — It was considered by others as an excrescence or morbid growth, caused by the sting or deposition of its eggs by some insect.

And, 3dly. — It was said to be a parasitic *fungus*, analogous to those denominated *blight*, *smut*, &c.

† For the details which follow we are indebted to a communication by Gen. Martin Field, of Vermont, U. S., given in Silliman's Journal of Science, vol. ix. p. 359.

‡ The *Norway* or *white* rye is, it appears, more subject in America to the *ergot* than other kinds; which Gen. Field is inclined to think may be attributed to the greater length of time it requires to arrive at maturity after having blossomed, in consequence of which it is more exposed to the ravages of the insect hereafter to be mentioned.

‖ 'Near the end opposite to that to which the thread of nutrition had been attached.'

its fluids; but which, at the same time, exhibited no symptoms of decay. Between the culms of these a stake was driven, and to this both were attached, so as to be more easily found again and examined. During the first day, the flies were observed busily employed in extracting the juices from each grain; and when these did not seem to flow in sufficient quantity, they probed, as we are told, the orifice anew. On the second day, both grains appeared in a state of fermentation and decay; and, on the third, each had become a rotten and shapeless mass.

The valves of the glumes were now carefully opened, and a small black globule, rather larger than a pin's head, was discovered in each. These globules were situated at the points of the peduncles of the diseased grains, and were, as it afterwards appeared, the rudiments of the *ergot*. During the first four days after being discovered, these bodies grew in length two lines nearly, in each twenty-four hours; displacing, at the same time, the remains of the diseased rye from the glumes it had occupied. On the 12th August, (nine days after being discovered,) they had attained their full size, and appeared as *grains of ergot*; one of which was twelve lines in length, and three in diameter; the other rather less.*

Not having been able even by the aid of a good microscope, to dicover at any time the eggs or larva of any insect in the diseased grains of rye, Gen. Field was led to conclude, that the object of the fly in puncturing the grain was simply to obtain food; and that the wound thus given, and the subsequent escape or extraction of the juices of the part, were the only injuries inflicted on the plant. To ascertain this point an experiment was instituted, which, though not quite so conclusive as the author seems to imagine, is yet worth recording.

A full-grown head of rye, in a green and pulpy state, was selected, and four grains in it were punctured with a fine needle, so as to produce from each a discharge of its proper juices. About this head the flies collected as usual; and on the fourth day after the operation, *ergot* was discovered in two of the wounded grains —but the other two exhibited no appearance of injury or decay either then or afterwards.

To these details Gen. Field adds, that the *fly* alluded to in them is a *blow-fly*, and one of the hairy or bristly species of *musca;* that it is rather larger then the common horse-fly, and has transparent wings, and the abdomen dark green; that it deposits its eggs on animal flesh, either fresh or putrid; and that, during the months of July, August, and September, it is one of the most numerous

* The size of the *ergot* is usually, Gen. Field observes, in proportion to the number of grains in the same head. Thus, when there is but one grain of this substance in a head of rye, it is generally from ten to fourteen lines in length, and two or three in diameter; but when there are twenty-five or thirty grains of it (which is not unfrequent, it appears), they are proportionably small, and often not larger than grains of sound rye.

† *Not so conclusive;* for both analogy, and the result of the injury here inflicted, would indicate that the fly, in puncturing the grain of rye, poisons it also.

of the fly species in the district where he resides, and very annoying to horses, oxen, and some other animals.

Surgery.—Of Depression of a Portion of the Bones of the Cranium.

That very great improvements have taken place within the last twenty years in the treatment of injuries of the head, and that, for the general and extended knowledge of the subject now possessed by the profession at large, we are principally indebted to Mr. Abernethy, cannot be denied. It may well be supposed, however, that many facts favourable to the present treatment must have been met with before they could be laid before the public; and as we think it both a matter of justice to individuals, who, relying on their own good sense and observation, have dared to go out of the common track, and of great professional utility to notice such facts when we have become acquainted with them, we lay before our readers the following very interesting case, which occurred in the practice of Mr. Welchman, of Kincton, a very intelligent and eminent surgeon. We may add, that we have ourselves seen and examined the individual, and found the statement perfectly accurate. That such practice should have been adopted by a country practitioner, in opposition to the then prevalent doctrines of the schools, is not a little honourable to him. The case was drawn up by Mr. Welchman.

'Robert Wilkins, about twelve years of age, was sitting on a rail whilst some men were playing at quoits, when a random blow from a quoit struck him about half way between the outer and upper edge of the right orbit and the coronal suture. He fell, and was stunned for a short time, but quickly recovered his senses. On examining the wound, which bled freely, both tables were found to be driven in upon the brain, full half an inch. He had little pain, was perfectly sensible, and rested well. A strict antiphlogistic regimen was adopted, and mild superficial applications applied to the wound, which was about three inches long, and one wide. When the soft contused parts came away, the pulsations of the brain were very perceptible at the bottom of the wound. The case was sent to London for the opinions of surgeons of eminence, who were all of opinion, *that the trephine ought to be applied, and the depressed bone to be raised; for though no bad symptoms had appeared, they would certainly come on, as the brain would not bear such accumulated pressure.* As the boy lived in the town, was frequently attended, and no unpleasant symptom occurred, the trephine, however, was not applied. The wound was dressed superficially, and the regimen above mentioned adhered to. Several small portions of bone came away during the cure, healthy granulations formed, and the wound gradually healed, leaving a sulcus in the forehead, at least a quarter of an inch deep, which still remains. The person is now forty years of age. He has never been troubled with headach nor any affection of the brain. He is a shoemaker at Stratford.'

A case somewhat similar came under our observation shortly before we entered upon professional study. A boy, aged about nine years, of respectable parents, was struck on the right parietal bone by

a nearly spent shot of about five or six pounds weight. A perfectly round and cup-shaped depression, nearly one inch deep, was occasioned by the projectile. Depletory measures, and the antiphlogistic regimen, were instituted as soon as reaction of the system, after the immediate effects of the injury, occurred. Urgent symptoms of compression of the brain did not supervene; the bone was therefore allowed to retain its unnatural position undisturbed, and still retains it to this day. The individual in question is now considerably upwards of thirty years of age, and is a solicitor of much and deserved eminence, and of very considerable literary acquirements.

VIII. *Hydrophobia.*

A case of rabies is related in the Revue Médicale for August last, which was occasioned by the bite of a wolf. The subject of it was a man aged forty-eight: the third phalanx of the index-finger of the left hand was bitten in two in the middle, and the finger only remained attached by a little skin. The finger was amputated the next day at the metacarpal articulation. For thirty-two days after the accident the man went on very well; cicatrisation was proceeding favourably; but he very frequently dreamt of the animal which had attacked him. On the thirty-second day he felt a general and indescribable uneasiness, and the idea of the wolf became present to him day and night. Two days afterwards, the appearance of the wound changed, it became swelled and painful; the edges were elevated, and there was an oozing of reddish serum; his countenance became mournful; convulsive agitations, startings of the tendons, mental distress, constriction of the throat, and impossibility of swallowing, but without horror of fluids, succeeded; the respiration became difficult, interrupted with sobs or sighs; violent convulsions alternated with a state of calmness, in which he was continually occupied in spitting a glutinous and frothy saliva. He described his general sensations to be as if he was placed on burning coals; and his sufferings were terminated on the fifth day after the invasion of the malady. During the whole of this time there was no alvine evacuation; very little urine was passed; and for the three last days there was continued priapism. No account is given of the treatment, and the body does not seem to have been examined.

We believe there is yet much to be learnt on the subject of this dreadful malady; and, therefore, frequently avail ourselves of opportunities of collecting what relates to it. It is to be feared that the hopes held out, not very long ago, of the great benefit to be derived from the puncture of pustules under the tongue, are very fallacious. The pustules do not seem constant in their appearance, or uniform in their character and situation; and several cases have been fatal after the most careful watching and puncture. The French have given these bodies the name of *lysses*.—We shall bring the subject of rabies fully before our readers next Number.

IX. *Upon the peculiar Principle of Narcotic Plants.*

Dr. Brandes of Sabzerflen, having been prevented by extreme illness, induced by investigating the peculiar principles of narcotic

plants, from completing his inquiries, has announced the result of his labours in general terms. He states, that he has found a peculiar narcotic principle extremely pure in all the narcotic plants, as belladonna, hyoscyamus, conium, stramonium, chelidonium, digitalis, &c. The narcotic principles are readily soluble in alcohol, æther, acid, and water, and of a highly offensive odour. This odour is so great in the principle of conium, that it is almost impossible for an individual of an irritable habit to remain in the room where there is an æthereal solution containing only a few grains of it. The smell of such a solution is equal to the smell arising from twenty or thirty pounds of the plants. It is also remarkable, that as this principle is neutralised by acid, the disagreeable odour disappears or is greatly diminished, which so far agrees with the circumstance, that the plants themselves give little of their peculiar smell, because the narcotic principle is not in a free state. Dr. Brandes has promised to communicate the manner of obtaining the principles.

X. *Remarkable Cure of Loss of Speech.*

A YOUNG girl, sixteen years of age, was suddenly bereft of speech and consciousness, as she was acting the part of the angel in a procession (des Christkinder.) 'It was the commencement of a catamenial period, which had just begun; the day was stormy and wet, and she was clothed in a thin white garment. The attack took place as she was on the point of pronouncing the salutation. The populace regarded this as a judgment from Heaven. The day after the seizure, I was sent for. Leeches to the neck, as menstruation was declining, commenced the treatment: mercurial frictions with volatile liniment three times a day, and belladonna with carbonate of ammonia in increasing doses, were added. Within fourteen days the patient recovered. On the twelfth day menstruation was re-established. But the remarkable part of the case in the public mind was, that on Christmas eve, on which, 1824 years before, the real angelic host had sung their hosannas to the Virgin, which she had wickedly endeavoured to imitate, her speech returned; an event, nevertheless, which, however wonderful at first view it might appear, is altogether explained by the re-establishment of the menstrual discharges, which happened to take place on this day.'—*Hufeland's Journal for January* 1825. *A Communication by Dr. Huize of Waldenburg.*— We suspect that Prince Hohenloe's miracles, much as our opinion may shock a pious Catholic, would be as easily accounted for, were all the circumstances known.

XI. *Ligature of the Carotids.*

FROM observing the great relief produced by this operation, in cases of violent determination of blood to the head, some of the French practitioners seem to meditate a trial of it in cases of epilepsy which do not readily yield to medical treatment. The result must, in many instances, be so doubtful, and in some so certainly unsuccessful, that there is but little encouragement for such a practice; whilst in those cases in which the epilepsy depends upon causes likely to be controlled by tying one of the carotds,— cases, for instance, depending on simple determination of blood to the brain, without

organic mischief within the cranium, we should not too soon despair of giving relief by a less heroic mode of proceeding. If considerations of this kind have no weight, we may expect to see the carotids tied in mania, in tendency to apoplexy and paralysis, and even in cases of headach. But we shall not give way to any alarm on this subject until we learn that our neighbours *submit* to the ligature on such occasions; for unless the patient consents, the surgeon speculates but in vain.

XII. *Hypospadidos.*

Two cases of this peculiarity of conformation, in which the urethra terminated under the glans penis, and just before the frenum, have been lately made public by Dr. Gunther. The subject of one was a Lutheran priest, whose wife was of a character not to be suspected, and had borne him five children. The other subject had given rather inconvenient proofs of his power to exercise the great privilege of his sex, and sought to avoid the consequences by a plea of impotence: the plea was very properly disallowed, and two years afterwards he married, and became the father of several children. There seems nothing surprising in these cases; no necessity for having recourse to the *aura seminalis*. But M. Hollard and M. Formey assert, that they have known instances in which fecundation has taken place, though the urethra opened into the perinæum: a case, it must be confessed, of more difficult solution.—*Bulletin des Sciences Méd.*

XIII. *Ointment of Tartarised Antimony.—Remarkable Effects produced by it.*

The free application of the ointment of tartarised antimony to the lower extremities is frequently productive, Dr. Elliotson states, of a very remarkable effect; namely, the appearance of a crop of *pustules on the genitals.*

The application of the ointment, also, to the abdomen has sometimes, he says, been followed by a similar effect; which he never noticed when the ointment was applied to other parts, unless when the patients, from neglect, allowed it actually to come in contact with the parts.

In the cases seen by Dr. Elliotson, and he states them to have been numerous, the pustules appeared chiefly on the scrotum; but extended also to the glans and other parts of the penis, and sometimes to the perinæum, the groins, and the verge of the anus. These effects were observed even when the ointment was applied entirely below the knees; and were not confined to males, the females suffering in a similar manner on the corresponding parts.—*Med. Chir. Trans.* 1825, p. 241.

XIV. *The Syphonic Theory.*

A little brochure of forty pages has just been published under this title,* the object of which is to explain the *mechanism* of the

* 'The Syphonic Theory, or Brief Observations on the Circulation of the Blood,' &c. &c., by Ed. Hopley, Surgeon R. N. 8vo, pp. 40. London. 1825.

'circulation of the blood, and particularly to point out the existence of a '*power of suction*' in the chest, depending, in some measure, upon '*atmospherical pressure.*'

Upon these points, however, or upon any other connected with the subject under consideration, the author gives us nothing *new*, either in the way of fact or illustration; nor has he stated with candour, or placed in a better light, things already known, and treated of even by his contemporaries.

This entire 'THEORY,' indeed, is exceedingly crude and imperfect; and we only notice it here for the purpose of undeceiving the author himself with respect to its merits, and of warning others who may feel an interest in the subject, lest they also be misled, and tempted to throw away their time or their money upon it.

XV. *Contagion and Non-Contagion.*

THE contagious or non-contagious nature of the plague, and of yellow fever, is at present a fertile subject of dispute among the French medical academicians; and the non-contagionists have given the strongest proof of their sincerity, by offering to expose themselves to the danger, of which the existence is asserted by their antagonists in this never-ending controversy. MM. Costa, Lassis, and Lasserre, some time ago requested permission to make a personal experiment of this kind in the lazaretto at Marseilles; and offered to *wear* any infected clothes that might be imported: a physician at Rochelle, M. Casimir, begged to share the honours and the danger of the first part of this offer. Whether or not this great question will be at all cleared up by the experiment, supposing it to take place, is a matter of considerable doubt. On the one hand, supposing that three out of four of the above gentlemen should die in the trial, the fourth would, in all probability, 'argue still:' and supposing all to escape, their good fortune could by no means be conclusive against the existence of contagion in certain circumstances; and this, we believe, is all that sensible people contend for at present. There are some physicians, no doubt, who deny this—and some who contend for more; and between combatants whose view is so obstinately limited to one side of the shield, we see no prospect of a termination of hostilities.

XVI. *Quina Bicolorata.*

THIS bark, which has considerable reputation in Italy as a febrifuge, and of which a short notice was given in our number for April, has been analysed by M. Pelletier: the specimens were furnished by M. Brera. It appears not to be a true cinchona, and to contain neither quinine nor cinchonine, but a bitter principle, resembling colocyntine. An account of this latter principle will also be found in the number above mentioned, page 349.—*Rev. Méd. Sept.* 1825.

XVII. *Hydatid Tumour.*

'A PATIENT of *La Charité* lately died in consequence of the formation of a large tumour over the scapula, considered by M. Roux to

be a scrofulous abscess. It was found, after death, to be a hydatid tumour consisting of two portions, divided by the scapula, and communicating by a round foramen in that bone.

XVIII. *On the Detection of Arsenic by Lime Water.*

The paper from which the following extracts are made is by M. Aug. Ludw. Giseke, and has been published in Schweigger's Journal. We are induced to notice a part of it in consequence of the importance which attaches to any circumstance affecting the indications of arsenical tests. The following process for the detection of arsenic in cases of poisoning, is the joint production of Rose and Berzelius :—' Cut up the coats of the stomach, and place them in the liquid, which is boiled with a few drachms of caustic potash, in order to dissolve any arsenious acid that might be contained in it. The solution obtained is filtered, heated till it boils, and during the boiling mixed with nitric acid, which is added in small portions as long as any thing separates, and till the liquid has become strongly acid, clear, and of a bright yellow colour; it is filtered while hot; afterwards nearly, not completely, saturated with carbonate of potash, and made to boil, in order to expel the carbonic acid; then it is boiled with clear lime-water as long as any precipitate is formed; the lime-water first saturates the excess of acid, and then precipitates with the arsenious acid as arsenite of lime, and with the phosphoric acid and other animal substances decomposed in the nitric acid. If, instead of saturating the acid with lime-water, you add first caustic alkali till the liquid becomes alkaline, and then add lime-water, no precipitate will be formed, because the arsenite of lime is held in solution by the alkali.'

This statement of the solubility of arsenite of lime in a solution of alkali being in contradiction with certain facts, M. Schweigger was induced to examine the circumstances more minutely, and was ultimately led to the following explanatory experiment:—Prepare an arsenical liquid, pour it into three glasses, and add to one portion an excess of caustic potash; to the second, excess of caustic soda; and to the third, excess of caustic ammonia. On adding lime-water, a deposit of arsenite of lime will be formed equally in each of the glasses. Now add to each a few drops of acid, (for instance, nitric acid,) yet so that in all the alkali shall predominate; whilst no solution of the precipitate will take place in the glasses that have the potash and soda in them, it will immediately begin in that with the ammonia; and all the arsenite of lime will be finally dissolved, although the ammonia be not saturated by the acid which has been added. Of course, the solution will take place in the three glasses when any acid is in excess; yet, on saturating the acid with alkali, the precipitate will be reformed immediately in those glasses that contain the potash or soda, but not in that which holds the ammonia, however one may neutralise the liquid.

By putting muriate or nitrate of ammonia into a liquid containing arsenic, and adding lime-water in any quantity, no pre-

cipitate will be formed, even though heat be applied. Thus it will be seen, that it is not the ammonia, as *caustic alkali*, which retains the arsenite of lime in solution, but it is the presence of a soluble salt of ammonia which prevents the formation of the deposit; and if, instead of ammonia, caustic potash or soda be used in the process described by Berzelius, then lime-water will instantly form the precipitate of arsenite of lime.—*Phil. Mag.* lxvi. 253.

XIX. *Effects of Lightning on the Animal System.*

Dr. Fusinieri states, that during the winter of 1824 no particular effects were perceived by Sig. Tomiello in his arm, struck, some time previously, by lightning; but that, as the spring of 1825 advanced, it became affected; a sensation of heat and want of motion taking place when the weather became stormy; the change in the weather being pre-indicated for several hours, or, at times, even days. Dr. Fusinieri remarks upon the circumstance, that these effects were not perceived in the winter season, though the weather might be stormy, and the temperature as warm, at times, as on occasions when the arm was affected. He considers the cause as existing in a morbid sensibility of the nerves of the arm to atmospheric electricity.—*Gior. di Fisica*, viii. 219.

XX. *Investigation of supposed Electric Currents in the Nerves.*

Il Sig. Nobili has endeavoured to ascertain, by means of his delicate Galvanometer, the existence of those electric currents which are supposed by some persons to take place through the nerves in the animal system. The means adopted, were to introduce the wires of the instrument into different parts of the nerves, in which case, if currents existed, part would be diverted through the instrument, and rendered sensible by its effect upon the compound needle. Notwithstanding the extreme delicacy of the instrument, no traces of such currents could be perceived.

In consequence of the observations of Amici and Herschel, Il Sig. Nobili also examined the circulation of the chara* in a similar way, but could detect no electrical current. He found also that a current of electricity, sent through the circulating system of the chara, deranged and injured it.—*Gior. di Fisica*, viii. 269.

XXI. *Colica Pictonum.*

From the coincidence observed between certain states of the spinal marrow, and of the intestinal canal, M. Serres has been led to entertain the idea, that the spinal marrow may be the primitive seat of the painter's colic. In pursuance of this view of the disease, he has successfully employed the tincture of nux vomica, by friction, on the dorsal region of the spine, and has administered the same medicine internally—*Arch. Gén.*

* Quarterly Journal, xvi. p. 138.

XXII. *French Surgery.*

AMONGST the operations reported to the Section of Surgery of the Academy, we observe the division by M. Barnard, of adhesions between the tongue and the cheeks, on each side, to the extent of an inch, after inflammation with ulceration. M. Larrey presented a patient who had been recovered of lumbar abscess, pointing both in the loins and in the groin, in what the French now term, 'mal de pott,' or disease of the spine: the cure was effected by the repeated application of *moxas.*

XXIII. *Assembly of German Physicians and Natural Historians.*

THE account of a meeting of this kind, held at Frankfort in September last, and which is to be annually repeated, has brought to our recollection a plan, which has, we believe, been frequently the subject of conversation in London as well as in Edinburgh, for establishing an *Annual Meeting of the Medical Graduates of Edinburgh, to be held in London.* This intention will we hope some day be carried into effect. Several physicians residing in the country have intimated their willingness to attend. It cannot be difficult to name a fit president or chairman for the day, who should of course be practising in the metropolis; and a committee might be named to make the necessary arrangements. The spring would on every account be the best time for the meeting. The first meeting might be merely a dinner; but in successive years, the morning of the day of meeting might be occupied in the reading of papers selected by the committee from such as might be sent previous to an appointed time. If due care were taken that none but papers of a high character should be thus honoured, and if the papers were read by the authors, there would be no want of an audience. The whole of the proceedings might be afterwards published or not, according to circumstances. The opportunity thus afforded of seeing friends living in remote parts of the country, of forming or cementing valuable connexions, of promoting the general acquaintance and good-feeling of numerous practitioners, and of having one day in the year free from professional labours, and sacred to friendly and social sentiments, are sufficient reasons for putting a proposal of this kind in practice.

The most distinguished pupils of Edinburgh, and even the professors themselves, would doubtless be proud to patronise the plan; and if any thing of the kind, but less exclusively limited to Edinburgh graduates, should be proposed as an amendment, there would probably be little objection to it.—*Editors.*

XXIV. *Sheffield Literary and Philosophical Society.*

'THE Session of our Literary and Philosophical Society for 1825 closed last week, with two lectures by Dr. J. Calthrop Williams. He had chosen a most interesting subject, '*The Connexion between the Animal and Vegetable Kingdoms,*' and he traced their analogy in many curious and important instances. The changes which take place in the egg during incubation, and the wonderful pro-

vision which nature has made for permitting the action of oxygen on the arterial blood during the earlier stages of the chick, together with its analogy presented in the germination of the bean, were accurately and beautifully described. Dr. Phillips, the president of the society, took a review of the public lectures which have been delivered during the year; shewed how greatly the council had exceeded the promises which were made; and inferred how interesting the lectures had proved to the public, from the very crowded and attentive audiences which have been collected.'—*Sheffield Iris.*

We notice this announcement for several reasons. We presume we are not singular in viewing with considerable pleasure the formation and proceedings of literary and philosophical institutions in several of the principal towns of the kingdom. It is by these and similar exertions that those who have been accustomed to call themselves, by way of distinction, the *educated* part of society, will continue to preserve their rank under any changes consequent on the wide communication of knowledge now daily making to those whose station and pursuits are of a more humble description. But we have also a peculiar gratification in observing that the members of our own profession, who have in all ages been favourers both of science and of learning, and have been always loved and honoured by the greatest philosophers, the best scholars, and the best men of all countries, are every where, as might be expected, among the zealous and distinguished supporters of such institutions. This circumstance is the more honourable to physic, insomuch as, in several instances, those distinguishing themselves in this manner are gentlemen eminent for their professional acquirements, and actively engaged in practical duties.* These societies are, perhaps, only the foundations of future provincial colleges; for there can be no doubt that provincial institutions, on a greater scale than any yet existing, must soon come to be required by a continually increasing population, all eager for the acquisition of knowledge. Already, in some of the large manufacturing towns, something of this kind has commenced. Wherever there is wealth, *there* there will always be talent; and there can be no nobler or fitter occupation for that talent than to impart knowledge to those who are eager to receive it.

XXV. *Royal Society.—New Annual Prizes.*

On the 15th December (1825), Sir Humphry Davy officially announced to the Royal Society, that his Majesty had been pleased to found two new annual Prizes, consisting each of a Medal of the value of fifty guineas—to be bestowed, by the President and Council of the Society, as honorary distinctions on the authors of such new discoveries, &c. of a scientific nature, as to them may seem most deserving of the award.

* It would be wrong to speak of Sheffield without alluding to a distinguished member of its Philosophical Institution, whose lectures a few years ago cannot be forgotten by those who profited by them; we mean that excellent physician and estimable man, Dr. A. Knight.

XXVI. *Clinical Remarks on the Diseases most prevalent during the preceding Month.*

The commencement and middle of January were extremely cold and dry. Towards the end of the month the severe frost broke up; and dense fogs have since prevailed, particularly in the metropolis.

Pulmonary disease, which was frequent during the month, became unusually prevalent about the middle and close of it. Catarrhs and bronchitis were the most frequent forms: the bronchial inflammation, in several instances, extending to the smaller bronchial tubes, and to the substance of the lungs. In one case the bronchial disease was soon followed by manifest signs of inflammation of the mediastinum: the former disappearing as the latter advanced, until the disease at last consisted of uncomplicated mediastinitis.

One case of acute pericarditis came before us, complicated with a much slighter inflammation of the lungs. The disease yielded to the usual treatment. We mention this case in order to notice what has not, as far as we are informed, been before recorded: the serum of the blood taken from the arm of this patient, at two bloodlettings, exhibited each time a milky or whey-coloured appearance.

We have observed the same character of the serum of blood drawn from a vein in three cases of pericarditis and carditis, besides the one now alluded to. The subject of one of these cases (a lady, aged about 27 years) was seized, two years *subsequent* to her recovery from carditis, with pneumonia. The serum of the blood taken on this latter occasion had the appearance it usually has in inflammatory diseases, but was entirely devoid of the milky colour which had been so very remarkable in the three depletions employed to remove the previous carditis. We have only seen one other instance of milky-coloured serum, and this was to a much less extent: it was observed in a patient blooded for inflammation of the surface of the liver. So that in five instances of it, four occurred in inflammation of the pericardium and heart. Did this appearance arise from oil in the serum?

Measles have been also very prevalent; but the cases which have come before us have not been very severe. Hooping-cough is now frequently met with. A few cases of croup have also occurred to us.

NOTICE OF LECTURES.

Dr. Copland begins his Spring Course of Lectures, on the Principles and Practice of Medicine, on Wednesday, at Four o'Clock P.M. at 17, Great Pulteney Street, — and on Chemistry and Materia Medica, at Nine A.M.

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

1. A Treatise on the Diseases of the Eye; including the Doctrines and Practice of the most eminent modern Surgeons, and particularly those of Professor Beer. By George Frick, M.D. Ophthalmic Surgeon to the Baltimore General Dispensary. A new Edition with Notes. By Richard Melbank, Member of the Royal College of Surgeons, and of the Medical and Chirurgical Society of London. 8vo. Pp. 312. Anderson, London. 1826.

2. An Essay on the Application of the Lunar Caustic, in the Cure of certain Wounds and Ulcers. By John Higginbottom, Nottingham, Member of the Royal College of Surgeons of London. 8vo. Pp. 147. Longman, London. 1826.

THE METEOROLOGICAL JOURNAL,

From the 19th of DECEMBER, 1825, to the 20th of JANUARY, 1826.

By Messrs. HARRIS and Co.

Mathematical Instrument Makers, 50 High Holborn.

December.	Moon.	Rain Gauge.	Therm.			Barom.		De Luc's Hygrom.		Winds.		Atmo. Variation		
			9 A. M.	Max.	Min.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	2 P. M.	10 P. M.
20			48	48	46	29 32	29 28	84	84	ESE	SE	Fine	Fine	Fine
21		,10	48	50	46	29 34	29 38	83	92	SSE	SSE	——	——	Sleet
22			46	47	40	29 42	29 60	90	84	WNW	WNW	Fair	——	Fine
23		,10	40	48	36	29 73	29 61	89	87	W	WSW	Fine	——	Rain
24			37	41	41	29 90	30 11	84	84	W	WSW	Fog.	——	Fine
25	●		47	48	37	29 61	29 77	94	71	SW	NW	Fair	——	——
26			38	43	29	29 77	29 65	80	73	W	N	Fine	——	——
27			30	43	30	29 72	29 67	73	73	WNW	WNW	——	——	——
28			32	36	33	29 53	29 48	76	79	W	W	——	——	Fog.
29			33	36	32	29 46	29 46	84	84	N	N	——	——	Fine
30			35	34	28	29 49	29 55	90	87	N	W	——	——	Clo.
31			29	34	28	29 61	29 65	87	84	WSW	WSW	——	——	Fine
1	☾		36	41	39	29 63	29 61	92	89	SSE	SSE	Rain	Rain	Clo.
2			38	41	32	29 67	29 69	81	81	SE	ESE	Fine	——	Fine
3			35	35	34	29 71	29 75	80	84	E	E	——	Fine	——
4			35	36	35	29 76	29 76	81	81	ENE v	ENE	——	——	——
5			36	36	35	29 75	29 71	82	92	ENE	E	——	——	Rain
6			36	36	35	29 57	29 61	92	92	E	E	Rain	Rain	——
7			35	36	32	29 68	29 75	84	79	ENE	ENE	Clo.	Fine	Clo.
8	☽		33	33	25	29 80	29 87	72	67	E	NE	Fine	——	Fine
9			28	33	24	29 90	29 85	67	71	ENE v	NE	——	——	——
10			25	30	29	29 67	29 55	76	78	N	WNW	——	——	——
11			30	33	22	29 56	29 62	85	80	NW	NW	Snow	——	——
12			25	31	21	29 65	29 71	82	75	W	WSW	Fine	——	——
13			22	29	20	29 81	29 81	80	78	W	W	——	——	——
14			21	27	19	29 93	29 96	82	85	W	NNE	Fog.	——	Fog.
15			20	29	19	30 12	30 26	90	85	NNE	NE	——	——	——
16	☽		20	28	20	30 37	30 41	85	85	NE	SSE	——	——	——
17			25	32	27	30 44	30 44	88	82	SSE	S	Fine	——	Fine
18			30	36	37	30 34	30 15	87	85	SW	SW	——	——	——
19			40	42	36	29 97	29 97	93	85	WNW	N	——	——	——

The Rain Gauge having frozen, no account could be taken of the quantity of rain fallen.

NOTICES TO CORRESPONDENTS.

THE Readers of the MEDICAL REPOSITORY may perceive, from this Number, that it is our intention to extend our monthly limits to at least six whole sheets, or 96 pages, and to print the greater part of the work in a closer and more uniform type than formerly, which will be equal to a still farther extension of the limits of the work.

Several Communications are received, and are under consideration.

Literary Notices, &c. cannot be inserted in the body of the work, unless with a very few exceptions, which will rest with the Editors.

Correspondents, and authors of works, or of papers in other Journals, who may wish to have their productions noticed, may send them under cover (post paid) to the Editors, 1 Bulstrode Street, Cavendish Square, or to the Publishers', Fleet Street.

The Index to the preceding Volume will be delivered with the next Number.

Errata in the last Month's Repository.

Page 78, line 13, *for*, Castor Oil, *read*, Croton Oil.
— 88, — 4 from foot, *for*, of, *read*, at.
— 89, — 30, *for*, dispersing, *read*, deepening.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the EDITORS, to the care of Messrs. T. and G. UNDERWOOD, 32 Fleet Street.

THE LONDON MEDICAL

REPOSITORY AND REVIEW.

No. 147. MARCH 1, 1826. Vol. XXV.

No. IX.——NEW SERIES.——Vol. II.

PART I.

REVIEW.

I.

STATE OF THE SICK POOR.

Protestant Sisters of Charity; a Letter, addressed to the Lord Bishop of London, developing a Plan for improving the Arrangements at present existing for administering Medical Advice, and visiting the Sick Poor. London. Knight. 1826.

Observations on the prevailing Practice of supplying Medical Assistance to the Poor, commonly called The Farming of Parishes; with Suggestions for the Establishment of Parochial Medicine Chests, or Infirmaries in Agricultural Districts. By H. L. Smith, Member of the Royal College of Surgeons, London; and Surgeon to the Eye and Ear Infirmary, Southam, Warwickshire. London. Printed by the Philanthropic Society. 1819.

In proportion to the facilities afforded by periodical journals for the dissemination of opinion, is the responsibility of those who conduct such publications for the opinions they so disseminate, and for the industry with which they avail themselves of their frequently returning opportunities of enforcing such as have a tendency to promote the true interests, or to support or improve the character, of the class or profession of persons to which their readers belong. The consciousness of having performed this duty with zeal and probity, and to the best of his ability, is one of the compensations to which an editor should look forward for a life of continual exertion and frequent controversy. This kind of labour, at least, will always appear to him to have been something better than vanity, and its result something better than vexation. Considerations like these, which are surely both just and con-

scientious, make it incumbent upon medical editors in particular, not wholly to confine their labours to selecting and giving publicity to a clinical record of remarkable cases, or to noticing and recording the progressive steps made in the sciences connected with medicine in different countries, or to analysing or reviewing new books of merit—or of none; and we have on several occasions shewn, that we deem it proper and useful from time to time to bring such matters before the medical public as relate to the duties of its members to one another, and to society in general. On subjects of this description, so long as there is freedom of thought, there will be diversity of opinion; but the most opposite parties will seldom refuse to receive liberally such speculations even as they cannot be brought fully to entertain, when they find them emanating from a consistent desire to produce praiseworthy ends.

The publications of which the titles are prefixed to the present article, have re-awakened our attention to a subject of this kind, than which few are in our estimation more important,—a subject which has long been regarded by us as one calling for public animadversion, and embracing the consideration of abuses which seem to have been overlooked amidst the characteristic charity of the times; and which, whilst they are more partaken of than committed by the members of our profession, are caused in a great measure, if not entirely, by the negligence and inconsideration of those who do not belong to it. We speak of the method by which, in almost every part of England, the medical and surgical attendance on the sick poor is provided for, and particularly of what is called *Farming the Sick*. That this subject is beset with difficulties, and surrounded with the thickest vapours of prejudice, affords no admissible pretext for shunning it; and whatever hazard there may be in the attempt to exhibit it in a clear and intelligible manner, we sit down to the attempt as to a duty we have long owed to the character of medical practitioners.

In the able and well-written letter to the Bishop of London, the state of the sick poor of country parishes is clearly and faithfully described, and evidently from what the writer has had sufficient opportunities of observing; and it should alarm the prudence at least of country practitioners, to find that the clergymen about them are as fully acquainted with all the mysteries of farming a parish, and with all the necessary consequences of it too, as the oldest contractor in existence. The principal object of the writer of the *letter* is to propose the establishment in England of a Protestant order of Sisters of Charity—the word Protestant being, we imagine,

used chiefly with a reference to the religion of the majority of persons in England, whom doubtless it would well become, if the plan is found practicable, to be the foremost in promoting it, although the plan itself is such as might be adopted by any sect or persuasion of Christians.

Few of the numerous travellers who have been enabled to visit the continent during the last twelve years, can have failed to notice the dress of an order of nuns, known by the appellation of *Sœurs de Charité;* and whoever has inquired into their life and habits knows that they are a description of persons whose whole time is devoted to charitable labours, and in particular to attending the sick, for whom they perform the most menial, as well as the most important offices. These good women are seen at all hours of the day going about in quest of proper objects of their pious duties. They are persons of a respectable station, sometimes even of a certain *rank*, and have always acquired sufficient information to make them useful without being officious. Happy is he who, when disabled by wounds or sickness, has the advantage of being attended by a *sœur de charité!*

If we reflect for a moment on the general character of the regular *nurse* in this country, we shall find much to deplore, and something to condemn: gossiping, intemperate, selfish, and often negligent of things most important to the sick man's comfort, she has learned to bury all interest in his recovery in a depraved fondness for the dismal festivities in which the common people indulge in the hour of death, and amidst funeral obsequies. It is difficult, indeed, to speak of this class of persons without approaching to that kind of ridicule with which in these pages we can have nothing to do. But when we think of the universal propagation of scandal produced by them, and of their common habits of indulgence in vicious conversation, even in the chamber of sickness; and, on the other hand, reflect on the frame and temper of a sick man's mind; how he is first separated, and gradually weaned, from many worldly feelings by the mere circumstances of his malady; when we observe the effect produced by the very fear of dying, and think how these merciful provisions might be improved, both for the temporal and spiritual advantage of the sufferer; and, considering the opportunities of large hospitals and the great proportion of poor in all towns, how far and wide these 'sweet uses' of temporary suffering *might* be extended among those whose education has been the most neglected, and whose feelings have been the least awakened,—we are struck with the long existing sin of omission, of which we have all been guilty in paying so little

attention to the character and education of persons so important as nurses. The common nurse cannot understand, much less can she avail herself to any good purpose of the salutary workings of the patient's mind: if she is not hardened and profligate, she is probably full of the weakest and worst kind of superstitious fears. A well-regulated piety, the absence of earthly motives, a judicious attention, a cultivated but humble mind, and all those little attentions which, though they make no figure on paper, are all in all to an invalid, make the sister of charity a being so contrasted with her whom we have thus faintly sketched, that she would seem to the eye of sickness like the vision of an angel of light after a dream of the night-mare. The sister of charity does not exaggerate trifling appearances of danger; but she has learnt to know the signs of increasing malady in time to summon abler assistance than her own, both temporal and spiritual: she does not console the weakness of the patient by the private administration of ill-timed stimulants: she does not confirm him in his aversion to taking his medicines: she is, in short, so attentive, so kind, so prudent, so thoughtful, as truly to deserve that most expressive name of sister. What she might be as a meek, simple, pious attendant, we can imagine, but shall not attempt to describe; it is sufficient to say, that she is not to be looked upon as a mere nurse: the proposers of the institution contemplate its being filled by females of a class considerably above that of ordinary nurses, and capable, by means of a better education, of performing duties, sometimes as auxiliaries of the physician, and sometimes of the minister of religion. Let not any one start away from such a proposal because it admits of possible abuses: it has been carried into operation in some countries with the happiest effect; and the important question is, whether or not it can be so in ours?

Of the importance of such subordinate duties being well performed, all medical men will be easily satisfied; and of the usefulness of some such provision as regards an office subordinate to that of the clergyman, in his very essential duty of visiting the sick, the writer of the *letter* leaves no doubt upon our minds. For although this duty is in some measure divided with the clergyman, in most large parishes, by the personal exertions of ladies, who, with minds highly cultivated, and of habits the most refined and delicate, do, from the purest sentiments of a Christian's duty, devote a great portion of their time to visiting the forlorn habitations of the sick poor, of the benefit of which none but the most unreflecting or selfish can harbour a doubt,—yet these exertions

are necessarily less constant and less general than the wants of large and poor parishes require.

'Such assistance is exceedingly useful as an auxiliary, but there are many reasons why it should not be sufficient to make up the unavoidable deficiency in the clergyman's attendance. It is not regular—it is not permanent—it is a voluntary duty, and must therefore give way to many others that are imperative, or are considered as such—it is not under control, and may not unfrequently, therefore, be injudiciously administered, without the possibility of a check—it is altogether withdrawn in the most needful cases, where there is fear of infection.'—*Letter*, p. 11.

We of the medical profession, who know what is passing in hospitals, and in the habitations of the poor, at all hours of the day and night, can well conceive the value of attendants to whom these objections would not apply; but the public cannot be supposed fully to understand it. Various difficulties, we are aware, will present themselves in the course of any attempt to establish an order of sisters for this purpose; and it is even doubtful whether our national prejudices may not be found to operate strongly against it; but as, if it should be attempted, medical men will doubtless be called upon to assist in the good work, we extract from the pages of the letter the following account of the *Sœurs de la Charité*:—

'They consist of women of all ranks of society, many of them having been born in the very highest classes; but who, from various causes, wish to separate themselves from the world, not in the sense in which the phrase applies to other orders of nuns, by surrounding themselves with high walls, but rather in its scriptural sense; while they are impelled by their religious feelings to devote themselves to the benefit of their fellow-creatures. They take vows, and pass a noviciate of a twelvemonth within the convent, and under the immediate inspection of the head of their order. At the end of this twelvemonth, they have the power of withdrawing from their vows, and returning to the world if they desire it. However, it very rarely occurs that a noviciate *sœur de la charité* alters her mind at the end of her probation; and if she continue steady in her intention, she then takes the vows which bind her for life to devote herself actively to the work of charity for the love of God. These nuns have two distinct objects in view; the first is to attend upon the sick, and the second is to educate the poor. They are distributed all over France, and are the principal nurses in the hospitals. They are to be found in every town, and search out the most wretched abodes of disease and want. Others reside in villages, and convey the first rudiments of instruction to the children of the poor. The good that is done by them is incalculable; and the misery which they relieve, by the affectionate sympathy of their attentions, is even greater than that which is removed by their plain sense in

medicine and their excellent nursing. They carry their religion with them wherever their medical usefulness gains them admittance; and the rosary and the crucifix are as important to them as the medicine chest. During a residence in France of some years, though I made many inquiries concerning them, I never heard of one of the order who disgraced her profession by any stain upon her character. There are, I believe, upwards of fifteen hundred of these *sœurs de la charité*, who are ready to attend to every requisition for their services. If a hospital wants a nurse, or a parochial *curé* has need of assistance amongst his flock, application is made to the *Compagnie des Sœurs de la Charité;* and whatever the distance or the difficulty, the charitable sisters set forth at the call. They usually, I believe invariably, are stationed in pairs, which arrangement is made for their own comfort, that in all the distressing and difficult situations in which they may be placed, one may afford assistance, support, and sympathy to the other. They are under the command of the head of the order, who disposes of them in the stations she sees fit, obedience being a part of their vow. The government pays a hundred francs a year to each *sœur de charité* to supply her with clothes, and besides defrays her travelling expenses. If their support cannot be provided from the funds of the hospital, or the parochial resources where their services are required, they are supplied from the general fund of the order; and the active portion of their lives being passed in this labour of love, the period of their decline is rendered comfortable within the precincts of their convent, where even their latest years are beneficially employed in preparing the noviciates for a new course of charitable exertion. They wear a distinguishing dress, of the plainest kind; and they meet with the most universal attention and respect from all classes of people, the high as well as the low, the rich as well as the poor. In travelling about the country from station to station; and in all the situations into which they are thrown, their only, but their sure protection, is the dress of their order; and such is the reverence in which they are held, that even more enlightened persons than the common peasantry hail it as a happy omen, when upon a journey, if a *sœur de charité* happen to travel by the same conveyance; while several instances are recorded, in which the presence of one of them has saved a party of travellers from the attacks of robbers, or the insults of unprincipled men. The surest token of the value of their labours, and perhaps the highest proof that could by possibility be afforded of their acknowledged usefulness, may be drawn from the practical panegyric which was passed on them during the French Revolution. At that period of atheism, anarchy, and horror, when every outward appearance of religion was a sure proscription, and the ready guillotine was the test by which an open profession of faith was put to the proof, a great number of the *sœurs de charité* undauntedly maintained their "faith that worketh by love," and many of them retained the badge of their profession; yet were they rarely molested: their fruits bore the stamp of such evident usefulness, even to the minds

of the monsters possessed with the demon-spirit of the revolution, whose name indeed was Legion,* that they forbore to destroy; and the remembrance of the offices performed by one of these Samaritan sisters in the time of sickness, has stayed the uplifted hand, and quelled the murderous cry of many an infuriated wretch: no doubt that several *sœurs de charité* in various parts suffered, but it is on record, that several were left unharmed while they continued in the exercise of their divine work; and it is certain that they were the only order of persons, connected with religion, who were permitted openly to perform their vows, and discharge their allotted office, in which they were reinstated by the revolutionary government, as soon as the subsiding of the first impulse of anarchy permitted the intervention of any government at all.'— *Letter*, p. 16.

The proposition of the writer of the letter is, that a society of females shall be formed, on a plan having some resemblance to this, modified of course so as to suit the habits and religion of the people; and that their occupation shall be to visit the sick and afflicted, under the direction of the parochial clergy and of medical men; the persons belonging to the order being of known piety, of mature age, and who have had proper preparatory instruction, partly religious, under the superintendence of a chaplain, during a residence under the eye of a matron; and partly medical, during an attendance on some of the public hospitals. It is proposed to effect this plan by means of donations and subscriptions, under royal and distinguished patronage; and the affairs of the institution are to be conducted by a committee of ladies, a general committee, and a medical committee; the chaplain and matron only being stipendiary offices of the charity. Such of the parochial clergy as wish to have assistance of one or more of the sisters are to make an application to the general committee for that purpose; and it is proposed—

'That, previous to making such application, the clergyman shall ascertain what sum he can raise, by subscription in his parish, towards defraying the expense of her support, and what advantages he can otherwise offer her;—that, in stating these particulars to the committee, he shall also state the population and other local circumstances of the parish;—that a comfortable lodging, a convenient cottage, or some proper place of abode, be always required to be found by the clergyman applying;—and that if his other contri-

* We have nothing to do with politics; but really this accumulation of epithets upon men whose faults were indeed great, and their success dreadful, but yet attributable to the system of ignorance and oppression under which it was their misfortune to be born, and which it was in the *first* instance the sacred object of the revolution to put an end to, appears to us to be a little *ultra* on the part of the reverend author.

butions towards the expenses be fairly proportioned to the sources from which it is considered that they could properly be drawn, then a sister should be appointed to the situation;—that an arrangement should be made, by which the contributions shall be remitted by the clergyman to the committee, and that the sister shall receive an annuity from the committee, which annuity shall not be regulated by the sum contributed by the parish; but shall be such as, according to the particular advantages of the place, may render her income equal to a stated sum (perhaps £60 a year).'—*Letter*, p. 19.

Among the difficulties which may attend carrying this benevolent and useful design into execution, those who engage in it may derive hope from being reminded, 'that when in the year 1625, just two centuries ago, the benevolent Vincent de Paul, surnamed "la père des pauvres," established *La Compagnie des Sœurs de Charité*, he could find but *two* pious women who would offer themselves. Yet from this small seed has grown a large tree, whose branches spread to the furthest parts of the land, and afford a blessed shelter to many a weary traveller in his difficult pilgrimage upon earth.' —*Letter*, p. 35. We shall not anticipate objections; but there is one which has not only already been foreseen by the proposer, but which it will probably be imagined that medical men in particular will entertain at the very outset; we mean the objection to the sisters having 'a smattering of medical knowledge.' For our own parts, we quite agree with the writer of the letter, that the degree of medical education which the sisters might, under a proper system, be brought to acquire, would be beneficial rather than objectionable. A 'little learning' is said to be a dangerous thing, we know; but if by *learning*, in this oft-repeated phrase, be meant *knowledge*, we must dispute the proposition, for if ever so little knowledge is acquired, provided that knowledge is correct as far as it goes, it must be useful. If a little knowledge is less valuable than more would be, it is surely more valuable than none at all. Quackery is not so often fostered by a little knowledge as by the absence of the very rudiments of a knowledge of physic; and the presumption of quacks is always greater in proportion to their more or less complete ignorance of the fine and complicated mechanism of the body, and the nature of its maladies, and the operation of medicines. No people are more meddling and more mischievous, and at the same time more grossly ignorant, than the common nurses and midwives who now infest the chambers of the sick; and medical practitioners see very frequent instances in which health has been destroyed, and life rendered comfortless, by their rashness, impatience, and invincible obstinacy. Many

of these inconveniences might, we think, be prevented by a better system; at all events, the manual of instructions proposed to be drawn up by a medical committee for the use of the sisters might be made to contain a great deal of useful information. It should clearly define the narrow limits within which unprofessional persons can act, in cases of sickness, with safety; and it should state, in plain and convincing language, the dangers and evils which might be avoided by reporting the case without delay to the physician or surgeon. Such a manual should also contain directions for the application and general management of leeches, the attention necessary when blisters are applied, the method of applying fomentations, and of preparing some of the most simple articles of sick diet; as well as information concerning baths, cold applications, spunging the skin, suppressing hæmorrhages, the management of infants, &c. &c. &c.; concerning many of which subjects nurses and midwives entertain foolish and hurtful prejudices. Still we would not have the *sœurs de charité* think themselves substitutes for the parish surgeon, any more than for the parochial clergyman, since it is impossible they can ever be efficient substitutes for either. If there be any certainty or solidity in the foundations of medical science, a *sœur de charité* can never be made a good and safe practitioner, excepting under the control of a physician or surgeon; and her most valuable knowledge will be found to be, that she knows when it is best not to interfere. We earnestly recommend our readers to peruse the letter to the Bishop of London, in which they will find all the parts of the proposed plan explained with brevity and clearness; but, at the same time, we trust all idea of the plan having the effect of rendering the attendance of surgeons on the parish poor superfluous, will be abandoned, before experience shall have taught its serious inconveniences.

Let it not be imagined for a moment, that we think the present method of providing attendance for the sick poor of parishes as without great defects. That large feature of it, which consists of what is called *farming* the sick poor, is singularly inconsistent with every thing else in this country in the present day; and would not have been so long unreformed by the gentlemen of England, if a great part of its evils had not been unknown to them. The practice is too general to require much explanation. When the overseers of a parish determine that the sick shall be farmed, it is put up to the *lowest* bidder, almost without any limitation as to the distance of bidders from the place in question, or any regard to their comparative respectability. If a surgeon (for physicians have at least nothing to do with *this* means of de-

grading the profession)—if a surgeon of the greatest respectability, residing within five miles of a parish of 2,000 souls, has attended to the pauper sick for £20 a year, and another surgeon, scarcely known in the country, offers to take the parish for £10 a year, the latter has the votes of the overseers unless their former attendant will lower his terms one-half. *Their* business, they conceive, is to save money to the parish, and in this way as well as in any other. The alternative is obvious: either the surgeon who has already had the parish takes it for a sum which he knows will not remunerate him for attending to it, or the new surgeon takes it, and soon finds out the same thing; but he finds, also, that his distance from the parish is an advantage to him: he does not pretend that he can go near it very often, and he cannot very easily be got at: he has made an indifferent bargain, one among many bargains probably (for some individuals carry on very extensive dealings of this kind), and *his* business being to save money for himself, he neglects nothing for that purpose, and only neglects the sick poor. Of the consequences of these arrangements to the country surgeons we cannot speak without concern and indignation. Habitually depreciated by the most ignorant overseers in their neighbourhood; selected for their cheapness; *forced* into neglect of what they feel to be their duty; entangled in vexatious disputes with the overseers and with one another; subject to the most unworthy comments on the contrast afforded by their charges to individuals and to parishes, and to the imputation of overcharges in all the accidental cases which do not come within the contract; we know that almost all surgeons detest this unworthy competition, as no less degrading than subversive of all social and gentlemanly feeling among members of the profession situated as they are. The consequences to the sick paupers are still worse, and such as we could not detail without the risk of exciting very angry feelings; but if there be any reader to whose eye these remarks will be presented, and whose heart or understanding is so perverted as to make him the defender of farming the sick poor, we promise to produce such facts as will make him ashamed of his cause.

The sums expended in public charities in this island exceed calculation and belief; and the regulation of the expenditure of these great funds furnishes occupation to a countless number of persons, who, themselves possessed of all the blessings of this life, voluntarily incur very great labour and trouble, that they may alleviate the distresses of those, whose condition in the world is less fortunate than their own. Even these philanthropic exertions are exceeded by the wide

diffusion and continual operation of that private charity, which sheds so pure a lustre on the character of our country, and carries comfort and consolation into every hamlet in every corner of this populous kingdom. That, notwithstanding so much zeal and judicious generosity, so vast and wide-spreading an evil as the farming of parishes should so long have been either overlooked or viewed with indifference, is to be accounted for partly by the secluded character of the wretchedness which it creates; partly by the delicacy existing among the humane persons who visit the poor, concerning any interference which would seem to reflect on any members of the medical profession; and partly by the difficulty of suggesting a perfect remedy. And thus from year to year has been perpetuated a system, against which every feeling and sympathy of our nature rises up in arms. We daily see that rank, fortune, prosperity, the attentions of friends, and all the consolations of wealth, and all the resources of a cultivated and disciplined mind, are unable in the hour of sickness to render men independent of the mere professional skill which they can command, or even of the soothing or agitating influence of the manners of their professional attendant. In no other circumstances is the human soul so weak and so anxious for support. The feelings of the lower orders of society are less acute, but precisely of the same kind; for sickness does indeed most truly begin 'that equality which death completes.' Their occupations are suspended, their coarse and scanty pleasures are interrupted, their humble prospects are clouded, and all their hopes rest on the kindness, and attention, and skill of the physician or surgeon. But it is precisely at this time that, by the parish system, they are made to experience the worst disadvantages of their station, and are subjected to an arrangement, by which their health and feelings are made as much the subject of an interested bargain as if they had been actually bought and sold in the slave-market. Therefore it is that they so often neglect to apply to the parish surgeon until it is too late, and linger on from day to day in pains, in privations, in sickness of body, and that sickness of the heart which arises from hopes, not deferred but destroyed; and, considering themselves destitute outcasts, begin to feel that discontent with man and God which it is always found so difficult to eradicate; and, even if they regain their health, lose in many instances all the qualities which made them respectable and useful.

It is far from our intention to throw measureless blame on the surgeons and apothecaries: we know too well how unjust it would be so greatly to misrepresent the feelings with which they find themselves compelled, when they first

establish themselves in country towns, to compete for parishes: nor is there any thing we should more lament, than an appearance of advancing a charge of deliberate inhumanity against any members of a profession to which we are no less attached by choice than by circumstance—a profession which calls for the full exertion of the mind in pursuits of the highest interest, for practical purposes of the noblest kind; and the followers of which have ever been distinguished, as a body, for an enlightened attachment to learning and to every branch of science, and for the habitual exercise of duties which are often most laborious to themselves—always most beneficial to mankind, and performed in daily and innumerable instances without any hope or expectation of reward beyond the consciousness of doing good.

An expensive education; the necessity of keeping up a respectable appearance; the number of competitors for public confidence; the slow growth of that confidence; even the gradual increase of engagements, harassing both to body and mind,—are all circumstances which cause the young surgeon to accept, and the old surgeon to retain a hold, real or imaginary, on nominal districts of country; and it is generally thought that to have the poor of a parish is a step to having the rich. 'The parish doctor is often seen in the village, is ready at the call of the farmers, shopkeepers, and those who are able to pay for themselves; and the medical man who farms the parish is thereby introduced into a considerable extent of village business, which constitutes a large portion of the income of most country practitioners.'* It is the latter circumstance which, in our view of the matter, is more detrimental to the country practitioners than any other: they are tempted in early practice to take parishes very cheap, on speculation; and in these enterprises the least respectable man in the neighbourhood has a great advantage: the more imperfect his education has been, the cheaper can he do the parish work; and not that work only, but the whole business of a country practitioner. Then comes the worst effect of all, as far as medical men are concerned—for country people think more of the cheapness of an apothecary's drugs than of his learning—and the cheap doctor gets all the business; and in this way the whole rate of apothecaries' charges has, as we know from actual observation, become in some parts of the country so much below what it ought to be, that the general practitioner, though full of engagements, barely gets a livelihood, and can make no provision for his family. We think it is in the power of the country surgeons and apothecaries

* Letter to the Bishop of London.—P. 5.

to take higher ground, and to set a higher price on their time, their talents, and their labour. In our profession, talents can never be exercised at once gratuitously, and for the advantage of the whole body of the public, for any length of time: no man of real talent would steadily submit to the fatigue of medical and surgical practice without that pecuniary remuneration which is to procure him comforts, or independence, or luxuries, or the means of intellectual gratification. But too many parish surgeons may be said to work for *next to* nothing; and we lament to feel convinced, that a conscientious parish surgeon, who does all that he knows to be his duty to his parish, must, according to the present system, be both hard-worked and ill-paid. Where can be the necessity for this? Are medical men so sunk as to be at the mercy of parish overseers? Are science, and skill, and attention of so little worth, that it has become a matter of favour to be allowed to exert them? By no means. But the overseers of country parishes, however upright they may be as individuals, partake a little of the narrow spirit of all corporate functionaries; they are generally of a class of persons who estimate the value of an apothecary's attendance by the weight and measure of medicine furnished; they firmly believe that 'a penny saved is a penny got;' and as they find that some apothecary or other, near or distant, will take their parish for as small a sum as can possibly make a decent item on paper, they think the parish must be benefited by the bargain. They do not easily comprehend that the above famous axiom of prudence is only true in certain circumstances; and that if a man is neglected in an illness in the prime of life, because his parish surgeon lives at a distance, and is not properly paid for seeing him, and thus becomes more or less burdensome to the parish for the long remainder of his existence, the penny saved by the first neglect is *not* a penny got, but many hundred pennies lost to the parish.

The sentiments of the best educated surgeons throughout the country being, as we have represented them, so averse to the continuance of the system of farming parishes, it might be supposed that any attempt to put an end to it would be favourably received by them. An allusion is made by the writer of the 'Letter to the Bishop of London,'* to the only persevering attempt of this kind with which we are acquainted; and the nature of this attempt is fully developed in the pamphlet, of which we have also placed the title at the head of this article. Mr. Smith's proposals have not, however,

* See Letter.—P. 8.

met with an uniformly favourable reception from medical men, and we must ourselves plead guilty to having for some time very much misunderstood them; particularly with respect to that part of them which comprehends a scheme for receiving subscriptions from persons *not paupers*, such subscribers being to be visited in illness, and to have medicine at the expense of the general fund; in short, a kind of Saving Bank against Sickness. But on duly considering this subject, both parts of the plan appear to us to tend to the same end. The pauper list is greatly increased every year by those who first become paupers on account of some transient sickness; and if these persons could be supported through the sickness, they might often be prevented becoming paupers at all. After once becoming paupers, it is to be feared they generally contrive to remain more or less burdensome to the parish: if they can not only be prevented becoming paupers, but prevented by what they have themselves previously saved and subscribed, or deposited, a great benefit is done to them, and to the public at the same time. It is easy to see on what the repugnance of practitioners towards this plan is founded, and we shall, notice that poin tpresently; but in fairness to Mr. Smith, and for the general information of the profession, we shall in this place give insertion to his plan of a District Infirmary:—

'I. That a General Infirmary and Dispensary be established at , open for all the labouring poor, who are resident within six or seven miles of that place.

'II. That it be supported by voluntary contributions, and by individual and parochial subscriptions; the latter after the rate of £3 per annum, for every hundred of inhabitants in all villages situated within three miles, and £4 per annum for every hundred in all villages beyond that distance.

'III. That mechanics, servants, and labourers, who are not strictly denominated poor, and who may be desirous of availing themselves of the advantages of this institution, be allowed to do so, on contributing annually 5*s.* each.

'IV. That every female subscriber of 5*s.* shall be entitled to medical attendance.

'V. The subscriptions for children under the age of fifteen to be 2*s.* 6*d.* each per annum.

'VI. That subscribers of one guinea per annum may recommend two patients (cases of midwifery excepted).

'VII. That annual subscribers of one guinea shall annually elect a committee of twenty from among themselves, who, with the overseers of the subscribing parishes, forming part of the committee, shall have the direction of the establishment.

'VIII. That Messrs. A. B. C. be appointed surgeons to the insti-

tution, and any, or every regular medical practitioner, residing in the district, be admitted into the establishment, at the discretion of the committee.

'IX. That Mr. A. be appointed to attend every Monday and Thursday, from ten to eleven. That Mr. B. on Tuesday and Friday. That Mr. C. on Wednesday and Saturday.

'X. That 2*s.* 6*d.* be allowed for every journey within three miles of the Infirmary, and for every additional visit in the same place 1*s.*, and for every additional mile beyond that distance 9*d.*, or . That after the expenses of the medicines, and all other demands on the funds, are paid, £50 (for the current expenses of the institution) be then kept in the treasurer's hands, the remainder to be divided between the surgeons, in proportion to the number of miles travelled and visits made; and each surgeon shall deliver in a monthly account of his journeys and visits to the secretary, from which his allowance shall be calculated.

'X. That the poor shall have the privilege of being attended at home, by such one of the surgeons as they may desire, upon sending an order signed by the minister of the parish, or the overseers.

'XII. That the poor of subscribing parishes, who may be able to attend at the infirmary, upon observing the appointed hours, and producing evidence of their belonging to such a parish, require no other recommendation.

'XIII. That all medicine be purchased by the surgeons, under the direction of the committee. The surgeons to find their own instruments, except trusses.

'XIV. That lodgings and accommodations, for patients requiring frequent attendance, be procured at the expense of the funds, provided they have no accommodation for sick in the house.

'XV. Paupers not being maintained out of the funds of the institution, must, therefore, if in lodgings, be supplied immediately from their parish; and if in the infirmary, will be provided for by the housekeeper for 5*s.* 6*d.* each per week, and if under ten years of age 3*s.* 6*d.*—Her accounts are separate from the funds, but regularly investigated by the committee.

'XVI. That under unavoidable circumstances, that may require the absence of the surgeon officiating, he shall provide a substitute.

'XVII. That no important operation in the infirmary be performed without the attendance of two surgeons. The operating surgeon only shall be allowed to introduce visitors to an operation.

'XVIII. That the committee (five constituting a majority) meet on the first Monday in every month.

'XIX. That a treasurer and secretary be appointed, the latter with a salary.

'XX. That in extreme cases the surgeon, if he thinks it expedient, do call in the aid of such neighbouring physician as he may think proper, whose fees shall be paid out of the funds.

'XXI. That notice of the physician's attendance be communicated to the surgeons of the infirmary by the surgeon who solicits his attendance.

'XXII. That when the usual midwife is obliged to call in the assistance of an infirmary surgeon to the female poor in labour, such surgeon shall be entitled to one guinea for his attendance, from the funds.

'XXIII. That no female poor be entitled to medical attendance when in labour, on account of the establishment, but as above.

'XXIV. That the names of the surgeons, with their days and hours of attendance, be fixed in the common room.

'XXV. That patients desiring a consultation of the surgeons, do, with the consent of two overseers or governor, send the secretary an intimation of their wish to that effect.

'XXVI. That the poor find their own bottles, phials, and bandages, and come supplied with them after the first visit.

'XXVII. That any complaint of inattention, or neglect, of the nurse, secretary, or surgeon, be directly stated to a subscriber, who, after investigating its truth, will report it to the committee.

'XXVIII. That wine, sago, porter, &c., be ordered for the patients by the surgeon only, and kept by the nurse, who shall deliver in a monthly account of what has been thus expended.

'XXIX. That every patient admitted into the house do conform to the rules thereof, or be discharged, and a report of the cause of his dismissal be made to the party who recommended him.'—Pp.13—16.

Of all the parts of the above plan, that which we believe has weighed, and weighs, most strongly against its obtaining even a patient inspection, is what relates to those who may be called the benefited subscribers: it has been conceived, that the effect of affording such an opportunity as this to the lower classes would be, that many would avail themselves of it who could afford to pay the apothecary. We should look upon this as a very serious objection indeed. Between the paupers, however, and those of the labourers *who pay*, as well as *employ*, the apothecary, there is (as many an apothecary's book could tell) a very considerable class of persons who are burdensome to him as long as they can, and then become at once, and for ever, burdensome to the parish. Now we conceive a well-regulated district infirmary, or dispensary, would prevent both these inconveniences. Too great care could not be taken to prevent the intrusion of persons in better circumstances; for nothing strikes more directly at the root of industry than indiscriminate eleemosynary aid of any kind: and if any means could be devised by which this point would be made *secure*, we believe the objections of many who now feel jealous of the plan would be wholly removed. It would thus become a part of that well-devised system of charity which draws a judicious distinction between *assisting* and *mere giving*, and which effectually provides for the relief and help of the most industrious and deserving, because it exacts some portion of exertion as a title to its benefits.

A single perusal of Mr. Smith's plan will shew that it possesses these advantages:—1. The sick person is able to choose his attendant, a most desirable and proper privilege. 2. The medical men who reside near each other can readily consult together concerning difficult cases; the result of which will be, that no case will be allowed to get worse from neglect, whilst the general spirit of practitioners will be kept up. 3. The poor, who have often even an unjust want of confidence both in the parish surgeon and his powders and potions,* would think very differently of medicine thus supplied to them, and in some instances would obtain medicines which no parish surgeon could be expected to supply them with under his contract; they would also be more regularly, because more easily, attended to. 4. Each parish would pay a just sum for the professional attendance required by its poor. In short, among many minor improvements, the following, which are all-important, would be secured:—The poorest person in the poorest parish would not be neglected; the apothecary attending him would be properly paid; the parishes, whilst they paid what was right, would not be liable to extortion: and these points ought to recommend it as much to the country surgeons as to all the parties interested.

It should be added, that Mr. Smith has not wholly trusted to speculation, or limited his exertions to making specious proposals. When the plan above described had been laid before the public some years, he determined on endeavouring to put it to trial, under his own inspection, and that of a committee, to be chosen out of those who should attend a meeting summoned for the purpose. Such a meeting was held at Southam, about three years ago, and most respectably attended. In the list of names of the committee then appointed, we find several of the most opulent and influential of the country gentlemen of the county of Warwick, with whose sanction a District Dispensary was established, and has now been nearly three years in operation. The result has recently been given in a Report from the committee, and appears to be very favourable, although hitherto the institution has had to contend with the disadvantages of its novelty, and of being not fully understood. We trust Mr. Smith will persevere in this experiment, the result of which is observed with no inattentive eye by those whose power of drawing public attention to it is far greater than our own; by men in whom great influence is

* Mr. Smith observes, 'This is almost the only instance of independent spirit the poor laws have not destroyed.' We fear this is too true: and the great recommendation of the reform we are advocating is, that it would tend to encourage, or rather to revive, the independent exertion of those who now look upon the parish as an 'inheritance.'

happily combined with the most enlarged philanthropy. For ourselves, we confess that we watch the plan with interest chiefly with reference to the *parish* system, of which we cherish a hope that it will eventually effect the downfall: but the change included in that downfall is so great, the evil complained of is so general, and so hallowed by that long custom, which always confounds right and wrong, that our present hopes are limited to the perseverance of the proposer, until such statements can be made in the proper place as will ensure the interference of Parliament. We may be mistaken, but we scarcely hope to see a complete stop put to the system of farming the sick poor until the practice is declared illegal.

There is one circumstance connected with the District Dispensary already said to have been established, which, although its being mentioned here is not very important, might yet, if omitted, be supposed to be so left out from an improper motive. We will not conceal, therefore, however we may lament the fact, that many of the country gentlemen who entered very warmly into the plan at first, have, without professing to have changed their opinion, thought themselves not justified in taking any further active part in a matter which some of the country practitioners have represented to them in the light of an unjust and even cruel interference. The considerateness which forms part of the character of those who know all the interests and all the wants of the country, has been practised upon by these remonstrances to an extent which threatens to obstruct all improvement,—as if the parish system were a thing so pure and holy that it could not be touched without a kind of sacrilege. But this delusion cannot last long. The representations were sincere enough, no doubt, but they were founded on misapprehension; at least we should be sorry to entertain any other supposition.

We do not expect in these days to arouse any excessive spirit of jealousy in those physicians and surgeons who hold appointments in public hospitals, if, as connected with this subject, we express our opinions on these institutions without reserve. Every day convinces us more and more of the incalculable benefits accruing to the public from hospitals, dispensaries, lying-in charities, and all establishments, under whatever name known, of which the objects are similar. Without institutions of this kind, the condition of the poor, in countries which are called civilised, would be that of savages, without their independence. Wherever we find poor families, to whom the benefits of these institutions do not come in any shape, there we find wretchedness in all its forms; the children dirty and diseased; and the older people suffering daily and hourly from neglect in some past sickness. All these chari-

ties bring the poor out of the rude hands of those just above them, and place them within the notice of those of more elevated station, of more enlightened minds, and better cultivated feelings. The institution of hospitals, in which the sick poor could have the best advice and the most kind attentions of every kind, was perhaps one of the greatest of the many civil blessings which followed the establishment of the pure religion of Christ. When they were first established, and for a considerable time afterwards, the population of this kingdom was thin and scattered, the wealth of the provinces very inconsiderable, and the means of education difficult of access; hospitals were necessarily fixed where large communities were collected, and where talent of every kind was most surely to be found, engaged in the pursuit of wealth; and as large towns were not numerous, each hospital was intended to ensure the advantages of professional skill to a wide district, of which it was the centre. But every thing is changed in England. Towns are more numerous, the provinces more populous and wealthy, the means of medical education within every man's reach; and talents and information, which a century ago would have challenged attention in the capital, may now be found contending for success in all the towns, and in many of the villages, of this highly cultivated country. Do not all these circumstances together render the ancient constitution of hospitals rather inconvenient? Would they not be more useful if smaller and more numerous? Whoever has resided in a part of the country remote from the 'county hospital,' or in counties where there is no hospital, can have little doubt how to answer these questions. We are content to leave them open to free discussion: we have no object in view but the diffusion of as much good as possible to as many individuals as possible, without any approach to extravagance; and he who suggests the best method of effecting these ends shall always have our thanks and our support.

The plans thus noticed, and more particularly that of Mr. Smith, are presented to our readers, not as out of the reach of objection, not as meeting every difficulty, but as truly worthy of grave and deliberate examination. Let the defects be pointed out; let the propositions be amended; but, at all events, let medical practitioners try to reform a system which is prejudicial to their interests, and to their estimation in society. We will speak openly;—we wish professional men to be active in promoting a reform which will do them honour, and which, if they neglect it now, will by and by be effected without them. Many particulars indicative of the necessity of this might be added, for we have merely opened the subject, but they are all pretty well known to medical men, and

we trust we have said enough to attract attention to them: the rest we leave to the good feeling of medical practitioners; and we will, for our own parts, afford every opportunity for free discussion on a question on which the highest abilities might not unworthily be employed.

As for the author of the plan last noticed by us, we should be sorry to prejudice any of our readers against him, unknown as he must be to many of them, by what might appear injudicious and partial praise; but if it be in the nature of things that the most disinterested exertions for the good of a very large portion of the least fortunate inhabitants of a flourishing and charitable land—exertions steadily pursued, for many years, against many difficulties—at great expense—with much labour—with frequent disappointments—through 'good report and evil report'—with the utmost openness, and the fullest desire to explain every part of the object proposed, and to listen to all suggestions, from all persons, and on all proper occasions—should at last succeed, we shall look forward to Mr. Smith's receiving his reward, at no very distant day, in the approbation of all parties, not in his own neighbourhood only, but generally throughout the kingdom; and in the still more gratifying consciousness of having had it in his power to do more than it often falls to the lot of an individual to perform for those who are abandoned to every variety of suffering and neglect. But should such a reward never be attained by him, we exhort him to remember, that the merits of endeavours like his are in no degree dependent on their success.

II.

THE MEDICAL DOCTRINE OF M. BROUSSAIS.

[Second Article.]

Conversations on the Theory and Practice of Physiological Medicine, or Dialogues, etc.; containing a concise Exposition of the New Medical Doctrine, and a Refutation of Objections brought against it. Translated from the French. 8vo. Pp. 326. Burgess and Hill. 1825.

Lettres à un Médécin de Provence, ou Exposition Critique de la Doctrine Médicale de M. Broussais. Par A. Miquel. Paris, 1825.

Exposition des Principes de la Nouvelle Doctrine Médicale; avec un Précis des Thèses soutenues sur ses différentes Parties. Par J. R. A. Goupil. Paris, 1824.

Were it not a part of our editorial duties to give to our readers an account of all the proceedings of the medical scientific world, we should hardly have persuaded ourselves to

have investigated at any length the whole system of the French medical reformer; for scarcely had we entered upon it ere we became truly disgusted with his intolerable arrogance, and fatigued and annoyed by the perpetual contradiction which distinguishes his theory. Having, however, already analysed this part of the system at some length, we proceed to shew the manner in which it is twisted so as to apply to every case. In doing this, however, it is by no means our intention to discuss every point in which we disagree; and we must, in the first place, caution our readers against the conclusion, that where we have entered no protest we are in perfect concordance with the author. To discuss every part of the new medical doctrine would require a volume fully as large as M. Goupil's, which contains upwards of six hundred pages; and, after all, such a critique would probably be very little read.

In the practical application of this system, the great point of attack and defence has been those diseases which by nosologists have been ranged under the head of fever, and the phenomena of which have never hitherto been satisfactorily accounted for. They were considered as diseases implicating the whole corporeal system; but in their progress frequently attacking some particular organ, and more especially the brain and lungs. M. Broussais, however, having denied the existence of any really general disease, and maintaining that in every case some individual organ is the seat of the complaint, with which afterwards one or more organs sympathise, found himself compelled to give a different explanation of fevers, and to attach all their phenomena to some local origin. We may perhaps be unjust to M. Broussais's motives in fixing upon the stomach and bowels as the offending parts; yet we cannot but suspect that in doing so he was principally influenced by a desire of evincing originality. That fevers of every kind have their source in some local disorder is no new opinion. The circumstance, that local injuries were frequently attended with febrile symptoms, and that the fevers thus excited imitated accurately those which had no manifest local origin, has frequently excited a question respecting the real nature of the latter. But Dr. Clutterbuck has pursued the matter much further; and has proved, in his own opinion at least, most completely, that fevers are nothing more nor less than inflammation of the brain. Whether M. Broussais might not have seized upon this organ, had it not been thus preoccupied, we leave to the decision of those who may feel interested in the inquiry. As it is, however, he has laid hold of another of the more general phenomena of fevers, viz. the affection of the alimentary canal; and admitting no

longer the term fever, comprehends all those complaints to which it has long been applied under the designation of gastro-enteritis. The author of the 'Conversations' has introduced a young disciple of Broussais, illustrating the supposed truth of this doctrine by the case of his own father, who, when in the last stage of typhus, with sunk pulse, low muttering delirium, and subsultus tendinum, was restored by the application of fifty leeches to the abdomen, with weak broth and lemonade.

According, then, to this reformer of medicine, fevers are nothing else than inflammation of the alimentary canal, connected sometimes with inflammation of other organs; but in themselves being only different species of gastro-enteritis. Thus the bilious fever is only an affection of the alimentary canal, in which the locomotive muscles are painful and the bilious secretion very abundant; and the mucous fever, again, is only a gastro-enteritis, in which the mucous secretion abounds. The inflammatory fever of authors is an intense degree of inflammation of the digestive canal; while the typhus fever is the same affection after the vital powers have been exhausted by the previous violent and disordered action. The affections of the brain and the heart, as the stupor, delirium, &c., the quick and hard pulse, and irregularity of the circulation, are entirely sympathetic, and originate from the primary affection of the alimentary canal. The variety and extent of these sympathies M. Goupil has considered at great length; there is in them, however, nothing particular,—nothing which has not been frequently noticed, and differently applied, formerly. Allowing, however, that the essential fevers of authors are really only different species of gastro-enteritis, yet there seems some difficulty with respect to what have been termed traumatic and eruptive fevers. In those fevers which are the offspring of contagion, or marsh miasmata, it is very easy to conceive that the exciting causes, whatever these may be, may exert their influence more peculiarly upon the mucous membrane of the stomach and intestines, and in this manner the author of the new medical doctrines explains the origin of such fevers, differing, as he observes, in nothing but in the external causes that excited them. In order, therefore, to make the eruptive fevers, &c. come within his system, he reverses the order of the phenomena, the sympathies in these cases acting from without inwards, and the stomach, &c. being only secondarily affected. To this sympathetic irritation, also, according to M. Broussais, it frequently happens that their principal danger is owing, as in those inflammatory disorders which not unoften terminate in typhus fever. Thus then is the traumatic fever

likewise precisely the same affection with the essential fever—a real gastro-enteritis, originating from the sympathetic irritation of the stomach with the wound; and an eruptive fever is an inflammatory disorder, affecting at the same time the skin and the digestive canal. The influence of the sympathies, however, does not end here, for the Professor of Val de Grâce does not attribute the danger of the gastro-enteritis to the membrane primarily affected, but to the extent of the consequent irritation of the heart and brain. In ordinary cases, after a short time the disease disappears, often imperceptibly, sometimes by a manifest crisis; but at others, the brain and its membranes become inflamed, and all the symptoms of typhus fever ensue, with frequently a fatal termination. M. Goupil puzzles over the question, whether, as the most serious symptoms are owing to irritation of the brain, the latter would not sufficiently explain the phenomena of fever without recurring to the affection of the alimentary canal? and he only ends it by asserting, on the authority of 'the master,' that gastro-enteritis always is present with fever. That this has never been proved, however, we trust that our readers need scarcely be told—it is merely in the present case assertion, and an adjunct is given, which, on the Broussaians' own shewing, is quite unnecessary in the explanation of the symptoms. The really important characteristics of typhus spring from the cerebral affection, upon their own confession, how then does it become requisite that the stomach should be implicated? In the same spirit of systematising, M. Broussais asserts the plague and yellow fever to be species of gastro-enteritis, 'complicated, however, almost always with some additional local inflammation, and most frequently of the brain and its membranes.' All the phenomena of fever, he contends, may be explained and understood by this view of them, and their cure rendered easy and certain. Since inflammation is the real disease, antiphlogistic remedies must be strictly pursued; and with this plan, it is asserted that the most remarkable success has been met with. Then, again, in the antiphlogistic method, both cathartics and emetics are forbidden, because they are stimulants of the inflamed parts; and pushed to explain how it has happened, nevertheless, that these two remedies have often been successfully applied in the cure of fever, he most intrepidly speaks of them as occasionally acting as revellents, although they stimulate the part affected; and revellents, as understood by all writers, produce a metastasis of the diseased action. The Broussaians, however, appeal likewise to experience in their favour. 'Every day,' says the author of the Con-

versations, ' physician-physiologists observe disappear from their practice all the pretended essential fevers :' and M. Broussais himself, in his Examen, published in 1821, says, ' Already the tables of mortality testify in favour of the new doctrine ; and I confidently believe, that the physiological doctrine, perfected as it is capable of being, will soon have a more remarkable influence upon the increase of population than the discovery of the cow-pox :' and a year after he even goes farther, and asserts, that in those hospitals which have adopted the physiological doctrine, the diminution of mortality was from one in five to one in thirty. The following remarks and statement, published in the *Revue Médicale* in the month of April, 1824, appear to us so important, that we shall give them at full length, trusting that they will prove of use in enabling our readers to form a proper estimation of the value of this new doctrine :—

' I know not whence M. Broussais has received his information ; but I can testify to its incorrectness. If he had taken the trouble of examining the tables of mortality, he would have discovered that in no hospital had so large a proportion been lost as one in five, not even in the time of an epidemic. He would have found that there is not a single physiological physician, not excepting Broussais, who has not lost more than one in thirty. If, however, the new has so many advantages over the old doctrine practice, and M. Broussais had held himself bound to make it known, he would have distinguished the civil from the military hospitals, for no one knows better than himself that the mortality of both cannot be the same.

' This distinction once made, he would have established a comparison between hospitals of the same kind, or what is even better, between those physicians who pursue the new, and those who still adopt in their practice the ancient doctrine, in the same hospital. He might have made this parallel in his own hospital, and among his own colleagues. Why has not this been done ? or why has it it not been published ? The following table will perhaps explain it :—

' *Table of the Mortality of the Hospital of Val de Grâce for five Years.*

Years.	M. Vaidy.	M. Desgenettes.	M. Pierre.	M. Broussais.
1815	1 : 17	1 : 19	1 : 16	1 : 11
1816	1 : 24	1 : 22	1 : 25	1 : 19
1817	1 : 18	1 : 20	1 : 24	1 : 14
1818	1 : 15	1 : 16	1 : 20	1 : 12
1819	1 : 12	1 : 18	1 : 18	1 : 8.

Against this *exposé* M. Broussais has written a very violent tirade, in which he endeavours to argue away the value of the above statement, and accuses his opponents of malevolence and bad faith. The language he employs is such, however, as a good cause could never require, and which, we may well believe, would never have been used had he had it in his power to contradict the truth of the statement. The fact is, that M. Broussais has not been as successful in his practice as he would have us to believe; but determined to become the founder of a system, he supplies by arrogance and abuse what he wants in accuracy and success. In this also, if the Scotch theorist has not been slandered, he closely imitates Brown.

The common fever of this and other climates is not the only form of gastro enteritis admitted by Broussais; but under the same nosological arrangement he places the cholera morbus of the East Indies. It must be confessed, that he has a most happy manner of just adopting such evidence as is suitable to his theory, and of neglecting to investigate every document that may in the least militate against it. Accordingly he asserts, as he says, upon the authority of a Dr. Gravier, that 'blood-letting and emollient beverages saved in a few hours all those who were fortunate enough to obtain this assistance in the moment of its commencement;' while he entirely neglects the notice of those masterly reports which have issued at different times from the Medical Boards of Bengal, Bombay, and Madras. Mr. Jameson, who, as secretary to the Board of Calcutta, corresponded upon the subject most extensively with the surgeons of the different stations, and received from full one hundred medical men most important information respecting it, which he has embodied in a report, must be allowed to have had the best opportunity of forming a correct judgment, gives a very different account of the matter. According to this very competent author, the effect of bleeding was different in the different periods of the epidemic. In the earlier period, though occasionally beneficial, he observes, 'We must, upon the whole, speak unfavourably of the results of the practice at this early period of the epidemic.' Afterwards, indeed, when the symptoms were generally milder, he observes that venesection rarely failed to give relief. Neither did the morbid appearances at all justify the wholesale deduction of Broussais, for in those who died at the earlier periods of the disease 'the bodies frequently exhibited hardly any unhealthy appearance;' and the marks of inflammation were found only 'in such as had

lived some time after the commencement of the attack.' We could, it appears to us, hardly have better proof than this that the disease is something more than mere common inflammation. Indeed it is very evident, from the reports alluded to, that death was the consequence of some violent affection of the nervous system, from the derangement of which the after virulence of the symptoms depended. After thus shewing that M. Broussais is not very particular in his mode of proof, we cannot refrain from also stating, that he is not very nice in claiming as his own, opinions and practice which have very long been acknowledged as correct in medicine. Thus, after stating the danger of applying blisters in inflammatory diseases till the system has been previously reduced by blood-letting, he actually claims this as a discovery and improvement of this physiological medicine. We will give the passage at full length.

'The moderns do not apply counter irritation on the skin until they have sufficiently reduced the internal irritation by bleeding, then that which is excited in the skin becomes the strongest, and the revulsion takes place. *This is one of the great improvements our theory has introduced in the treatment of inflammatory diseases.*'

In proceeding with the history of the practice of Broussais, we find ourselves in a very curious dilemma; for we are compelled to infer, either that the French medical practice is ten times more ignorant and inefficient than the published documents will prove (low as these occasionally shew their practical knowledge to be), or that the author of the new medical doctrine is guilty of the grossest falsehood that any one ever attempted to palm upon the public. For practices, which have in this country been followed beyond the memory of the present generation, are claimed by this leviathan of arrogance as peculiar discoveries of his own; and these claims are followed up by assertions of success in practice, of the value of which we have already enabled our readers to judge. It might be supposed, that the very energetic manner in which pneumonic inflammation has been met in this country would have left no very great improvement, so far as the efficient employment of antiphlogistic remedies are concerned; but M. Broussais says, that though he continues 'to treat fluxions of the chest by bleeding,' yet that 'he has very much improved this method in pneumonic inflammation.' Now this great improvement is nothing else than carrying bleeding, generally in the first instance, to the fullest allowable extent, and the application of leeches, when the strength is so reduced as no longer to admit of venesection;

and all this is explained with considerable pomp of word; and we are gravely told, that the advantage of this method consists in this —

'That the flow of blood from the punctures, after the falling off of these animals, acts in a manner more direct upon the focus of inflammation, and much more permanent than the bleeding in the arm, after which the disease gains a new ascendancy. Besides, the superficial bleedings of the skin cause less weakness than bleedings of the large vessels.'

Such are the common school-boy reasonings which are held up by his disciples as admirable examples of correct observation and logical acumen. Having already noticed his opinions respecting the nature and treatment of tubercles of the lungs, &c., we pass onwards to the subject of apoplexy.

M. Broussais can permit very few diseases to pass without involving them, in some degree or other, with gastro-enteritis; and if we will employ common language, and content ourselves with affirming that some kind of intestinal affection frequently accompanies, and is frequently the cause of, diseases of distant parts, we know not that any objection can be made to the doctrine. Deprived of its peculiar phraseology, this appears to be what the medical reformer asserts respecting apoplexy; and his practice is accordingly directed very much to relieve and to remove the irritation of the alimentary canal. Having, therefore, referred to this as one of the sources of apoplexy, and asserted that the immediate cause is an irritation of the brain, and not merely a superabundance of blood, he recommends bleeding, counter irritants, and abstinence from all stimulants, in its treatment. He is particularly adverse to purgatives, because he considers them as a very fruitful source of those intestinal irritations which produce apoplexy. His precepts in this instance seem too exclusive, since there is no period in which he will admit that active purging can be proper. His principal rules of practice are those which have now for years been followed by English practitioners generally; and which have been by them, as they now appear to be by Broussais, carried much farther than the legitimate deductions from experience will justify. Dr. Cooke, in his work on apoplexy, has well observed, that the great difficulty lies in distinguishing the proper period for abstaining from lowering and for recurring to stimulating remedies—a distinction, however, which Broussais deems it perfectly unnecessary to make. Emetics our reformer entirely condemns; and in this he is supported by the most judicious practitioners of our own country. In the chapter

which is devoted to the consideration of apoplexy, it is actually asserted, that till the appearance of Broussais's 'L'Histoire des Phlegmaries Chroniques,' the existence of chronic inflammation of the digestive canal was 'quite unknown.' Are we to attribute this assertion to ignorance, or utter shamelessness?

Consistent with the observation just noticed, he proceeds to say, that those physicians who have not adopted the new medical doctrine assert that there is no such thing as a chronic gastritis, but that this malady is a mere chimera. How far this may be true in France, we cannot determine; but we suspect not more so than in England, where its nature and treatment have long been understood. The following is his account of this universal disease:—

'He who digests his food with difficulty, although he has still sufficient appetite, or even possesses more than usual; who experiences a burning heat at the region of the stomach, rumination, eructation, flatulence, a flushing of the countenance, or who complains of pain in the head two or three hours after his meals; who feels at the same time pains more or less violent at the pit of the stomach, and under the false ribs on either side, situations that we call hypochondria; who experiences often an internal heat, a sense of fatigue, and even slight febrile disposition,—is attacked by a chronic gastritis. I will say more, nearly the whole of those who digest with difficulty, whose stomachs before possessed much energy, become capricious, and require to be coaxed with certain aliments; they who are obliged to attend continually to the stomach; they who are unable to support hunger, contrary to habit, without suffering acute pain; they who are obliged to walk or drink to assist digestion; they who pass restless nights, with troubled dreams, and awake with a foulness of the mouth, the limbs fatigued, a heaviness of the head; nearly the whole of the individuals, I dare assert, are labouring under chronic gastritis.'

Before making any observation upon this passage, we subjoin another, respecting the treatment.

'To him who labours under a chronic gastritis, we prescribe bleedings on the region of the stomach, water or refreshing potions for common drink; we cautiously abstain from the use of those medicines called stomachics, tonics, digestives, corroborants. If there should exist fever, or vomitings, or the digestion is attended with much pain, we withhold food for a time more or less limited; afterwards we seek to give strength to the patient, without exasperating inflammation, by aliments the mildest in their nature, such as milk, the lightest farinas, the emollient vegetables, white meat; and we conduct the patient by degrees to his habitual regimen.'

That the exposition of the symptoms above enumerated are very frequently indicative of disease of the alimentary canal,

our readers will not be much inclined to deny, considering, as they naturally will do, that the influence of the digestive organs upon local diseases has been very long acknowledged; they will not, therefore, be prepared to admit that M. Broussais has any great originality in the doctrine he advocates. In the treatment, as in the treatment of other diseases, he is evidently far too exclusive. That in the earlier stages tonics would be improper, and that leeches and antiphlogistic remedies should be steadily employed, is very certain; and for the fuller explanation of our opinion on this point, we beg to refer to the review of Billard on mucous membranes, in a former Number. But that tonics are to be altogether prohibited, free as we are to admit that they have been carried too far, is neither justified by experience nor consistent with analogy.

To reason from things known to things unknown, appears the proper mode of proceeding in such cases, and not at once forming an opinion upon the latter, to refuse all information which the former may be able to afford. Now inflammation occurs in the conjunctiva of the eye in a manner, so far as observation has gone, precisely similar to its occurrence in the other mucous membranes. There is the same redness, pain, and, if M. Broussais will have it so, vital erection; and in order to overcome it, the most energetic antiphlogistic remedies are frequently in the highest degree necessary. But there is a time when the inflammation has passed into a state to which the depleting remedies are no longer applicable, and when, if persisted in, the conjunctiva becomes more relaxed, the red blood vessels more numerous, and the sight more obscure; and if, after this has occurred, stimulants are had recourse to, the membrane recovers its tone, the eye becomes clear, and a complete cure is speedily effected. We believe that the same circumstances have place in the alimentary canal; and we draw our inferences from experience and analogy. Experience has taught us that tonics are frequently successful, combined with a proper attention to diet, in relieving the evils of dyspepsia, and even of the slighter instances of gastrodynia: and this relief has not been merely of that temporary nature which ardent spirits bestow, but the whole frame has been invigorated, and the feelings of languor and listlessness have thoroughly disappeared. And we have seen tonics successful under different circumstances, as, in the first instance, when the affection has not been severe, and without the application of leeches; and where the affection has been severe, after the application of leeches, although, before the depletion, they had evidently aggravated the disorder. The analogy of the inflammation of the eye we have already

alluded to; and, guided by both, we can come but to one conclusion, viz. that any plan of treatment so exclusive as that advocated by the disciples of the new medical doctrine, is neither supported by nature or experience; that depleting and stimulating medicines are occasionally required; and that any system confining itself entirely to one method of cure cannot but be most eminently unsuccessful—a conclusion in which we are supported by the table of mortality above given.

In gout and rheumatism, as in the diseases we have already mentioned, antiphlogistic measures alone are advocated; and the professor claims, as peculiarly his own, the merit of treating these complaints as simple inflammation. The only part of the chapter in which these diseases are treated of that can claim the merit of originality, if merit it can be called, is that which pronounces gout and rheumatism to be nothing else than common inflammation; inferences which certainly are supported by nothing else than by the circumstance of depleting measures being sometimes advantageous. It is true, that he says that 'they alter the different textures in a manner conformable to their own organisation;' a mode of expression, however, which may mean every thing or nothing, as the author pleases. In its first and most manifest sense, it would seem merely to imply an increase in the magnitude of the natural structure of the parts; but that this may not be supposed, he further adds, 'So, in the articulations, it will sometimes produce inflammatory depositions, and large white tumours, nodes, chalky concretions.' How these have any reference to the 'organisation,' we are unable to comprehend, since chalky concretions have appeared to us to form in the very same parts in which, under other circumstances, we have seen ulceration, suppuration, or effusion.

We may also make some observations on the treatment of rheumatism; and we must at once state, that excepting in its very acute forms depleting measures are absolutely injurious. The opinions we have formed upon this head have not been lightly taken up, nor without considerable experience in various modes of practice. By far the most successful plan of practice has been that of administering bark in very frequent doses, as soon as the high vascular action has been reduced, either by bleeding or other means. But if there is any one fact of which we feel certain, it is—that repeated bleeding in rheumatism is exceedingly injurious; that it materially adds to the weakness of the patient, while it in no manner, or at least very temporarily, mitigates the virulence of the disease. A very useful, and frequently successful medicine in this painful complaint, is the cinchona bark and colchicum combined. The formula we have employed has consisted of two drachms

of the former, with half an ounce of the wine or tincture of the latter, in half a pint of camphor mixture. The dose, from an ounce to an ounce and a half, every four hours.

In the exposition of the treatment of scrofula, there is the same pretension of novelty, and the same real want of it, which we have so often had to remark; nor do we find any thing really valuable which has not long been practised in this country. The statement that is made of the common treatment of scrofulous children has certainly no place in Great Britain, excepting with the most ignorant of the profession; and if the following account is correct as respects France, that country must be sunk low indeed in medical practice. We should rather hope, however, that this is but another specimen of the inclination of the 'Créateur de la Médecine Physiologique' to arrogate all medical knowledge to himself, and to misrepresent those who will not swear by his name.

'Upon the mere apparition of a mild scrofulous visitation, there is prescribed for children, who in other respects are in good health, dark-coloured meat, game, mutton-chops, pure wine, the most generous that can be procured; they are compelled to take the vinum absynthii, gentianæ, the bitter elixir, or there is added to these, to render them still more stimulant, a considerable dose of a caustic the most violent, called *the carbonate of potash.* The merit of Broussais's practice in this disease is in paying great attention to the general health.'

In the succeeding essays upon particular diseases, there is very little to remark. Gastritis is still made an integral part of every disorder; and inflammation the cause of all. But, apart from the peculiar language of the system, there is nothing peculiarly incorrect, although we are still at a loss to understand by what right M. Broussais can lay claim to originality.

The only remaining part of this 'nouvelle doctrine médicale' which remains to be considered, is that which treats of diseases arising from asthenia. This source of disorder, however, is confined within very narrow limits; and indeed, though the occasional occurrence of debility is admitted, it is for the most part as the consequence, and not the cause of disease.

Asthenia is the result (to adopt the language of the sect) of the total or partial abstraction of the stimulants which excite the irritability of the organ, or of the irritation of another part; consequently, it can scarcely ever be general. Asthenia of the stomach, arising from starvation, appears almost the only source admitted of general debility; for this organ having very intimate connexion with every other, and

being the medium of supply to them of nourishment, &c., whenever its functions become languid, the debility of the brain, heart, &c., must be a necessary consequence. The debility thus produced, however, it is affirmed, does not last long, but that very quickly reaction ensues, and frequently inflammation. As an illustration of this fact, the effect of cold is cited, which renders the tissues pale and less sensible in the first instance, but which is followed, the cold being withdrawn, by redness, heat, and a true phlegmasia. We need scarcely, we think, remark to our readers the imperfection of this analogy and reasoning, and the utter incompatibility of the fact with M. Broussais's doctrine, that inflammation occurs only in the strongest parts. Here we have a part, upon his own shewing, in a state of debility, and, of course, possessed for the time of little vitality, yet it becomes inflamed upon the cold being withdrawn, because more sensible of slight stimuli; the warmth, which under other circumstances would have been merely agreeable, becoming now the exciting cause of a high inflammatory action.

Broussais has employed the term *indirect debility* in a different sense from Brown. The latter understood by it the consequence of over excitation; but the former means that which is the result (in his own language) of the concentration of vitality in some one part—as the weakness of the limbs in inflammation of the bowels. This is to be removed by overcoming the original disease. But there is also a debility, the consequence of diseases of irritation; and in the treatment of this, great care is to be taken lest the disease itself be again excited. In all this there is nothing which has not long been acknowledged and acted upon in practice by every well-informed practitioner; and we know none who would not restrain a patient from stimulants very long after an inflammation had disappeared. He admits of some species of dropsy 'having no other cause than general weakness, and the loss of the tone of the coats of the abdominal veins:' but having said thus much, he seems to repent himself, and adds, 'they are met with after large and prolonged losses of blood; however, this would not be the only cause, if the sanguineous effusions were not furnished by an inflamed organ.' And thus it is that he is perpetually guilty of contradiction. The merit of the doctrine of debility of Broussais, consists entirely in acknowledging it as not always real, but depending rather upon oppression of the vital powers than their diminution. He acknowledges that occasionally the weakness may require the first attention; and he is disposed to wait for reaction in syncope after concussion, before he would employ depleting remedies. In all this also there is no novelty.

Our readers will have no difficulty in understanding our opinion of this new medical school of France, and of its founder, M. Broussais. That amidst its doctrines and practice there is much that is correct and admirable, we are not inclined to deny; nor that something of this in France may be really new. Yet we cannot say that the perusal of Broussais's works will repay any well-informed practitioner for his trouble. He may find something new, it is certain; yet we believe that we may assert, with strict accuracy, of the 'nouvelle doctrine médicale,' what Blumenbach is reported to have observed of the craniological doctrines,—'There is much that is true, and much that is new; but that which is true is not new, and that which is new is not true.'

We cannot close this article without protesting against the grossness of the abuse with which M. Broussais and his followers have loaded their opponents. It does indeed appear strange, that persons engaged in scientific investigations should be so little acquainted with the uncertainty that besets them; should be so little liberalised by the knowledge, however imperfect, they afford; so little acquainted with the nature of the human mind,—as to imagine that coarseness of abuse will have any power in convincing when argument has failed. His late Majesty, King George the Third, in his conversation with a far greater man than Broussais, and in reference to a contest between men, in comparison of whom the present combatants are mere infants, well said, 'When it once comes to calling names, argument is pretty well at an end.' An observation which, however common-place it may seem, was well worthy of a monarch. Let us also remind these virulent writers of the regret which Charles the Fifth experienced in his retirement, that he should have ever attempted to make men of one opinion in religion—a subject which, if unanimity is ever absolutely requisite, must demand it above all others; for when he found that he could never make two watches alike, he immediately recognised how vain must be any endeavour to reconcile to one mode of thinking the far more complicated machinery of the human intellect. We have spoken upon the supposition that Broussais and his adherents have thought to compel, where they could not induce, conviction: if, however, they have sought only to gratify a childish resentment, we must pity the moral complexion of their dispositions, as much as we shall ever despise their abusive vituperations.

III.

OF DIABETES AND TABES DIURETICA.

A Practical Treatise on Diabetes: with Observations on the Tabes Diuretica, or Urinary Consumption, especially as it occurs in Children; and Urinary Fluxes in general: with an Appendix of Dissections and Cases, illustrative of a successful Mode of Treatment: and a Postscript of practical Directions for Examining the Urine in these Diseases. By ROBERT VENABLES, M.B., Physician to the Henley Dispensary, &c. &c. &c. London. THOMAS and GEORGE UNDERWOOD. 1825. 8vo. Pp. 230.

DR. VENABLES, in the volume before us, directs the attention of the profession to a subject, which we agree with him in considering has attracted but little of their notice. 'I have often observed children,' he states, 'to all appearance very healthy up to a certain period, when suddenly the constitution changes, the child emaciates, its health declines, and without any obvious derangement sufficient to account for the gradual depravation of health, at last dies a most miserable object.' The head he generally found free from pain, and the functions of the brain regular: the respiration was natural, the bowels free, and the secretions from them healthy. Nothing, he was generally told, appeared remarkable in the urine; but it was after farther inquiry stated, that it was discharged in very great abundance; but this was considered as the consequence of the inordinate quantity of fluid taken by the child. Having thus ascertained that the emaciation was attended with an excessive discharge of urine, he had little hesitation in referring the disease to the kidneys; and on a minute inspection after death, he discovered morbid appearances in these organs sufficient to account for all the symptoms.

We are perfectly aware that the functions of the kidneys are on too many occasions not sufficiently attended to during our investigation of the disorders of children; and we cannot better express our obligations to Dr. Venables for having called the attention of practitioners to the subject, than by accompanying him in the full exposition he has given of it in the work before us.

Symptoms of the Tabes Diuretica in Children.—'The disease seldom appears until after the child has been weaned;' the exciting causes being seldom applied until after this period. It loses its usual flow of spirits, is dull and inactive, and after a little time gradually emaciates. The skin becomes harsh, dry, and flabby, and seems to hang loosely about the body: the temperature of the surface is

much elevated. In the early stages of the disease, the bowels are regular, and the tongue natural: but as disorder proceeds, the bowels act irregularly, and the tongue becomes covered with a coat of mucus. Sometimes the stools are of a greenish hue; at other times they seem natural, but become greenish some time after they are passed. At a more advanced period, the abdomen is full and distended; and this preternatural distension frequently leads to the supposition of mesenteric disease,—an opinion which seems farther confirmed by the progress of emaciation. The pulse, from the first, is generally accelerated, and has a hard wiry feel. 'The most remarkable symptom, however, although it frequently escapes observation, is the inordinate discharge of urine. This discharge increases in quantity so gradually, that it is not usually noticed.' By the time it has become more remarkable, great thirst prevails; and hence it is neglected, the parents generally considering the excessive discharge of urine as a necessary consequence of the excessive consumption of fluid. In some cases the urine appears quite limpid; in others it is milky, or like a mixture of chalk and water; sometimes it is of a pale straw colour; and in one case, Dr. Venables saw it of a green colour. Its specific gravity is much increased; and it coagulates by heat, and the addition of the usual reagents.

Dr. Venables considers disease of the mesenteric glands, when met with in this malady, as an adventitious rather than an essential occurrence. Of all the organs, the functions of which are liable to become affected during the progress of the disease, he views those of digestion as the most prominent. Respecting the function of respiration, he expresses himself as follows:—

'The respiration is said to be always affected in diabetes, but when pulmonic affections occur, I believe they should be generally regarded as of a secondary or symptomatic nature. Dr. Bardsley says, that he does not recollect a single instance of the disease which was not attended with some affection of the chest. The pulmonary affections in children are purely of a nervous nature; and I have seen several instances in adults, in which there were no pulmonary symptoms whatever. However, it must be acknowledged, that cough, dyspnœa, and frequently expectoration, attend; and under such circumstances, the disease is not unfrequently considered and treated as a pulmonary affection, till it has arrived at a very advanced stage.'—P. 16.

Morbid Anatomy of Diabetes.—The author appears to have more uniformly met with change of structure in the kidneys after this disease, than the majority of writers re-

specting it. ' Diabetes,' he states, ' never exists to any extent without the kidneys presenting on dissection manifest changes.'

' These changes vary from a trifling vascularity to severe organic derangement. Sometimes the kidneys are much inflamed, and present a florid vascular appearance; in other cases the venous system of these organs seems enlarged and turgid with blood. In a case which I examined about five years ago, the kidneys were enlarged in size, dark-coloured, and seemed turgid with blood. On cutting into the substance, there was an instantaneous effusion of fluid dark-coloured blood, as happens when a congested liver is cut into. Sometimes the veins, on their external surface, form a complete net-work of vessels. In some cases the kidneys are found in a loose, flabby state, being at the same time much increased beyond their ordinary size. They are often of a pale or ash colour.

' In some instances the substance of the kidneys is much inflamed, and then they present an appearance of a high degree of arterial vascularity. Their substance feels dense, and their structure firm. Frequently, under such circumstances, a whitish fluid resembling pus is found secreted in some quantity in the infundibula.

' The kidneys do not often contain abscesses, but I have seen two cases in which they were ulcerated. In these cases, the pus occasionally passed with the urine, and was mistaken for flakes of coagulable lymph, which it very much resembled. The ureters are often enlarged in diameter; and a respected medical friend informed me, that he once saw a case in which the internal surface of one ureter was ulcerated. It is natural enough to expect that these vessels should be enlarged in such a disease; but I have not met with a case of ulceration. This, however, may have been owing to my not having been prepared to expect, and, consequently, not having uniformly looked for such an effect. The renal or emulgent arteries are very often found larger in diameter than natural. Generally speaking, both kidneys are diseased, but sometimes only one, or at least only one to any great extent.'—Pp. 18—20.

The diseased appearances occasionally observed, in dissection of cases of this disease, in the brain, lungs, heart, liver, spleen, pancreas, and the other digestive viscera, Dr. Venables regards ' rather as accidental occurrences, than as absolutely and essentially a part of the morbid anatomy of diabetes.' And his reason for thus viewing the matter is, that ' a great variety of these appearances occur, and that diabetes frequently prevails without as well as with them, and sometimes with one description and sometimes with another.' Now we doubt the accuracy of this; and consider the derangements generally observed in the digestive and

assimilating organs, as more intimately related to the urinary disorder than our author is disposed to believe.

Of the Causes.— On this part of the subject we shall touch but slightly. Amongst the exciting causes, Dr. Venables ranks vegetable acids, particularly vinegar. The alkalies and alkaline salts, particularly in the states of sub, or super-salts, and when their use is long persisted in; gin and fermented liquors; strong diuretics, and injuries about the loins, are severally insisted on by the author, who concludes the consideration of the *exciting* causes with combating the opinion of Dr. Rollo, as to derangement of the digestive organs being a principal cause of the disease. The objections, however, which are here urged, are not so valid as their author seems to consider; for we do not consider that it is true, or 'well ascertained, that diabetes has existed to a considerable extent, without any very manifest disorder of these organs either preceding or co-existing with it.' And we do not consider that 'morbid anatomy has clearly proved that it may proceed to a fatal termination without any recognisable disease of this nature.' On the contrary, we may state, that we are unacquainted with a single instance, wherein the *post mortem* inspection of a diabetic patient has been satisfactorily made, without some morbid condition of the digestive and assimilating* organs having been detected. This brings us to the author's opinion respecting

The immediate Cause of Diabetes.— He considers the kidneys as the seat of the disease; and its immediate cause to be some organic change in these organs, by which their functions are both preternaturally excited and perverted. In his chapter on the *pathology* of the malady, he draws this conclusion:—

'Hence, then, it may be logically inferred, that certain agents, dietetic and medicinal, are capable, either mediately or immediately, of exciting the action of the kidneys, and causing an increased flow of urine. If this preternatural degree of excitement be frequently repeated or permanently kept up, an inflammatory state of the kidneys, and subsequent disorganisation, will be induced. The increased flow of insipid urine constitutes the incipient stage of diabetes; the presence of coagulable or of saccharine matter in an unusual quantity, is a consequence, not only of the preternatural excitement of the kidneys, but also of certain changes in the structure and mechanism of these organs, which, in the present state of anatomical and physiological research, are placed beyond the reach of the discriminating powers of our perception.'—P. 41.

Before we altogether quit this particular part of the subject, we may remark, that Dr. Venables has not sufficiently

* Amongst assimilating organs we include the liver and the lungs.

discussed this question, the importance of which both he and our readers will immediately perceive:—Whether is the saccharine matter found in the urine, formed in the circulation, owing to the perverted actions of some one or more of the digestive and assimilating organs, and afterwards eliminated from the blood, as its formation proceeds, along with the watery part of this fluid, by the action of the kidneys, or is it formed by the kidneys themselves, during their usual secreting, or rather eliminating process? Or, in other words, is the saccharine matter the produce of a perverted function of the assimilating organs, its presence in the urine being the necessary result of the eliminating nature of the functions of the kidneys, which remove it, *pari passu*, with its formation, or is it actually formed by an excited and perverted function of the kidneys themselves, at the moment of secretion? According to the supposition suggested by the first of these questions, we must consider the saccharine substance as formed previous to its elimination by the kidneys: conformably to the second question, we must view it as being formed during the secreting or eliminating process. Now we consider that this question, which is entirely neglected by Dr. Venables, is one, the satisfactory disposal of which is absolutely necessary to the arriving at just conclusions respecting the pathology of diabetes. And we farther consider, that it may be advantageously discussed with some reference to the more precise knowledge which we have obtained as to the formation of urea,—a substance which is present in urine, under all circumstances of health and disease, excepting that now under consideration: and the relation, as well as analogy, between the formation of urea, and of the saccharine substance found in diabetic urine, is the more intimate, and therefore the more important to consider, inasmuch as we find that these substances are never co-existent in the urine to any considerable extent, but that, as the one becomes apparent, so the other disappears; so that when urea is in its usual proportion, the saccharine matter is entirely deficient, and when the saccharine character is at all distinct, no urea can be detected. This, therefore, being invariably the case, is it not reasonable to conclude, that the saccharine matter is formed by the same organs which form urea; and that, whilst urea is one of the products of a healthy function of these organs, the saccharine matter of diabetic urine is one of the products of their perverted or morbid actions? And if it be also incontrovertibly proved that urea is not formed by the kidneys, but only eliminated by them from the blood, in proportion as it is formed by the actions of other organs, is it not reasonable farther to infer that, the same is likewise the case with the saccharine matter of the urine in

this disease? Now it has been shewn, in the most satisfactory manner, that when both kidneys have been removed from animals, and when they have continued to live for some time after the operation, a very considerable quantity of urea is always found in the blood of these animals; proving, most unequivocally, that the urea is not formed by the kidneys, but only eliminated by them.

Having thus pointed out the propriety of disposing of the question respecting the source of the saccharine matter in diabetic urine, before we proceed to decide as to the pathology of the disease, we shall now proceed with our author.

Passing over the chapters on *Diagnosis* and *Prognosis,* we arrive at the most important part of the subject; namely, the *Treatment of Diabetes.* The propriety of *bleeding* is first discussed by Dr. Venables; and here we shall give his sentiments in his own words:—

'I almost invariably adopt venesection, either as a preparatory or curative means. Nor am I in the habit of confining the practice of depletion to those cases only which manifest the more unequivocal signs of inflammatory or febrile action. If the discharge be much increased beyond the usual quantity, I generally direct venesection, and repeat the operation according to its effects upon the system in general, and the disease in particular.

'We should not be deterred from repeating the bleedings, merely because the blood does not exhibit the buffy coat, the usually received characteristic of inflamed blood. I have in another place* suggested the probability of the characters of the serum being capable of indicating an inflammatory state of the system. I have generally found that a dense milky appearance of this part of the blood indicates inflammatory action, and this independently of the appearances presented by the coagulable part. I have found the pulse rise under such circumstances after venesection, and a repetition of the operation required; although the crassamentum should not exhibit the buffy coat, but even seem unfirm and dissolved.

'With respect to the quantity of blood, and the mode of its subduction, they must depend upon circumstances which admit of no specific rules. We must be guided in the quantity by the effects. I think, however, I may venture to assert, that a repetition of the venesection, so as to draw off the requisite quantity at several operations, rather than the whole at once, will be found to exert a greater control over the disease, and at a less sacrifice of the strength. Such cases differ materially, both in the severity and urgency of their symptoms, as well as in the activity of the means to be instituted for their relief, from those of peracute and acute inflammation. These require for their reduction an immediate and powerful influence, by the speedy adoption of the most vigorous means, carried, too, to the

* 'Clinical Report on Dropsies, &c. Preface, p. xvi., note.'

fullest extent; whereas the former are more safely controlled by the repeated and permanent, but more gradual operation of the same means, applied in a lesser degree.

'Of all the means of drawing off blood, none are so efficacious as the lancet. Whenever, therefore, the age, health, and strength of the patient will admit of general blood-letting, it is, however small the quantity, to be preferred, especially if fever be present. And even in cases where the discharge of urine is profuse, and unattended by fever, general bleeding seems to control the flux much more speedily and effectually, than a much larger quantity abstracted by local means. If, however, there be pain on local pressure, and if this pain be of the obtuse or subacute kind, then both means will be advisable. In many cases, leeches to the loins will prove eminently serviceable; and I shall have an opportunity of submitting a case or two, in proof of their efficacy in controlling and reducing the excessive action of the kidneys.

'In infants, it is frequently impossible to institute general blood-letting. In such cases leeches must be substituted. The scarificator and cupping-glasses may be used with persons more advanced in years, but such severe means cannot be safely attempted with children. The situation most eligible for the practice of local blood-letting, when there is no sensation of pain to guide us in our application, seems to me to be the region of the kidneys, on each side of the lumbar spine. I have my doubts, whether the spinal marrow be not in this situation, if not always, at least very frequently, the seat of disease. I trust such of the profession as have extensive opportunities will not fail to institute inquiry upon the subject, and ascertain the correctness of the opinion; and I myself promise faithfully to neglect no opportunity of deciding the question.'—Pp. 58—61.

Dr. Venables next recommends the application of blisters near the region of the kidneys, which, as our readers will have perceived, he conceives to be always the seat of this disease. He advises the blisters to be employed in succession, or the discharge from the first to be promoted by the unguentum lyttæ, or ceratum sabinæ: of these two ointments, he prefers use of the ceratum sabinæ. He next notices the application of mustard cataplasms to the lumbar spine, and caustic issues, in the same situation, as powerful derivative means in this disease. The latter, particularly, he thinks deserving of great confidence.

Amongst the medicines usually prescribed internally, he seems to place the greatest confidence in the use of opium, in combination with antimonials, keeping, at the same time, the bowels freely open. It may be recollected by many of our readers, that Dr. Ferriar strongly recommended in diabetes the exhibition of cinchona and the uva ursi, of which he gave a scruple each, with half a grain of opium, three times a day.

resorting also to the use of lime-water; but of this plan of treatment, which appears to have been successfully employed by Dr. Ferriar, our author seems to have no experience.

'Of all the remedies which seem to exert a restringent influence upon the action of the kidneys, none seem so powerful as the phosphoric salts. Many cases of rickets are attended with a considerable discharge of urine, and I verily believe many cases of this disease have been brought on through the excessive action of the kidneys. The profuse flux of urine, which often precedes and frequently accompanies the progress of rickets, has not been sufficiently attended to. The action of the kidneys is so increased, that the absorbents, throughout the whole frame, are put in requisition to supply them with materials; hence the removal of the solid parts, the gradual emaciation, and the voracious appetite to supply the waste.

'The phosphate of soda has long held the reputation of lessening the action of the kidneys, and thus diminishing the flow of urine. My friend Dr. Starkey, of Cork, has published two cases in the 4th volume of the Transactions of the Dublin College of Physicians, illustrative of the efficacy of the phosphate of soda in the treatment of diabetes. May we not thus obtain some clue to the solution of the *modus operandi* of phosphate of lime, in the case of rickets?

'But the efficacy of the phosphate of lime seems to me to be owing to the controlling influence which the phosphoric salts, in general, exert over the functions of the kidneys. Taking this as a principle, and of its correctness I believe there can be very little doubt, it is rather questionable if an alkaline phosphate be the best suited to fulfil the indication. The alkalies and alkaline earths, I have some reason to think, excite the kidneys; and although this property may be considerably modified, I have my doubts as to whether it can always be wholly neutralised.

'But, independently of these objections, phosphate of soda is too apt to excite the bowels, and pass off by stool, before its effects upon the kidneys have been secured. These facts led me to the conclusion, that some of the metallic phosphates might be advantageously substituted for those with an alkaline base. The tonic and astringent properties of iron and zinc pointed them out as the best suited to the object in view. I selected iron* for my first trial, and I have felt so satisfied with its powers, that I have not attempted any farther investigation. I have been really struck with the efficacy of the

* 'This metal,' says Dr. Murray, 'is the one which has been regarded as most salutary to the animal system. It exists as a constituent part of the blood and other varieties of animal matter, and it acts as a powerful tonic, increasing the power of digestion, quickening the circulation, and causing the blood, it is said, to assume a more florid hue, promoting the secretions, *or restraining them where they have been morbidly increased.*'—Materia Medica, vol. i. Art. FERRUM.

phosphate of iron in excessive discharges* of urine. The quantity is rapidly reduced under the use of this salt, and indeed its qualities sensibly altered. The bulimia, which also attends on diabetes, is reduced, and the powers of digestion invigorated and increased.

'The phosphate of iron is readily formed by the admixture of solutions of sulphate of iron and phosphate of soda. The resulting salts are sulphate of soda, which, being soluble, passes through, while the insoluble phosphate of iron† remains on the filter.

'Phosphate of iron may be given as an astringent, in doses of one or two grains, which may be gradually increased to a scruple or half a drachm, three or four times in the day. In children, smaller doses should be given; but the exposition of the rules for apportioning them according to the ages of patients, belong to a different branch of medicine. It may be observed, that after a continued use of any medicine the dose must be gradually increased, or otherwise its effects will begin to diminish. Sometimes it is useful to suspend the use of the medicine for a short time, and then to recommence it again. In this way the susceptibility of the system is often revived, when it would not be safe to attempt the same object by any other means.'—Pp. 67—72.

When the medicine sits heavy upon or oppresses the stomach, Dr. Venables recommends it to be combined with rhubarb, or some other light bitter.

'In many instances,' he proceeds, 'patients complain of a sense of sinking in the stomach, such indeed as is experienced from hunger, attended with languor and lassitude; and if any thing, either food or medicine, be taken, it brings on nausea, restlessness, fever, vomiting, and other distressing symptoms. Leeches and blisters, alternately applied, are the proper remedies. If blisters be inadmissible, then mustard cataplasms, or the emplast. ammoniaci may be advantageously substituted.

'A very excellent plaster, and which I have found extremely beneficial in similar cases, is the emplastrum ammoniæ of the Medico-Chirurgical Pharmacopœia. It consists of two drachms of soap, lytharge plaster half an ounce, and muriate of ammonia one drachm, the lytharge plaster and soap are to be melted together, and when nearly cold, the sal ammoniac, finely powdered, is to be stirred in. The value of this plaster depends upon the decomposition of some of its ingredients. The alkali of the soap separates the muriatic acid from the ammonia, which being thus slowly but abundantly liberated, acts as a powerful stimulant and rubefacient; therefore it should be

* 'In rickets, carbonate of iron is usually combined with the phosphate of lime, and the combination is found more efficacious than either singly. I have no doubt that decomposition takes place, for in the animal laboratory, the laws of chemical affinity are set at defiance, and those compounds evolved which are most suited to the living purposes.'

† 'This salt and the oxyphosphate have been highly extolled by Mr. Carmichael, as remedies in cancer.'

applied immediately after it is formed, and renewed after a proper interval, otherwise the decomposition of the sal ammoniac, and the evolution of the ammoniacal gas, upon which its virtues depend, will become nugatory.'—Pp. 73, 74.

Dr. Venables next proceeds to consider '*the treatment of certain occasional symptoms which do not properly belong to the general plan of cure.*' His observations under this head are well deserving of an attentive perusal, inasmuch as his remarks are judicious and acute, both as respects the disease under consideration, and as regards these symptoms when met with as idiopathic derangements.

'Of the various affections which arise in the progress of diabetes, those of the digestive system are the most frequent; so much so, that, as already observed, they have been regarded as the primary cause of the disease. A severe pain, or more often only a soreness and tenderness, on pressure, of the precordia, is felt. On taking food, it sometimes happens that what was previously a mere tenderness becomes an acute pain, producing vomiting and other distressing symptoms. This arises from inflammation of the mucous membrane of the stomach, or of the transverse arch of the colon: sometimes the pain is felt lower down in the epigastrium; frequently the pain is felt in the hypochondres. It is occasionally felt in the abdomen, in the seat of the small intestines. The seat of these pains is very various, but wherever situated, they are to be regarded as indicating the presence of inflammatory action.

'If there be no fever, leeches and blisters should be applied in alternate succession till the pain be completely subdued: if, however, there be fever, then, in addition to the means just noted, general blood-letting, proportioned to the extent and severity of the fever, will be advisable: sometimes the symptoms will be merely those of deranged function, without any indication of a structural derangement. If the functional disorder be attended with fever, then moderate venesection, repeated occasionally and at proper intervals, will be useful; and, if judiciously applied, will often prevent the disorder from spreading to other parts.'—Pp. 76, 77.

When constipation is present, as it generally is when the disease occurs in adults, colocynth, aloes, and soap, are recommended by our author as a useful aperient; and when this combination is not sufficiently active, it may be quickened by a senna draught the following morning. The exhibition of calomel, which he justly considers as a valuable purgative in this disease, he conceives to be objectionable when acidity is present in the prima via, unless an absorbent earth be given either previously or at the same time, in order to neutralise the free acid, and prevent it from decomposing the calomel, and hence rendering it an irritating, and therefore

dangerous remedy. The following remarks upon the use of chlorine, when the disease is connected with disorder of the liver, deserve attention. In justice to the author we may remark, that his recommendation of this medicine has been now some time before the profession; and we think he deserves the credit of having first publicly recommended it internally in disorders of this important organ.

'Under an active exhibition of mercury, disorganisation of the glandular and parenchymatous viscera is frequently induced. It is of importance, then, to know if we can substitute any other remedy for mercury. Two have been highly extolled, namely, chlorine and taraxacum. Of the taraxacum I have not had a great deal of experience, but from what I have had, I am inclined to think rather favourably of it. Chlorine I have used more extensively. Chlorine has been recommended as evolved in the nitro-muriatic acid bath; but I have generally preferred a saturated solution of chlorine given internally. Ten, twenty, or thirty minims may be given in an ounce of distilled water, twice, thrice, or oftener, in the day, and this dose may be afterwards increased according to circumstances. More lately, I have narrowly watched the effects of this solution upon the functions of the liver, as indicated by the appearance of the stools. I have generally found the dark colour corrected, and even the bowels seem to be gently acted on. The secretion of bile seems also to be promoted, for when the stools are of a bright yellow colour, indicating a deficient secretion of the hepatic fluid, under the use of chlorine they gradually become of a deep brown. Whenever, then, either from the tendency to scrofula, or severe organic affections of the kidneys, or other organs, mercury becomes inadmissible, the solution of chlorine will be found a valuable substitute.

'This solution is readily formed by passing a current of cholrine gas through distilled water, reduced to a sufficiently low temperature. The gas is absorbable by water at a reduced temperature, and is again expelled by elevating the temperature of the liquid.'—Pp. 84, 85.

As to the author's remaining observations on the other affections; and amongst others, on those of the chest, which he considers secondary, or consecutive upon the diabetic disease, but which we are inclined to view as more intimately connected with the cause of the disordered urinary discharge,* we must refer our readers to the work itself. This we are bound to do, as a matter of common honesty, and justice to the author. It will be found amply to repay an attentive perusal.

* This view of the subject is fully confirmed by the details of the cases which the author has adduced.

After giving a chapter on the *prophylactic treatment*, Dr. Venables subjoins an *appendix*, containing two dissections, and eighteen cases of diabetes and tabes diuretica. In somewhat less than one half of these cases the urine was sensibly saccharine. Of these cases generally, we may remark, that they are interesting and instructive. The same remark is equally applicable to his '*Directions for a practical examination of the urine, so as to determine its morbid qualities.*' Of his work, upon the whole, we are disposed, as our readers may have observed, to speak favourably. His cases, however, seem not altogether to warrant his high encomiums on the phosphoric salts, nor do they prove his pathological views. His professional zeal, as well as ability, are very satisfactorily shewn in his present undertaking; and we sincerely recommend him to proceed in the same path of close observation, and, in some respects, original research, and we shall not be the last to withhold our meed of praise. We withheld it on a former occasion, because we did not conscientiously believe it was fully due; on the present we pay it with pleasure; at the same time we must intimate, that on this subject very much still remains to be achieved.

PART II.

COLLECTIONS OF MEDICAL FACTS, WITH OBSERVATIONS.

Section I.—Original Papers.

I. *Singular Case of Hysteria, complicated with Disease of the Spleen.* By John Gifford Croker, Esq., Chudleigh, Devon.

Miss H. S., aged nineteen, daughter of a Baptist minister, of a leuco-phlegmatic temperament, occupied in a linen draper's shop, was attacked in October 1822 with symptoms which were chiefly pleuritic, for which Mr. Penkivil, of Plymouth Dock, bled her repeatedly, and employed blisters, and the other remedies usually adopted in similar cases. Whilst by these means the original symptoms were relieved, a distressing affection of the head ensued; which, however, in a few days yielded to further bleedings, local and general, to blisters to the nape of the neck, &c. Mr. P. does not recollect that at this time his mind was impressed with any idea of there being any organic derangement in her case; as in the

course of a month she recovered so far as to be sent to Bovey Tracey to her parents' house, where she was visited by the reporter, who found her complaining of a sluggish state of the bowels, and only requiring laxatives and tonics.

January 1823.—She returned to Plymouth, and resumed her duties in the shop.

February.—Mr. P. was again called in to visit her, when he found her labouring under violent inflammatory fever, with evident determination to the head, and a distressing pain in the region of the spleen. Bleeding at the arm; leeches to the temples; blisters to the part affected, with brisk cathartics, were actively employed; but on this occasion, though the bleeding was carried to a greater extent, the head did not seem to be very materially relieved* till it was shaved and blistered; and, as effusion on the brain was apprehended, mercury was given to a considerable extent. By these means the affection of the head seemed to be relieved; yet the pain of the side continued, and an evident enlargement of the spleen was taking place, indicating congestion in that organ.

March 30*th*.—She returned to her parents' house, when the reporter again attended her, and, by Mr. Penkivil's desire, renewed the administration of the mercury.

Pil. hydrarg. gr. v. nightly, and camphorated mercurial ointment rubbed over the region of the spleen, produced an affection of the gums, but not a corresponding flow of saliva. She remained under this influence three weeks, with a gradual diminution of the mercurial affection, aided by saline laxatives. She seemed much benefited; and there was evident diminution of the enlargement of the spleen. 45 grs. pil. hydrarg.; ʒiij. ung. hydrarg.; ung. cetacei ℥i.; pul. camphor. ʒi. were used at this time.

On the disappearance of the mercurial action, when we were looking for an opportunity to give restoratives, she became hysterical, with globus hysteria, violent contortions and jactitations of the body, requiring people to hold her during the convulsive attacks, which, in a few days, became very frequent. She always referred to the pain of the left side as the cause of her complaints. Leeches and blisters to the side, warm bath, antispasmodic remedies, variously combined, and in full doses, were constantly given, without affording any alleviation of her sufferings.

The pulse was under 70 since her return, and during this period; and she had not menstruated since her first illness in October. A neighbouring medical friend advised opium, in large doses, nightly; and Dr. Hamilton's purging plan, with nourishing diet, &c., was tried for a fortnight without any effect.

April and *May* were passed as above detailed. The latter end of the month of May she began to ride out in a child's chair, ex-

* That bleeding alone will not cure, but rather increase determinations to the head, we have already given sufficient proofs in former numbers of this Journal.

pressing a pleasurable feeling whilst in the open air; and was accustomed to remain out several hours, during which she was never attacked with convulsions; but as soon as she was taken out of the vehicle, the spasms or hysterical convulsions commenced, and now began to last from an hour to two hours.

Mr. Penkivil informed me, about this time, that he had had a young lady under his care, who had consulted the most eminent professional men without benefit, whose case was approaching to that of H. S., and who thought of a remedy for herself to check the attack or convulsions: this was a swing fixed up in her garden; and whenever she felt intimations of an approaching attack, she instantly went to it, and it invariably relieved her: she had even been carried to it when in the midst of a paroxysm, when it might have been thought, from her violent agitations, impracticable. Yet the moment the swing was put in action the paroxysms ceased. Mr. P. strongly urged the expediency of adopting some such mode, or some exercise for H. S., which caused me to send her out in the child's chair, as she was partly deprived of the use of her lower extremities; and it is worthy of observation, that the action of the child's chair had almost a similar effect in the one case, to the swing in the other.

June and *July*.—The complaint (of H. S.) had now begun to assume that very singular character which afterwards followed; and she described its commencement as a fluttering at the scrobiculus cordis, immediately succeeded by acute pain in the left side (whence she always made efforts as if to pull out something)—that she next saw things and persons double—then she lost her recollection, and the writhings, contortions, and jactitations of the body usually attendant on the severe forms of hysteria supervened, and lasted for one, two, or three hours at a time. She had three or four such attacks in the course of the twenty-four hours. During the convulsions, the heat of the body was much below the natural standard.

July.—Dr. Scully, of Torquay, saw her. He considered there was some affection of the spinal column—advised opium, gr. ij., every night—pil. galban. comp., largely—the nitro-muriatic acid lotion to the vertebræ—and a seton to the side.

August.—Dr. Collins, of Exeter, considered the case as mixed hysteria and chorea—advised carbonate of iron, in drachm doses, and copious affusion with cold water over the whole body—two or three buckets at a time. The iron had no effect but that of colouring the fæces.

Other neighbouring practitioners saw her during these three months (June, July, and August), and suggested the solut. arsenic., hyoscyamus, terebinthinum—in short, the materia medica was exhausted of remedies: she gave a full and fair trial to medicines, but never felt their influence on the system, except that of opium in 2 gr. doses.

August, about the beginning.—The very singular form of this

case began to appear, which I shall describe as minutely as possible.

Some little time before the convulsive movements begin, she has double vision, which ceases on closing either eye; and she states that things appear sometimes threefold—then commences fluttering at the scrobiculus cordis; pain in the left side, going round to the back bone, ascending or creeping (her own expression) up the vertebral column to the occiput, over the head to the os frontis, followed by loss of sight and the other functions of sense—then begin twitchings of every muscle of the body, which lasts for ten minutes—instantly these cease, and the whole body becomes so rigid and inflexible, that the greatest force cannot cause any limb to move, or joint to bend—the legs are drawn up under the buttocks, the soles of the feet touching the nates—the trunk is bent backwards, so as to form the segment of a circle, the occiput and knees forming the extremes of the arch—the tongue is protruded to the right side of the mouth, with alternate opening and closing of the eyes—the little fingers are protruded between the third and fourth fingers, with very strong convulsive actions, or heavings of the pelvis, similar to what are described as characterising nymphomania. This particular state generally lasts for fifteen or twenty minutes, when instantly its form changes: she throws her body forwards, still sitting with the legs under her and the tongue and fingers protruded—the countenance assuming a strictly maniacal character, unconscious of what is said or done by her attendants, and the surface of the body being chilly and cold. She then begins to employ herself by making straw plait in a perfect manner. She imitates the visit of a medical man to his patient, feels the pulse, binds up her arm, bleeds herself with a straw, rolls out pills, directs and sends away medicine, makes dolls' clothes, draws patterns of fancy-work on a slate, copies them on paper with pen and ink, and works them on linen, but incorrectly: the greatest difficulty in this last employment is threading the needle. She composes hymns and verses to her parents for their kindness towards her—to her doctor or nurse, or on any other subject that she had heard during her intervals from convulsions. All this is intermixed with the most dreadful oaths, blasphemies, and imprecations; and if a pattern of work or a paper be attempted to be taken up, or looked at, she becomes violently enraged until she gains possession of it. The style of the poetry is not above mediocrity; but the adaptations of the different subjects are tolerably complete: it is always original, and chiefly on religious subjects. After some notice, understood by the attendants, she attends to the calls of nature during this state; yet she does not eat or drink. She is scarcely free from convulsions any three successive hours during the day. The parents describe the termination of every convulsion as truly distressing: her arms and body being thrown about with the wildest distraction; a loud crepitus is made by the fingers snapping against each other, similar to the breaking of bones in a mill.

She utters at this time dreadfully piercing screams; tosses her head, attempts to pull something from the left hypochondriac region, and urgently entreats the attendants to divide the rigid tendons under the knee, and alleviate her sufferings, whilst the legs are proceeding to their extended and natural posture. The tongue and the little fingers now resume their usual positions. She is unconscious of what takes place during the convulsion; feels very much exhausted by her struggling, and is astonished to discover what she has done. She has not two hours of sleep in every twenty-four; and during her intervals there is much subsultus tendinum. Pulse, menses, &c., as before reported. A paroxysm, such as I have now described, sometimes continues for ten hours.

As medicine has not had any effect during this month, laxatives only have been taken. She complains of exquisite soreness over the region of the spleen, but will not allow the requisite pressure to examine it with. She grows fat with a diet of fruit, vegetables, &c.

September.—A friend of the family, a female pneumatic chemist, and electric practitioner in Exeter, was consulted as to the probability of oxygen gas being useful to her; of course she advised its exhibition; but before it was entered upon, she considered it necessary to clear the mercury from the system, which tended, as she supposed, to keep up the irritability; and she ordered half a drachm of lac. sulphuris twice a day with this view. When an ounce of the sulphur had been taken, she began (October 8th) to give oxygen gas, and left a gasometer, and directions for its administration, with the parents, who were the daily operators. After the first week the convulsions had nearly left her—she expressed a feeling of comfort and delight over the whole frame, particularly in the left side—slept several hours a day—had a better appetite—was altogether better; and the parents were congratulating themselves that the female pneumatist, Miss Cragg, had taken a just view of the case, and that she would be restored. Unfortunately Miss Cragg's influence seems to have been more mental than medical; for on the 22d October, the paroxysms became as severe as ever—even more so, for the intervals scarcely afforded her time to take food. On the 2d November the menses returned, after an interval of seven weeks; but she still continued to be as severely afflicted as before, until—

November 13th, when the convulsions were lessened, and she became feverish. Pulse 114; bowels constipated; much pain in the head, in the direction of the longitudinal sinus, with heaviness and stupidity. Bowels constipated. She desired to be bled. I bled her to 16 oz. Laxatives, salines, and frequent ablution of the shaved head with cold water and vinegar, gave some relief.

15th.—The blood did not exhibit any inflammatory appearance: the serum was somewhat turbid.

19th.—Since this last febrile attack she does not employ herself as before. She raises her head from the pillow with much difficulty; describes the pain of the head at the junction of the frontal and parietal bones, '*as if a large stone were under the skull, and*

pressing down the brain;' complains of a constant noise in the ears, *similar to the roaring of the waves of the sea.* The convulsions are not so strong; yet the tongue, fingers, and the legs, are affected as before. She is often very vicious; threatens to kill the attendants; and utters most dreadful execrations.

21st to 29th.—The convulsions have assumed regular periods of attack, from 9 o'clock A.M. to 5 o'clock P.M., when she hastily takes tea, and bread and butter; and within ten minutes is again convulsed, until from eleven to twelve o'clock in the night; so that during the night she is free from the convulsions, but has very little sleep, and suffers much from subsultus tendinum. I considered that hydrocephalus would be the termination of her sufferings.

Sometimes now, when convulsed, she throws herself about in bed in the wildest and most distressful contortions of the body, and instantly after gets up to the head of the bed, and, in a state of nudity, personates various Scripture characters; makes tea with a set of child's tea-things; causes the attendant to carry the tea, and has the people of the house up to her bed-room to personate the company; plays at domino; detects when the adversary plays wrong, or if it be done designedly; seems displeased when she cannot get the game; and when she is successful she enjoys her triumph. Myself, and another medical man, have played with her several times in such fits, and always found that she played acutely and correctly. As a sectarian, she has a feeling against any neglect of duty amongst the members of the established church, particularly in the vicar, who is rather obnoxious to the dissenters; and an instance of his neglecting to attend to the burial of a child, who was placed in the vestry during the night before his (the vicar's) return the next day, was a matter of much discussion: this circumstance she had heard; and in one of her paroxysms it became the subject of her poetical reprobation: the following lines were a part of the effusion:—

'Here she lay, because she was poor—
Here she lay, at the chancel door;
The further in, the more they pay—
Yet here she lay as warm as they.'

December 3d.—The mother reports, that since the late feverish attack she appears to have a slight conception of things, as she is frequently directing or explaining to the attendant how to perform various domestic offices. Sometimes her recollection does not appear to be an act of the will, but merely the reflection of the subject, or the result of its accidental association with passing subjects, or with matters that had lately transpired; yet this is again controverted by the aptness which she exhibits whilst playing the domino game, for this game was only played whilst she was convulsed by the paroxysms.

7th.—The hydrocephalic character of the complaint is much relieved; seems to be more rational; and describes her sensation to be chiefly as if a stone were lying at the scrobiculus cordis, causing

a tumour there; 'the pain going round to the back, upwards to the nape of the neck, over the head to the forehead, where there is a sense as if there was another large stone in that situation; a noise in the ears similar to the rushing of waters; and double vision.' On examining the side, an enlargement in the region of the spleen was plainly felt and discernible to the sight, and very tender on pressure.

14th.—The case was drawn up as far as this, and transmitted to Dr. Copland by me for his opinion respecting it. After taking a review of the large depletions, the influence of the mercurial course, and the habit and temperament of the subject, he considered the case as essentially one of debility; and the particular form, hysteria advanced to its utmost degree of severity, and complicated with disease of the spleen. He had known cases in some respects similar to this, although not in his own practice; and he advised tonics, combined with antispasmodics, and attention to the functions of the bowels and uterine system. The heaviness, dullness, and sense of pressure in the head, he considered as more probably proceeding in this case from morbid sensibility than from any effusion of fluid; all which, the subsequent history of the patient fully confirmed.

Seems to be conscious of what is said or done when in the paroxysm, yet she cannot express herself: whilst in the spasm, she talks of what was said or done to her when in her last spasm: the same observation applies to the intervals, as she then talks of what was said or done to her in her last interval: so that it seems as if she had two periods of existence, distinct from each other.

18th.—Whilst in the spasm this morning, she told her mother 'that she had dreamt that her spasms would be cut short to-day an hour earlier than usual,' which proved to be the case; for in the evening spasm she became sensible earlier than usual, and had an interview with a favourite minister of her own persuasion, and talked very reasonably to him.

Here one might suspect simulation; but for what purpose could this young woman have tortured herself during so many months, or have been enabled to carry on what took place?

22d.—She felt excruciating pain over the region of the spleen, where the enlargement could be felt, extending to the left shoulder, to the left side of thorax and neck, and straitness or oppression about the cardiac region, all seemingly in the direction of the par vagum. A blister, at her desire, was applied to the side, without relief. Anodynes relieved her in some manner.

28th.—On a sudden, she expressed herself to her mother, 'that something had snapped in her side, that the stones in her stomach and head were gone, that she felt she did not know how, and that she wanted to pass an evacuation;' and within two hours she voided three highly offensive gelatinous evacuations, of a coffee colour, or Spanish brown, for several days afterwards; there was much purulent deposit in the urine.

The spasms from this time lost their periodical character; they were now brought on chiefly by hurry, noise, or sudden movements out of bed.

January 3th, 1824.—As she had remained free from spasms for several days, and it evidently appeared that debility was the most prominent symptom, I gave her acid. nitric., tinct. cardam. co., inf. gent. co., and comp. galb. pills, which relieved the dyspeptic symptoms.

14th.—Catamenia appeared, producing slight disturbance in the system, and sense of oppression at the scrobiculus cordis.

February 9th.—Catamenia; a very severe spasm for three hours preceding the approach.

11th.—Oxyd. bismuth. alb. gr. x. in die, cum pil. galban. co. Evident benefit from these pills.

16th.—Left her bed.

20th.—Came down stairs.

March 8th. — Catamenia; slightly irritated; speaks very favourably of the benefit derived from the pills; began to use her limbs.

April and *May*.—Recovering; went to the sea-side.

August 1825.—Quite well; except being somewhat nervous, and suffering at the menstrual periods.

II. *Observations in Practical Pathology*.—No. XI.—*Cases of Otitis, or Acute Inflammatory Ear-ache, successfully treated by Emetics; with Sketches of their remedial Effects in Chronic and Nervous Ear-ache, Erysipelas, Gout, and the Diseases of pregnant Females.* By JAMES KENNEDY, M.D., of Glasgow.

OTITIS may proceed from any of the causes by which the acute local inflammations are determined: the cases described in this article had their origin in the influences of cold air on the general system, and more especially on the seat of the disease: their treatment is original, at least the present writer is not aware of its having a place in medical history.

Sometime in the autum of 1814, I had occasion to treat this affection in a robust ploughman, in a considerably aggravated form. It was of two days' standing, and its characteristic symptoms occupied the right ear, while the corresponding side of the head, face, and neck, was deeply implicated: at the same time it was intense, obstinate, and seemed to include something of an erysipelatous tendency. Cooling purgatives, blisters over the head and behind the ear, and free sanguineous depletion from the external jugular vein, were the chief remedies employed: their effects, however, were obscure and unsatisfactory; and the violence as well as extent of the diffuse inflammation which supervened on the puncture of the vessel, induced the resolution of abandoning for ever the

practice of venesection in the neck, as a means subservient to the removal of this painful complaint.

During the next twelve months, several cases of the same kind were subjected to similar treatment, with exception of the requisite quantity of blood being abstracted from the arm. In all of them the patients' convalesence was slow; and in two, the disease assumed a chronic character: these last ended by the persons sustaining a considerable defect of hearing, which has never in any degree been repaired.

Meeting with an intense modification of the inflammatory ear-ache in 1816, I was led by a view of the predominating symptoms to deviate from the ordinary methods of cure in attempting its removal. The patient was a vigorous, florid young woman, and had been exposed to a current of cold air acting on the right side of her head and person, while recovering from a profuse perspiration. On the second day subsequently, her chief symptoms were quick pulses; hot, dry skin; hoarseness, and a cough, which aggravated the ear-ache; stiffness of the right cervical muscles; suffusion of the whole countenance; swollen eyelids; injection of the ophthalmic vessels; suspension of the nasal secretion; excruciating pain in the right ear, darting *generally* in radiating lines over the corresponding temple, and *occasionally* taking the form of paroxysms which sent an intolerable stinging sensation into the internal tissues of the head; and, at the same time, she experienced great restlessness, insatiable thirst, and other febrile manifestations.

With the object of unloading the turgid vessels of the throat, the head, the eye, and other affected parts, and of determining simultaneously a change of action in the disordered vital organs, sanguineous depletion, to be followed by the exhibition of an emetico-cathartic evacuant, was held to be the requisite indication in attempting to mitigate the patient's distress. Blood, accordingly, was detracted from the arm, to the extent of thirty-six ounces, when faintness supervened: this state was accompanied with nausea, retching, and a cold sweat bedewing the forehead; but its effects on the general system were imperfect and transitory. After the lapse of an hour, a powder containing half a drachm of ipecacuanha, one grain of the tartrate of antimony, and five grains of submuriate of quicksilver, was administered in the necessary proportion of treacle, and immediately followed by a free draught of tepid water. It soon commenced operating, but produced only four returns of vomiting, each of which was preceded by intense nausea, and occasioned an abundant flow of tears, and of the salivary secretion, with a discharge of much thin mucus from the nostrils. The ear-ache permanently disappeared during the efforts induced by the second return of vomiting; and, so soon as this had finally subsided, the woman was placed in bed, and forthwith sank into a state of profound repose, which was disturbed at the end of three hours by a copious alvine evacuation. Two more solicitations of the same nature occurred in the course of the evening, when a warm semicupium, with continuation of abstinence, promoted for the night a

tranquil and refreshing sleep. Next morning, all the signs of topical and constitutional excitement had nearly ceased; and rest, low diet, with mild aperient medicine, brought the patient, in three days more, into her former health.

During the long period which has intervened since, twenty-five cases, in many respects alike, have been treated in exactly the same manner, and with the same results as that of which the history is detailed; and the legitimate induction from the evidence afforded by these results is, that a judicious combination of blood-letting, with emetics and laxative remedies, constitutes an efficacious and successful mode of subduing the inflammatory ear-ache, when it manifests the acute distinctions. In three of the subjects the emetic required to be repeated; but in all, one bleeding, varying from ten to forty-five ounces, according to the intensity of symptoms, and the constitutional peculiarities, was sufficient.

Simplicity of practice, however, being at all times desirable, the practicability of dispensing with venesection in this disease presented itself to my mind, and led to the measure of making the treatment of its less urgent forms, by the use of emetic and cathartic applications alone, the subject of careful and reiterated experiment. Sixteen cases conducted on this plan, without a single failure, may therefore authorise my suggesting the propriety of prosecuting the inquiry, and of entertaining a conviction of the method being adapted to produce beneficial effects, under like circumstances, in the hands of other practitioners. In eleven instances, the emetic was twice, and in five, thrice exhibited: in every one of them the convalescence was rapid and perfect. One sketch may serve for illustration.

D. G., a lad of sixteen, of full habit and healthy, experienced a general chilliness, and other feelings of discomfort, in the evening after travelling in a stage-coach, the windows of which were occasionally let down during the journey. At the same time the atmosphere was moist and cloudy, while a cold wind blew from the north-east, and his right side was, in consequence, exposed to its action. At night he bathed his feet in warm water, had a 'warm drink,' and went to bed, complaining very much of sharp wandering pains in the throat, neck, and right side of the face, with increasing difficulty of deglutition, and a stinging deep-seated pain in the ear. Next morning early, he was roused from an unrefreshing slumber, by a severe paroxysm of ear-ache, accompanied with aggravation of all the precursory symptoms. For that day and the following, he was subjected to the discipline of a domestic treatment, composed chiefly of saline aperients, in defective doses, frictions of the throat, with ammoniated liniment, and the insertion of laudanum on cotton into the affected ear. Such means, however, proving inefficient, the disease progressively advanced, and late in the third day came under my observation as a true otitis, distinguished by the certain signs, local and general, of inflammatory excitement.

On this occasion, slowness of the bowels, loaded tongue, heat

and constriction of the skin, hoarseness, headache, with throbbing of the cephalic and cervical vessels, difficulty of swallowing, sense of cold all along the spine, excessive sensibility, and tumefaction of the right side of the face, eyelids, and neck, and an excruciating pain within the ear, which underwent intense exacerbations, with much disturbance of the respiratory and sanguiferous functions, afforded the grounds of a therapeutical indication.

Without loss of time, an active emetic, thirty grains of ipecacuanha, and three of the antimonial tartrate, was administered: its effects were powerful but not excessive; and the advantages derived from them were immediate and decisive. Before the last paroxysm of vomiting ceased, all the more urgent symptoms had nearly subsided; and the patient, on reclining himself to rest, soon fell into a tranquil sleep, during which a general and profuse perspiration supervened. Before midnight three copious alvine dejections were obtained; and he passed the morning in a state of uninterrupted repose. Throughout the whole of this day a genial moisture universally bedewed his cutaneous surface: he remained closely in bed; and, without other food or medicine, took twice some beef-tea, with a small piece of bread. At bed-time, an opening medicine—a scruple of rhubarb, with one grain of ipecacuanha—was exhibited; and, in half the proportion, repeated next morning. By noon, this produced a large fœtid dejection, after which the young man felt so free of uneasiness of every kind as to become importunate in his desires of leaving the bed. This design, being at last accomplished in the evening, led to a renewed attack of the disease, occasioned by his momentary exposure to a stream of cold air: his rest in consequence was disturbed; and early in the subsequent morning, many of his inflammatory symptoms had reappeared, and the ear-ache grown quite agonising. For these, he took the emetic and purgatives, as before; and the same results ensued. In the end, confinement to bed, abstemious regimen, warm foot-baths, with mild diaphoretics and aperients, enabled him, in four days longer, to resume his ordinary occupations.

By the pathological histories which this detail exemplifies, we should be guided to the conclusion, that acute, even very acute and complicated otitis, may be subdued by the united influences of emetics and alvine evacuants, independently of blistering or venesection. In its milder, though still acute form, the disease will frequently yield to the unassisted powers of an emetic of ipecacuanha with antimony; which, besides inverting the stomach's natural action, communicates excitement to the skin, and the system of organs on which the varied pressures of alimentation depend. Observation of this practice, in fifty-three instances, has furnished me with inducements to regard it, notwithstanding its extreme simplicity, as convenient and generally successful; and, under this impression, to submit its merits to more extended and diversified trial. The notes of three cases, taken indiscriminately from the list, may represent the principles on which this statement is founded.

R. G. M., a fine lively boy, aged eleven years, had complained for

a few days of a common cold, attended with stiffness of the neck and considerable enlargement of the submaxillary glands. Domestic remedies, however, had in a great measure removed his principal symptoms, when he employed his first escape from confinement in hastening to join his companions at a pool, on which the ice was softening, by the effects of an incipient thaw. At this place he spent upwards of two hours, in a variety of juvenile amusements, and returned to the family with his feet soaked in melted snow, and his whole person moistened with perspiration. He was instantly undressed, and sent fasting to bed, where he passed the evening without other inconvenience than what arose from an increasing desire of food. Under these circumstances, he had an early but light supper, and went to sleep in the best spirits. Nevertheless, ere noon of the next day, he began to droop; and by evening had symptomatic fever, difficulty of swallowing, and pain over all the left side of the head, with frequent and violent fits of ear-ache. The usual popular antidotes were opposed to this state, but without advantage; and, late at night, his treatment was consigned to my direction. On being questioned, he confessed that he had been forcibly struck with a snow-ball on the affected side of the face, and that some time elapsed before the snowy particles were picked out of the ear, on account of their coldness. Altogether, an acute otitis seemed evidently to be making rapid progress. Immediately, therefore, an emetic, containing fifteen grains of ipecacuanha and one of the tartrate of antimony, was administered, and in due time determined the best results, by abolishing entirely the ear-ache and its concomitant febrile movements. On the disturbance thus induced subsiding, the patient was immersed in a warm bath, where he underwent friction of the spine, abdomen, chest, and neck: this was followed by a profound sleep and gentle perspiration. Early on the ensuing day, his bowels became active, the cutaneous functions free, the circulation equable, and his exemption from pain complete. The establishment of his convalescence was now decided: light cooling nourishment, exercise in his room, and a gradual exposure to the genial atmosphere, without medicine of any kind, restored him in a few days to the enjoyment of vigorous health.

Equally beneficial were the results of this treatment in the following instance:—A. D., a maid-servant, twenty-four years of age, and endowed with a sanguine temperament, had sustained the effects of cold and wet, after being heated at work, on the first day of her catamenial period. The progress of this, in consequence, was suspended, and the circumstance concealed from her mistress, who, notwithstanding, directed her to have a warm bath, aperient medicine, and a draught for inducing perspiration, as the means of removing a catarrh, complicated with an excruciating ear-ache. By these remedies the general symptoms were partially mitigated; but the local affection continued to augment till its intensity had occasioned a train of alarming hysterical agitations. On the third day from her seizure, this person came under my care, in a state distinguished by the usual manifestations; the nervous disturbance parti-

cularly was severe, and had much in it of a true convulsive nature. Without delay, she took an emetic (℞. *pulv. ceph. ipec. ʒss. tart. antim. gr. iij.; M. ritè, ut fiat pulvis more solito sumendus*); and in due time a warm semi cupium, which was succeeded by free alvine evacuations, a general diaphoresis, and a long sleep. While rejecting a large quantity of bilious matter in the second fit of vomiting, she perceived the ear-ach yield, and it ceased entirely before the drug's specific influences were exhausted. In this interval, the uterine emanation re-appeared, and uninterruptedly perfected its ordinary course; she had no return of her nervous disturbance; and, with the necessary precautions against cold, was freed in a few days from every trace of her complaints.

More than one practical hint may be deduced from the next history. Mrs. S., having a lymphatic constitution, the mother of three children, and on this occasion in the fifth month of pregnancy, had inadvertently placed herself in the range of a moist autumnal air, blowing through an imperfectly closed window. In the evening, she experienced a general chilliness, with returns of shivering, constriction of the skin, soreness of the parietal bones, and a distressing sensation in the teeth of her upper jaw on making a respiration. After bathing her feet in warm water, filling both ears with cotton, impregnated with a pungent oil, and covering the throat with flannel, she went early to bed, but soon became hot and restless; and towards midnight had an accession of acute lancinating ear-ach. This returned in frequent aggravated paroxysms, darting to the innermost structures of the head, and, in the end, induced nausea, with very fatiguing attacks of retching.

Finding, in the morning, her vital functions in a state of great disturbance, and observing the indication pointed out by nature, which I had adopted on other occasions; and even in this person's peculiar circumstances, I hesitated not to advise the immediate exhibition of an emetic,—thirty grains of ipecacuanha, and two of tartrate of antimony, with large dilutions of tepid water. It operated copiously, but without severity, excited the bowels and cutaneous vessels, rebalanced the circulation, and was in all respects salutary. A warm bath, abstinence for that day, a refreshing sleep, and moderate exercise in her room, in due time rendered her convalescence complete.

Otitis, even in the simplest state, is not unfrequently the cause of very acute distress to the sufferer; but on such occasions, like tooth-ach, it seldom excites any great degree of sympathy. For this reason, and from other sources of neglect, the disease is sometimes permitted, by want of suitable interference, to establish an ascendency in the system, to which the best means of cure may be vainly opposed. On this account, therefore, there is a manifest propriety in subjecting it to treatment during its earliest and uncomplicated stage: and, from the evidence of these cases, the extensive and diversified influences of vomiting seem to be well calculated to determine the indicated results. These instances, it is true, afford exemplifications of ear-ach merely in its acute inflammatory form;

but, in conjunction with other appropriate remedies,—venesection, contra-stimulants, epispastics, and alvine evacuation,—it furnishes a powerful resource for subduing the affection in its more aggravated as well as protracted modifications. Such, indeed, are of less frequent occurrence, especially unaccompanied with lesion of the implicated organ; nevertheless, where the morbid action is still *nearly* simple, though chronic and inflammatory, the exhibition of emetics alone will often suspend its progress, frequently change its character, and sometimes restore all the disbalanced functions to their natural tenour. In my experience, the observation of thirteen cases, which it would extend the present article unduly to detail, goes to elucidate and confirm this doctrine; and a still greater number, having complications, authorises my stating, that this means shall contribute, decidedly, towards augmenting the efficacy of a systematic treatment for mitigating, or entirely removing the disease.

Nervous ear-ach, as it has been denominated, has its character, when idiopathic, exceedingly aggravated by derangement of digestion; and, when symptomatic, as it more generally is, it derives its origin and intensity from the operation of substances offending or disordering the alimentary system. It may be recognised by the usual signs of ' nervous irritation,' in connexion with that peculiarity which distinguishes the local pain. For this affection, therefore, which when protracted may attain a very injurious, as well as obstinate, ascendency over the constitution, an emetic, assisted by the common topical applications, and repeated, according to circumstances, to the third or fourth time, almost universally has favourable results. When yawning and squeamishness, and gastric flatulency, are superadded to the other symptoms, this remedy is certain.

Erysipelatous inflammation, as well as the true erysipelas itself, under both its local and erratic modifications, proceeds for the most part from the disorders of vital action, which have their origin in an imperfect or unnatural discharge, sometimes simple, sometimes complicated, of the digestive or cutaneous functions. In its first stages, the former is always accompanied, in a greater or less degree, with the febrile manifestations; and these, in being modified by the disease's peculiar nature, have a direct tendency to create inappetency, debility, and mental depression. Under such circumstances, the administration of ipecacuanha, with rhubarb and capsicum, in frequent and regulated doses, exerts a very beneficial impression on the skin and assimilative organs. When this salutary change has evidently been effected, a light, exhilarating, nutritive course, aided, when necessary, by suitable topical remedies, shall in general be found sufficient for the restoration of health. In many instances, however, a gentle emetic intercepts the malady: and, by consequence, should be held as the best means of accomplishing the preliminary objects of practice.

Gout has a constitutional source, associated with a tendency to assume a local determination. In its early attacks, and especially

when the manifest symptoms are those of excitement, the paroxysm shall in many instances be intercepted by the actions of an emetic, assisted by soothing the affected part with cold or with warm applications, and a determinate course of aperients, temperance, and rest. In almost all its forms, indeed, except under circumstances where the exhibition of such a remedy would necessarily be contra-indicated, the gouty accession will yield sooner to the appropriate treatment, if this has been preceded, or is succeeded, by the diffusive influences an emetic is capable of communicating to all the systems of the animal economy. At present, however, it is not proposed to investigate this question in detail.

Every attentive observer may be taught by his own experience to conclude, that justly qualified emetics possess a tendency to invigorate the assimilative organs. The confirmation of this maxim is drawn from the growing desire of food, the disposition to sleep, and the genial perspiration, which are often consecutive to their salutary operations. It is only when abused by ill-timed exhibition, excess of strength, improper ingredients, or a too frequent repetition, that they impair the excitability of the brain, the stomach, and the system. In some cases, as a preparatory measure, it may be necessary to unload, by sanguineous depletion, the overcharged vessels of the brain; in others, to moderate when exalted, by the same means, the tone of the nervous energy which is supplied by secretion from the blood; and in some, where the nervous activity is defective or oppressed, an acid draught, or affusion* of cold water on the head and person, shall render the system more susceptible of the influences which an emetic naturally produces.

By observation of their effects in numerous and greatly diversified instances, my own mind has, long since, been persuaded of the advantage of exhibiting such remedies in *full*, preferably to *inferior* doses; and, in my hands, a combination of antimony with ipecacuanha improves the peculiar efficacy of both medicines. A difference of opinion may be entertained, and indeed is usually retailed in dispensatories and pharmacological books, with regard to the propriety, or even the safety, of administering emetics to pregnant females. Of their safety, however, in ordinary circumstances, I entertain no doubt; and it is exemplified in one of the preceding sketches, taken from several others of the same kind. Reflections on the violent agitations which females occasionally undergo, without bad effects, even in advanced pregnancy, first of all induced me to investigate the principles on which the practice of treating them with emetics, as a remedy for disease, has been interdicted; and, by leading to a conviction of this proscription being founded on theoretical preconception, seemed to authorise a cautious trial, under urgent indications, of their powers. This proved most beneficial; and, on many subsequent occasions, the right administration of an

* The reader will find this practice successfully adopted, by recurring to the Repository, Vol. XVIII. pp. 26—29.

emetic * to a pregnant woman has secured the happiest results. Whoever, in fine, shall reflect philosophically on the acts of violent exertion, on the effects of irregularity, accidents, diseases and their treatment, and on the means employed by execrable knaves for the sake of procuring abortion, which many females sustain without injury, must be led to the conclusion, that nature is too wise, and has been too provident of the well-being of her noblest offspring, to leave the important processes of utero-gestation susceptible of derangement or destruction by the effects which well-regulated emetics naturally determine.

Glasgow, January 1826.

III. *A Case of difficult Parturition, from a Dropsical Tumour occupying the Cavity of the Pelvis.* By WILLIAM JACKSON, Member of the Royal College of Surgeons, London; and Surgeon, Sheffield.

J. W., a married woman, aged twenty-one, had suffered much from a tedious labour in the year 1822, when it was deemed necessary to resort to instrumental assistance to effect delivery. The child, which was above the ordinary size, was born alive; and at that time no distinct cause could be assigned to account for the protracted duration of the labour (above fifty hours).

The subject of this communication became pregnant again, and my assistance was again required on the 14th of March, 1824.

On my examining, the concavity of the sacrum was completely filled up by a soft tumour, which pressed the vagina against the arch of the pubes. Uterine action had been strong for the space of six hours previous to my arrival; and during each paroxysm the posterior parietes of the vagina assumed a tensely elastic state, preventing the introducing of the finger.

Conceiving that the tumefaction might arise from an obstructed state of the rectum, an examination of this part was made; but no

* With reference to this statement it may be added, that pregnant women often sustain great evacuations, both by the lancet and purgative medicines, intense excitement from blistering, and other remedies employed for the treatment of febrile and inflammatory seizures, without incurring a tendency to abortion. I have, moreover, conducted the cure of females in this state, with fractures of the upper and lower extremities, and in one instance with fracture of the right thigh-bone, and at the same time of both bones in the left leg: in another case, a violent contusion on the lumbar spine was followed by a sphacelating ulcer, which yielded to the usual remedies; and, in both, the course of pregnancy had a favourable issue. By one of my friends in this city, also, a malignant tumour was removed by amputation from the right breast of a woman, in her fifth month; and, while her particular condition passed on undisturbed, the operation was in all respects fortunate.

contents were found, the cause of obstruction being ascertained to be situated behind the rectum, so that that intestine was pushed with the vagina against the pubes. Pressure made upon the tumour, during the cessation of uterine action, had no effect in removing the contents of the tumour. After considerable difficulty, and during an interval between the uterine paroxysms, a finger was introduced under the arch of the pubes, and a foot was found to be the presenting part of the fœtus.

In this stage of the labour (the membranes being ruptured), when, under the present circumstances, delivery appeared quite impracticable—a question arose, whether a puncture should be made into the swelling to evacuate its contents, or an attempt at the delivery of the fœtus, by reducing its bulk in the best practicable way, be resorted to? If the former plan had been determined upon, the posterior part of the rectum would have offered the only practicable situation for an opening into the swelling.

I, however, determined upon the latter mode of effecting the delivery, calculating upon the compressible character of the swelling, and the uterine action, which still continued powerful, and being unwilling to injure the rectum, which at this period offered the only place for any operation, with a view of reducing the tumour.

During the continuance of each paroxysm, the foot was steadily drawn down, until the breech could be felt, when, by considerable exertion, the other extremity was extracted. It is unnecessary to detail the after steps of the operation, excepting as respected the delivery of the head; the difficulty attending which appeared insurmountable. Being at a great distance from the town, I dispatched a messenger for the craniotomy instrument; but previous to his return had succeeded in effecting the delivery, after two hours' exertion. The child, as might be expected, was still-born. There was now no farther immediate difficulty. The swelling, more flaccid, still occupied the concavity of the sacrum; and the contents of the pelvis did not appear to have suffered any serious injury by the great force exerted in order to effect the delivery. After the operation was finished, the woman appeared much exhausted, and she had an opiate administered.

On the 16th of March, being the day but one succeeding her delivery, the bowels not having been moved, and much pain being complained of in the pelvis, an aperient was administered, which had no effect: the urine was also discharged with great difficulty, and in small quantity. This state evidently arose from the pressure of the tumour on the rectum and urethra. On examining the rectum more accurately, I ascertained that now a very perceptible fulness and fluctuation were situated between the anus and os coccygis. The extreme pain experienced in the situation of the sacrum, together with the retention of the urine and fæces, called for some relief, if any were practicable; accordingly, at the distance of about an inch from the os coccygis, a lancet was plunged deeply forwards and upwards, which was followed by about six pints of a limpid

straw-coloured fluid, which came away in a forcible stream. A most agonising pain in the head succeeded the evacuation of the fluid, which was relieved on her resuming the recumbent position. The immediate effects of this operation were entire relief from the pain in the pelvis, and a free evacuation of the intestines and bladder, there having been occasion to empty the latter but once by the catheter. A considerable quantity of fluid continued to flow from the orifice for two days, after which it closed. The day following the evacuation of the fluid, much pain was experienced in the head, for which the following draught was ordered, with great relief, tinc. opii, sp. æth. nitr., āā g^{tt} xl. aq. menth. ʒi. M. ft. haustus.

On the 28th the fluid had again collected, and whilst she preserved the recumbent position, was drawn off at the former situation, to the quantity of four pints; its colour was a yellowish green. The same affection of the head, in a less severe degree, supervened upon the operation on this occasion.

On the 3d April the fluid had re-collected, and the discharge of the urine and fæces had been for two days with difficulty effected. A quart of clear fluid was drawn off with decided relief, but followed by the usual head affection. The patient's health, which had been much deranged since her delivery, now recruited; her appetite improved, her strength was restored, and every function approached the standard of health. The pulse especially, which had ranged from 100 to 120, now became reduced to 85.

On the 12th, it again became necessary to evacuate the fluid; and it appeared quite clear that a considerable change had taken place in the parts containing the fluid, as the slightest pressure upon them was attended by severe suffering, and this tenderness extended along the dorsal vertebræ. The integuments about the os coccygis had become considerably thickened, so that the fluid appeared to be situated deeper than usual. The fluid discharged on this occasion (by measure about three pints) was of a deep brown colour, and tinged with blood. The affection of the head was much slighter than on any former occasion. It was attempted to establish the gradual discharge of the fluid by means of a tent, but so much irritation was excited by it that this procedure was abandoned, and the orifice was allowed to close.

On my visiting this young woman on the 16th, her state was very unpromising. She complained of severe pain and tenderness, extending from the sacrum along the spine to the brain. She was very restless, and complained of a numb sensation in the lower extremities, and had great heat, thirst, with a full and hard pulse at 110. Tongue furred; bowels regular; urine scanty and high-coloured, and voided with difficulty. There appeared a slight accumulation of fluid, which on being evacuated amounted to little more than a gill, and was deeply tinged with blood. The introduction of the lancet on this occasion produced severe pain, which she described as shooting from the inferior part of the vertebræ to the head. An obstruction to the flow of the fluid appeared to arise from some membranous structure deeply situated within the orifice. I suspected this

was the sac containing the fluid, which again resumed its course when the obstructing cause was removed by the introduction of a probe. The treatment now consisted in the application of leeches along the spine, aperients, and opiates with antimony. In a few days the symptoms of excitement subsided. On the 15th, 16th, and 17th there was a considerable discharge of blood from the vagina. There has been no subsequent accumulation of fluid; the parts situated between the coccyx and anus appeared thickened and consolidated; but there still remained much fulness in the pelvis and immediately above the pubes.

A natural state of the parts, and a healthy condition of the constitution of my patient, were gradually re-established; and she again (3d time) became pregnant in 1825, and experienced no difficulty in her labour.

Remarks.—Dr. Denman, in his introduction, alludes to an affection nearly resembling the one herein detailed, with this difference, viz. the fluid in his cases (which he considers ascites) appeared to protrude between the vagina and rectum. He terms this affection dropsy of the perinæum, and was not decided at the time his cases occurred as to the most eligible mode of practice, but subsequently advises the tumour to be punctured previous to delivery.

On reviewing this case, a question arises,—whether the fluid was originally secreted and situated in the concavity of the sacrum, or by rupture or protrusion had descended from some more internal part, as the bag of the peritoneum, or more probably one of the ovaria? The distressing affection of the head, supervening on the evacuation of the fluid, is attributable, I think, to the pressure being removed from the blood-vessels; and the great excitement alluded to, on the 16th of April, clearly indicated inflammation of the membranous coverings of the spine, extending even to the brain.

October 28, 1825.

IV. *Case of Diffusive Cellular Inflammation in a Child.*—By F. Bailey, M.D., late of Sidney College, Cambridge; Member of the Medical Societies of London and Edinburgh; and one of the Physicians to the Reading Dispensary.

The attention which diseases of the cellular membrane have recently excited induces me to place on record a case of this sort, which I drew up more than two years ago. I do this the more willingly, because I have not observed in any late publication an instance of the disorder occurring at so early a period of life, wholly unconnected with external injury, and producing such extensive ravages in the particular structure which it occupies.

Caroline Blackman, aged eighteen months. On the 1st of May, 1823, each leg below the knee was observed to be œdematous; and

by the 3d, this swelling had extended itself over the whole body: no other marks of indisposition, however, supervening, I was not consulted until the 5th of the same month. I then found the child completely anasarcous, with the lower limbs prodigiously enlarged. Not observing any appearance of constitutional affection, except a slight feverishness, I attempted the removal of the watery collection by a combination of powerful diuretics and hydragogue purges; but these medicines proving inefficacious, recourse was had to scarification of the insteps. This operation, which took place on the 21st of May, by affording an exit to the effused fluid, considerably reduced the general swelling of the body, and led to the discovery of extensive sinuses in the legs and back.

The sinus of the left leg began high up in the thigh, and taking the direction of the sartorius muscle, afterwards descended over the gastrocneminus to the origin of the tendo Achillis. At this part it formed a pouch, by the compression of which the contained fluid ascended along the course just mentioned. In the right leg there were two distinct sinuses, the one precisely similar in situation and extent to that already described; and the other originating on the outer side of the thigh, and running, by the outer edge of the vastus externus and fibula, almost to its malleolar process. The sinus in the back occupied chiefly the left lumbar region, but extended a little way across the spine at this part.

Under such circumstances, the sinuses were punctured at their most depending points. Those in the legs yielded, collectively, a pint of a whitish, and apparently semi-purulent fluid, which, on cooling, separated into serum, and a floating substance resembling macerated flesh, and exhibiting in its surface a great many oleaginous particles. On the following day, also (viz. on the 29th), a considerable quantity of a similar fluid was again evacuated; but the sinus of the left thigh, to my surprise, appeared obliterated. Encouraged by this circumstance, it was proposed to attempt union by adhesion. Bandages were therefore applied over the several sinuses, with a force sufficient to bring their surfaces into contact. The subsequent visit realised my expectations, the sinuses in the right leg having considerably contracted their dimensions. No constitutional derangement worthy of remark had as yet arisen; and every thing seemed favourable until the morning of the 2d of June, when the child appeared in a good deal of pain, with an anxious sunken countenance, and a pulse sharper than usual. In this state the parents said she had passed the night. She grew rapidly worse; and at an early hour of the evening expired.

On the subsequent day the examination of the body took place. All the viscera (with the exception of the brain, which we were not permitted to investigate) were remarkably sound and healthy; neither had effusion taken place into any of the great cavities. The state of the sinuses was naturally the principal object of inquiry. On cutting into one of these, a considerable thickness of adipose substance was, as usual, found adhering to the skin; but its medium of connexion with the subjacent muscles, the cellular tissue, was

wholly destroyed, and their fasciæ consequently exposed. No doubt then could any longer remain as to the seat or nature of this anomalous disorder. All phlegmonic, and secondarily, many erysipelatous affections, are examples to which it bears some analogy; but I am not aware of any recorded instance in which the cellular membrane seems to have suffered so generally and primarily from an attack assuming the character and appearances of inflammation.

Such is the case, as recorded more than two years ago. The reperusal of this short history tempts me to associate the disease which proved fatal to my patient with those instances of acute dropsies which so often yield to antiphlogistic measures; and I feel persuaded that it can only be successfully combated by the adoption of a similar method of treatment.

The sudden termination of this case, no less than the absence of general disturbance observable in its progress, affords ample field for physiological speculation.

V. *On the Milky Appearance of the Serum in several Diseases.*

By Robert Venables, M. B. &c.

In the Repository for this month (Vol. xxv. No. 146), and in the xxvi. art. entitled 'Clinical Remarks on the Diseases most prevalent during the preceding Month,' I find the following observation: 'One case of acute pericarditis came before us, complicated with a much slighter inflammation of the lungs. The disease yielded to the usual treatment. *We mention this case in order to notice what has not, as far as we are informed, been before recorded,—the serum of the blood taken from the arm of this patient, at two blood-lettings, exhibited each time a milky or whey-coloured appearance.*' The appearance above noted has not escaped my observation; and in proof of what I advance, I beg to refer to the preface to my Clinical Report on Dropsies, p. 26. In the note, the following observation upon this subject appears: 'The report of the appearance on the 12th, at p. 54, and the observation in the note, p. 55, may appear directly contradictory. The observation at p. 54 regards the serum. *A dense milky appearance* I regard as indicative of an inflammatory state of the blood; and in the first impression I had introduced a conclusion to this effect. However, I thought it better to submit this opinion to the test of future experience, before adopting any conclusion upon the subject.'

Farther experience has confirmed the accuracy of this statement; and it must be highly gratifying to me to find my views confirmed under the peculiar circumstances in which they are in the Repository. This appearance, in all the cases, was observed under inflammatory action.

With respect to the cause of this appearance, I should doubt it

depending on oleaginous matter in the serum. However, it is necessary to state that there are two sources or varieties of this appearance. In the one, the coagulum formed by heat assumes a dense, heavy, and solid consistence. In this case the coagulum readily forms; and under such circumstances an inflammatory state of the blood may be safely inferred. In the other, the coagulum does not form so readily, is more brittle, and resembles more the curd of some milk. This state appears to depend upon an intermixture of chyle, and hence its appearance seems to indicate some defect in the process of sanguification.

In calling your attention to this circumstance, I am far from wishing to dispute either the honour of originality of observation or priority of statement; but I am desirous that the few merits which the publication on dropsies may possess should be plainly put before the public, the more especially as upon several occasions its defects have been sought out with an avidity, and dwelt upon with a degree of sarcasm, which savour rather of personal hostility than a desire for the advancement of philosophy and truth.

Henley upon Thames, Feb. 6, 1826.

VI. *Case of Adhesion of a divided portion of a Finger, after it had been for some time altogether separated from its Connexions.* By J. Houlton, F.L.S., Member of the Royal College of Surgeons.

The following case lays no claim to notice from either novelty or importance. It affords, however, another instance, to the many already recorded, of the restorative powers of nature,—powers whose limits have not yet been ascertained.

On January 30th, Mrs. B. called upon me with her son, requesting that I would dress his thumb, which he had severely wounded with a penknife. On examination, I found a piece was severed from the end of the thumb, with a portion of the nail; and as it was left at home, I begged the lady would go back and try to find it, which she succeeded in doing. I immediately adapted it to the place from which it had been removed, and confined it *in situ* by means of strips of lint, embued with tinct. benz. comp., there being too much hæmorrhage to allow of the adhesive plaster being neatly applied—a complete union by the first intention took place: the portion of the thumb was separated for at least ten minutes.

11, Grove Place, Feb. 6, 1826.

Section II.—Abstracts of Practical Facts, British and Foreign, with Remarks.*

I. *Epileptic Convulsions, &c.—From slight Injuries on the Head.—Cases, &c.*

Case I.†—A young man, of a bilio-sanguineous temperament, a private soldier in the 5th regiment of foot, then stationed at Dominica, received, whilst wrestling with a robust comrade, a blow from the clenched hand of his opponent on the centre of the *right* parietal bone.

This was on the 4th of February (1824), and on the 8th the young man was admitted into hospital with the common symptoms of fever, which yielded to the usual antiphlogistic treatment in a few days. The headach, however, which had hitherto been considered merely as a febrile symptom,‡ remained after that state was removed, and even increased in violence; the tongue, at the same time, becoming extremely foul, and the pulse unusually slow.

For these complaints, blisters were applied to the head, purgatives were exhibited, and bleeding, both general and local, was employed; mercury also was administered, and as soon as its peculiar action became manifest on the system, the headach, &c. ceased, and the man was discharged from hospital, in apparent good health, on the 24th of the month.

On the 29th, however (that is, on the fifth day after), he returned to that establishment, complaining of pain in the whole of the upper part of his head; the pulse at the same time being as slow as sixty in the minute,§ the tongue loaded, and the pupils much dilated.

A repetition of the treatment, which had already proved successful, was now put in practice; but not with a similar result, for the patient did not experience the slightest relief; and on the 2d March (third day after readmission), he was seized, at about two o'clock P.M., with a fit of *epileptic convulsions;* on recovering from which, he was found to be affected with *paralysis* of the *left* side.

The epileptic fits were shortly renewed, and continued with very

* When not otherwise mentioned, the Journals quoted or referred to in this and the following section are of course to be understood as being of the present *year*.

† *Case* 1.—From an article in the Lond. Med. Journ. for January, p. 103, by Dr. Blake, surgeon, 7th Dragoon Guards—a gentleman, as we have reason to know, of much skill and considerable experience.

‡ The man, on admission into hospital, made no mention of the blow he had received, and there was, it appears, no external mark of injury.

§ And it came down, we are informed, to fifty-four afterwards.

little intermission for about five hours; when the stertorous breathing, the rattling in the throat, the state of the pulse, and the general appearance of the man, all indicated the near approach of death. Under these circumstances, bleeding, the croton oil, and active enemata, having been already tried in vain, it was determined, in consultation, to apply the *trephine* to the site of the original injury on the side of the head.

Accordingly, about seven o'clock P.M., Dr. Blake, in the presence, as he informs us, and with the assistance of Staff Surgeon Ramsay, proceeded to remove with this instrument a portion of the *right* parietal bone. In doing this, it was observed that the bone was very thick, and that but little adhesion seemed to exist between it and the dura mater. The inner surface of the bone, however, did not exhibit any irregularity calculated to irritate the dura mater; nor was there any fluid effused upon that membrane—nor any appearance of effusion or suppuration having taken place beneath it; yet the moment the circle of bone was removed, the epileptic paroxysms, previously so severe, became considerably mitigated; and in a few hours thereafter ceased altogether. In less than a month, also, the paralytic affection of the left side entirely ceased; and the man having been sent to Europe, was soon restored to perfect health.

Observations.—This case is very creditable to Dr. Blake, and may be considered as a fair specimen of bold and judicious practice, modestly and clearly told.

It is, moreover, interesting in another point of view; namely, as a striking example of the serious consequences which sometimes arise from injuries on the head, in themselves apparently trifling, and productive of no marked local effects.

To his practical details, Dr. Blake has added some remarks, upon the manner in which the operation in this case may be supposed to have acted, in producing immediate relief and ultimate recovery. As these remarks, however, are rather of a speculative nature, we must pass them over in silence as not well adapted to this place,* and hasten to lay before our readers another case of *epilepsy*, &c., which our ingenious author has also quoted as a proper *pendant* for the preceding.

Case II.†—A man, aged about thirty-five, who had received a slight blow on the head, began some time after to labour under pain in the whole '*sincipital* region,' as the reporter calls it; and in a few months became affected with complete *amaurosis* of both eyes. Remedial treatment was employed for these affections under eminent surgeons, but without much benefit; and in addition to his other maladies, the man soon became *epileptic*. After suffering, in

* We feel the less regret in acting thus, as these remarks will probably receive some notice from one of our cotemporaries, upon whom this 'bold dragoon' has discharged a passing shot.

† *Case* 2.—From Edin. Med. Journ., vol. xvii., p. 322.

a hopeless manner, with these complaints for the space of six months, the patient fell into a comatose state, and in a few days after died.

On opening the head, it was found that the internal table of the cranium did not adhere with its usual firmness tot he *dura mater;* the skull-cap dropping off as soon as the bone was divided all round with the saw. Absorption, also, it is added, had rendered the surface of the cranium unequal (*quere*, which surface?); but no other unusual or morbid appearance is said to have been observed.

II. *Spontaneous Dislocation of the Thigh.—Case, &c.*

Case.*—A man of about sixty years of age was employed in pulling down a wall, and whilst thus engaged, part of it fell upon him, and dislocated the *right* arm at the shoulder, and the *left* leg at the hip-joint. He was immediately conveyed to the infirmary, where both dislocations were reduced, and proper bandages applied.

For a few days every thing seemed to go on well; but within a week after the accident, the left leg was found (*again?*†) shortened, the foot turned inwards, and the head of the femur upon the dorsum of the ilium.‡

With much difficulty, and by the aid of pullies, the dislocation was again reduced; and in order to prevent a recurrence of the unpleasant event which had taken place, the limbs were widely separated, and carefully secured by bandages, so as to prevent, as it was thought, any possible motion in those parts.§ Within a fortnight, however,‖ the head of the femur had again left its socket, and the proper motions of the joint, which had been completely restored by the two former reductions, were again lost.

After much suffering, as we are told, and again by the aid of pullies,¶ the bone was again reduced; and upon the presumption that the upper part of the acetabulum had been broken down, and thus

* *Case.*—From an article in the Edin. Journ. of Med. Science for January, p. 96, by Dr. Gibbon of Swansea, where the case occurred, *last year*, as it is stated, but whether this means in 1824 or in 1825 there are no means of judging, as there is no *date* to the communication.

† The nature of the first dislocation ought to have been particularly stated, and the reader should not have been left, as he now is, to conjecture, upon very faint grounds, that the bone each time was displaced in the same direction, and lodged in the same place.

‡ These events took place, we are told, *gradually*—how *gradually?* and if *gradually*, why not arrested in their course?

§ To what end secure the *limbs*, if the *trunk* be left at liberty? Surely it ought at once to have been seen, that though the former, under such circumstances, cannot be pulled *up*, yet that the latter can easily be pulled *down*.

‖ We are not told whether this occurred within a *fortnight* after the accident, or after the second reduction, nor are there any means of determining within our reach.

¶ We aresomewhat at a loss to understand how *pullies* came to be necessary on these occasions, or how so much *difficulty* seems to have been experienced in reducing a bone, which had been, as it appears, so *easily* displaced. Can Dr. Gibbon explain these circumstances?

opposed no sufficient resistance to the action of the muscles by which the displacement was effected, it was determined to secure the patient, with the limbs widely separated, to the four corners of the bed, and to retain him in that position for some time.

This plan was accordingly carried into effect, and with complete success. The bone slipped out no more; and the man, after a confinement of three or four weeks in a very irksome position, was rewarded for his patience and his sufferings by a perfect cure.

Observations.—There can be, we think, but little doubt with respect to the nature of this case, which seems to us to have been, as the author represents it, one decidedly of dislocation. We say this, because cases of *fracture of the neck* of the femur have often, as it is well known, been considered and treated as cases of *displacement of the head.*

Independently of the interest which the present case possesses in a pathological point of view, it may also be considered as of some importance in a *forensic*,—for surgeons, there is reason to fear, have sometimes been called upon to answer in courts of justice for not having REDUCED a dislocated bone, when that duty had been duly performed, and the part subsequently displaced by the spontaneous action of its own muscles.

We cannot conclude without observing, that if Dr. Gibbon has been guilty of some omissions (as we have pointed out in the notes), with respect to the proper subject of his communication, yet has he also endeavoured to atone for such neglect, by introducing some details, in his opinion no doubt more important, relative to 'the wife of this poor man,'—who, it appears, was brought into the *hospital* with a strangulated *hernia*, whilst the *husband* was in the *house* with a dislocated *hip.* This, as the ingenious author remarks, was surely a 'singular coincidence,' and well worthy of being rescued from the oblivion in which the records of a country hospital generally repose.*

III. *FRACTURE OF THE NECK OF THE FEMUR (within the Capsular Ligament, as it is supposed), WITH OSSIFIC RE-UNION.—Case, &c.*†

THE diversity of opinion which still continues to exist among professional men, with respect to the occurrence of *ossific* re-union when the neck of the femur has been broken entirely within the capsular ligament, renders every communication interesting which tends to enlarge our knowledge of the subject, or which is calculated in any manner to assist in determining the questions at issue.

* We notice this circumstance chiefly as furnishing a happy illustration of the passion which prevails, generally speaking, among our 'Original Correspondents,' for the introduction of irrelevant and useless matter,—often to the exclusion of that absolutely necessary to the proper understanding of the subject professedly under consideration.

† *Case.*—From an article by Dr. BEGBIE of Edinburgh (dated Dec. 5, 1825), under whose care the patient was; given in the Edin. Journ. of Med. Science for January, p. 71.

Of this nature is, we conceive, the following CASE,—the history of which is complete, even from the time of the accident with which it originated, to the death of the patient, and subsequent examination.

CASE.—A feeble lady, aged seventy-seven, in passing from one chamber to another (November 1821), slipped, and fell on her *right* hip. On attempting to rise, it was found she had lost all power over the limb; she was conveyed therefore to bed, but the hour being late, and the pain felt by the sufferer not severe, no assistance was called for until the following morning.

She was then found (as she had been, it appears, all night) lying on her back—with the *right* leg shorter than the left by about an inch and a half, the knee and toes turned considerably outwards, and the heel resting in the hollow behind the inner ankle of the other leg. There was no complaint but of inability to move the limb; but all attempts at rotating the thigh produced considerable pain in the situation of the trochanter major, and also in the upper and inner part of the thigh. The extension of the limb also, in order to bring the ankles together, was somewhat painful, though readily accomplished,—but the position could not be maintained, and the parts returned to their former situation. There was no *crepitus* to be distinguished.

These symptoms indicated pretty clearly a fracture of the neck of the thigh-bone, but as the age and feeble state of the patient forbad any hopes with respect to her ultimate recovery, little more was done beyond placing a firm bandage round the body, supporting the limb with pillows, and occasionally extending it, so as to bring the knees and heels into opposition.

Under this plan of treatment she continued for about five months, occasionally changing from her bed to a sofa. She then began to make some use of the leg, and with the assistance of crutches was enabled to move through the room; in time, the crutches were exchanged for a staff—the staff, in turn, was laid aside, and before the end of a year from the time of the accident, this lady, old, feeble, and abandoned as it were to nature, was able, by wearing merely a high-heeled shoe, to walk with facility through her house. Finally, she was in a few months more enabled to ascend and descend daily from one story of her house to another, and continued so to do until her last illness (an affection of the brain), which proved fatal in April 1824. The knee and foot, however, were to the last very much everted, and the limb considerably shorter than the other.

Examination of the parts after death.—On laying open the joint, the head of the bone was found in the acetabulum, and susceptible of being freely moved in its place. In the acetabulum itself there was no appearance of disease, nor in the ligamentum teres—but the capsular ligament was much thickened, and the neck of the femur much shorter than natural.

The femur having been sawn across a little below the trochanter minor, the upper part was removed for examination, and divided longitudinally. *Within the capsular ligament*, and trenching on the

head of the bone itself, a line of *compact bony texture* was then seen, extending from side to side. This, with the shortening of the neck of the bone and the thickening of the capsular ligament, were the only morbid appearances found in the parts.

Observations.—As all the symptoms and circumstances attending this interesting case during life, indicated in the clearest manner that the neck of the femur had been fractured, so the appearances found after death are considered by the reporter (and justly we think), not only as indicative of the same thing, but as affording the strong st grounds for believing that the fracture in question had taken place *within* the capsular ligament.

The accuracy of this opinion, however, has been questioned, and that by no less an authority than SIR ASTLEY COOPER,* to whom the morbid specimens were sent from Edinburgh for examination, and who is inclined, it seems, to attribute to 'age and disease,' the appearances which Dr. Begbie attributes to ossific re-union.

Sir Astley, however, appears to have formed his opinion from a partial view of the facts; and to have looked merely to the present state of the bone, without any reference to the history of the case; for neither age nor disease of any kind could have produced, *suddenly*, the symptoms under which this lady laboured, nor any other affection, indeed, but fracture or dislocation, which latter we now know did not take place. Nothing remains, therefore, but 'fracture of the neck of the bone;' and if the morbid appearances above mentioned be the result of 'age and disease,' where, it may be asked, are those belonging to the 'fracture?'

We have only to add, that the morbid specimens are preserved in the museum of the College of Surgeons at Edinburgh; and that a good plate, illustrative of their appearance, is given with the original article.

IV. *LITHOTOMY.—Lateral Operation fatal from Hæmorrhage.*

CASE.†—A countryman, aged about sixty, stout and very fat, was admitted into hospital,‡ labouring under symptoms of stone in the bladder. On sounding, the suspicions excited by these symptoms were confirmed, and the *LATERAL OPERATION* was there-

* Sir Astley, in a letter to Dr. Begbie on this subject, takes an opportunity of stating his true opinions with respect to fracture of the neck of the femur, which have, he says, been much misrepresented.

These opinions are, that fractures of this part do not unite *by bone*; and the reason assigned is, that the head of the bone is too little nourished for ossific union under the circumstances. 'But if the fracture is a *fissure* only in the bone, the envelop of ligament and periosteum remaining entire,' he then believes that ossific union will take place, because the means of nutrition remain.

† From a communication by Mr. Shaw, in Lon. Med. Journ., Jan., p. 3.

‡ No particular hospital is mentioned by Mr. Shaw; but the Middlesex, to which he belongs, is, we presume, the one intended.

fore determined on for his relief, and was performed, we are told, in the following manner:*—

The fore-finger of the left hand being introduced into the rectum, an incision was made in the perinæum, in the usual manner. This incision commenced about an inch above the *anus*, near the raphé, and was carried obliquely past the termination of the gut. On penetrating through the fat, which was here very thick, the *staff* was felt in its place, and cut upon; and the knife was then carried forward through the membraneous part of the urethra and the prostate gland.

Whilst the knife was passing through these parts, there was a gush of *blood*, and when it had fairly entered the bladder there was as usual a gush of urine; on the cessation of which latter, the wound in that viscus was enlarged a little with a common curved bistoury, and two very small stones were then extracted easily with the common forceps.

During all this time, however, and as it would appear for some time after the operation was finished, the blood continued to flow *profusely* from the bottom of the wound; and this notwithstanding the exposure of the lower part of his body to the air, and the application of wet towels to his thighs and perinæum.†

At length the bleeding ceased, and alarm for a time was at an end;‡ but about four o'clock the patient became extremely restless, and began to complain of severe pains in the chest and abdomen.§ Being at the same time cold and the pulse low, cordials were now exhibited; but the distress and sufferings of the unhappy patient rapidly increased, and continued with little intermission until about half past eleven o'clock, when death terminated the scene.

Examination of the Body.—On the following day the arteries of the pelvis were injected with wax, and the parts then carefully examined,‖ when it was found, that the fatal hæmorrhage had proceeded

* The *date* of admission into hospital is not mentioned, nor the *date* of the operation itself. We can only state, therefore, in general terms, and from public rumours at the time, that the case occurred about three or four months ago.

† The great depth of the wound, at the bottom of which the bleeding vessel lay, is assigned as the reason why no attempt was made to apply a ligature in this case. On examination after death the distance from the surface to the mouth of the wounded vessel was found to be, as we are informed, four inches and a half.

‡ How long the bleeding lasted, or what quantity of blood may have been lost, or what time elapsed between the cessation of the bleeding and the commencement of the pains, &c. are points upon which Mr. Shaw affords us no information, and upon which we can throw no light.

§ It is not easy, as Mr. Shaw justly observes, to explain the origin of these violent pains in the chest and abdomen, which sometimes follow the loss of blood. But as to the fact itself, it is too well established to admit of any doubt; nor is there any reason to believe it to be in any manner connected with proceedings of an inflammatory nature.

‖ To ensure the filling of every branch, injecting pipes were placed in both common iliacs, and in the inferior mesenteric artery; it being well

from a branch of the internal iliac artery (the proper artery of the *penis* in this case), which arose in an unusual manner, and passed along the *prostate gland* into the body of the penis.*

The trunk of the *pudic* artery, and the artery of the *bulb* of the urethra, were found uninjured; and no morbid appearances seem to have been observed in the viscera, at least none are spoken of.

Observations. — A distribution of the branches of the internal iliac artery, similar to that which occurred in this case, is more frequent perhaps than the anatomists of the present day seem to think; and is expressly mentioned by many of the older anatomical writers as a thing often met with by them. The publication of this case, therefore, cannot fail of being useful, in directing the attention of practical men to the subject; and in teaching the speculative that the *lateral operation* for the stone may be fatal from hæmorrhage, even when performed in the most skilful manner, and by the most experienced hand.

With respect to the present case, however, we must observe, that Mr. Shaw does not seem to think that the death of the patient was occasioned by loss of blood; for he calls the case simply one of 'Lithotomy, *attended* with hæmorrhage;' and says expressly that the man, speaking of him a few hours only before death, did not seem to have been *weakened* by the loss of blood he had sustained.

We cannot conclude without adverting to the singular carelessness with which the original article appears to have been drawn up, as must be evident to every one, from the numerous omissions pointed out by us in the notes to this article, and yet we have not noticed all which occurred to us.

V. *Neuralgia.—Two Cases, one interesting on account of the Symptoms, the other for the Treatment.*

Case.†—A man of a phlegmatic temperament, and aged thirty-two, became affected (in June 1825) with symptoms of general derangement in the digestive organs, such as constipation, head-ach, foul tongue, gastrodynia, fulness and tenderness of the abdomen, &c.

To these affections, in about a fortnight others more distressing were added, viz. acute pains in the *left* temple, eye-ball, ear, cheek, side of the head and neck, together with great tenderness of these parts. The nature of these pains was soon distinctly marked by their occurrence in paroxysms; by these paroxysms being brought on or aggravated by pressure, motion, exposure to a current of air, or even by noise; and by daily remissions, in the morning and at noon, and an exacerbation towards evening.

known to practical anatomists, that attempts to inject the arteries of the pelvis by a single pipe, frequently fail.

* A lithographic plate, exemplifying the distribution of the arteries in this, and in another similar case, from Tiedmann, is given with the original article.

† From an article in the Edin. Med. Journal, Jan. p. 37, by Dr. Belcher, of Bandon, in Ireland.

In the course of another fortnight, in addition to these complaints, he was deprived of all power of vision in the *left* eye, the *pupils* at the same time becoming dilated and insensible, and the upper eyelid paralysed and drooping.

Under these circumstances, medical treatment seems to have been employed for the first time. For the first three days the *Pil. Hyd.* and *Ext. Colocynth.* were exhibited, with saline aperients.* By these means the intestinal canal was unloaded, and the state of the digestive organs improved—but no change was produced in the state of the eye with respect to vision, nor in the neuralgic pains. On the fourth day, therefore, the *carbonate of iron* was exhibited, and was continued daily, for twenty-six days;† when the use of medicine was discontinued, and all complaint is represented as at an end.

It may be worth while to observe, that no marked change took place in the condition of this patient until the fifth day after he had commenced the use of the carbonate of iron; when on awaking in the morning he found himself able to distinguish day-light with the left or amaurotic eye. From this time the symptoms gradually yielded, until, as we have stated, they were entirely removed.

Observations.—The preceding details contain all that is really of any value in an article which, in its original form, occupies no less than five octavo pages. And yet Dr. Belcher is not more diffuse in his language, nor more full of common-place remarks, nor more fond of talking of himself, than a large majority of the *original correspondents*, through whose vapid and soporific compositions it is our lot to labour, in search of matter for this department of the REPOSITORY.

With respect to the present case, we have not quoted it as one 'successfully treated by carbonate of iron;' for the *blue pills* and the *purgatives* may justly lay claim to a part of th ealleged success! but rather as exhibiting a rare combination of disease, in the loss of vision and paralysis of the eye-lid, with severe neuralgic pains in all the neighbouring parts.

As to the *success* above alluded to, it is impossible for us at present to say any thing positive; for the patient is only 'reported well' on the 15th of August, and our author's long communication is dated at Bandon on the *following day!!!* Did he sit up all night to prepare it—or when was it really written—or has the relief obtained been permanent? These are questions the Doctor will do well to answer in his next professional epistle.

As the preceding case is interesting principally on account of the *symptoms* which became developed during its progress, so is the

* The *Pil. Hyd.* and *Ext. Colocynth.* were exhibited at bed-time (five grains of each), and the saline aperient in the morning. And this course we may observe seems to have been regularly persevered in, during the entire time the patient was under treatment.

† The carbonate was exhibited in half drachm doses; during the first ten days or so, thrice a day; during the remaining part of the cure, twice only. The entire quantity taken is stated to have been twenty-six drachms.

following, of an analogous nature, on account of the *treatment* employed in it. The subject of it, as will be seen, having taken in the course of a few hours (thirty-six) the unprecedented quantity of EIGHT OUNCES of the carbonate of iron, and with good effects also.

Case II.*—A gentleman became affected with *neuralgic pains* in the neighbourhood of the zygomatic arch, in consequence of undue exposure to a damp north-east wind, in November 1824.

These pains came on in paroxysms at irregular intervals, and were sometimes very severe. For them the carbonate of iron had been tried (in doses of one drachm every six hours), combined with cinchona, cascarilla, and sulphuric acid. These remedies gave relief but it was only temporary.

Assafœtida and sulphate of iron were next tried, with the cinchona, &c. as before,† and with a similar effect; but that the relief obtained was greater.

On the next return of the pains, therefore, (and the attack it appears was more severe than any former one,) the following plan was adopted:‡—

EIGHT OUNCES of the carbonate of iron were made into an electuary with honey, and of this four large tea-spoonfuls were taken every six hours. In thirty-six hours the whole of the electuary was finished; the quantity taken at each dose, therefore, was ten drachms and forty grains (*troy*) of the carbonate.§

With each dose a draught was taken, containing one and a half drachm of the extract of sarsaparilla, in strong peppermint water; and the only effects experienced from the entire proceeding were, a complete release from pain, and a plentiful evacuation of the bowels, without griping.

This appears to have occurred about the middle of November, (1825) and more than a month after, (Dec. 1822) the gentleman is reported as being still 'quite well.'

VI. *URINARY AND GENITAL ORGANS—Mal-conformation of—Cases, &c.*

CASE I.||—A man, aged thirty-nine, and of a full habit of body,

* From an article in the Lon. Med. Journal, for February, p. 124.—This case is reported in the original by the subject of it himself; a gentleman, we are told, residing at Welford, and evidently a professional man.

† Rather more than a scruple (22½ grains) of assafœtida, and the same quantity of the sulphate of iron, were taken in pills on the evening of the attack.

‡ The disease, it will be observed, had now existed for about twelve months.

§ The reporter himself says that the quantity taken at each dose was, 'one ounce and two drachms;' but this would only give for six doses *sixty* drachms, instead of *sixty-four* (eight ounces), which he asserts he took.

Similar doses, we may observe, to those mentioned in the text, were taken, it appears, twice a day, for a few days after the cessation of the pains.

|| From a communication by Dr. Martland, of Blackburn, in Edin. Med. Journ., January, p. 31.

became affected (in December 1824) with a retention of urine, under the following circumstances:—

From birth no urine had been discharged through the urethra, which, indeed, did not exist; but a *stillicidium urinæ* had constantly existed from an irregular fungoid tumour, situated on the pubes, immediately above the penis, from which it was separated by a deep fissure. This tumour was nearly of an oval shape, with a perpendicular diameter of two, and its tranverse of three inches. It appeared to be girt, as it were, by a ligament, was extremely tender, and of a lively red colour; was much swollen, covered with a thick coat of mucus, and evidently in a high state of vascular excitement.

Under these circumstances, the apertures on its surface, whence the urine naturally issued, had become closed, and *retention* had taken place, accompanied by great distension of the abdomen, considerable fever, and a strong tendency to coma. From the treatment adopted for these affections, no benefit seems to have been derived;* but at length the local inflammation yielded, as we are told, to a little zinc ointment (*ung. zinci off.*) spread on lint; and after nine days of suffering the patient parted with three quarts of urine in one night; and on the following day was free from all complaint but weakness.

About three weeks afterwards, however, he was again attacked in a similar manner; and his complaints, this time aggravated by a severe diarrhœa, proving too much for him or his attendants,† he sunk under them about the eighth day; and thus afforded an opportunity of examining more minutely into the structure of the urinary organs, &c. than could be enjoyed during life.

Examination of the body.—The tumour above mentioned, as situated on the pubes, was found to be of a spongy nature, irregular in its thickness,‡ and surrounded by a firm ligamentous membrane. Externally no opening could be discovered on it; but on passing a probe from the inside of the abdomen through the *ureters*, these tubes were found to terminate by open mouths on the surface of the tumour at its lower edge, and at the distance of rather more than one inch (1.8 inch) from each other.

The ureters were very tortuous in their course, and in some parts

* The only remedies particularly specified by Dr. Martland (under whose care the patient was) as having been employed, are *fomentations* and *cataplasms;* and these, we are told, seemed rather to have an irritating than a soothing effect; and this, too, notwithstanding they were of the *emollient* kind. The *lancet* perhaps would have been a more soothing application under the circumstances than any other.

† It is proper to mention, that the patient was not under Dr. Martland's care on this occasion; he, however, appears to have been present at the examination of the body after death.

‡ 'The medium thickness was about an inch and a quarter, and the structure that of a spongy membrane.

were strictured; they were much distended also with urine; and each, with the pelvis of the corresponding kidney, was found capable of containing, without violence, eight ounces of fluid. The kidneys themselves were both much larger than usual, and lobulated.

Immediately below the tumour, and separated from it, as we have said, by a deep fissure, was the *penis*, one inch in length, and covered with cutis, but destitute of both *prepuce* and *urethra*. The upper surface was flattened, and of a triangular shape, with a slight groove running along its middle — the other sides were very irregular.

The *testicles* lay in each groin; they were of the usual size, but not pendulous. The *vasa deferentia*, and *vesiculæ seminales*, were all natural; but no *prostate gland* was discovered.†

The *pelvis* was much wider,‡ and, as it would appear, more shallow than usual, in consequence of the bones of the pubis being separated from each other by an interval of five and a half inches§. Across this interval a strong ligamentous membrane was extended, which connected these bones together.

On the abdomen, externally there was no appearance of the *umbilicus*, but internally, just above the tumour, there was a cicatrix in which the umbilical ligaments terminated; shewing that at birth the penis had passed through that part.‖

To the preceding details we add, on the same authority, and from the same communication, the following, which relate, as we are told, to a strong man, resident in the town of Blackburn, by name James Barlow. This man is now twenty-nine years of age, wears a female dress, and is said to have been in the same state as at present, or very nearly so, from his birth.

Case II.—In this case the symphysis pubis is perfect, and the testicles pendulous and natural. The *penis*, also, which is a full inch in length when flaccid, and two when erect, has a well formed

* The medium circumference of the ureters is stated to have been about two inches—*quere*, were the ureters in this case really affected with *strictures*, that is, in parts permanently contracted, as we are given to understand? or was this only an appearance?

† Dr. Martland says nothing of the bladder, which must, of course, have been deficient, although this *deficiency* is the very foundation of the case, if we may so express ourselves. But then, he says, 'the *vesiculæ seminales* were natural:' in what respects natural, we may ask? certainly not as to their situation.

‡ The distance between the two anterior superior spinous processes of the *ilia* was eleven inches.

§ Although the *penis* itself was so short, yet the *crura penis* were of considerable length, in consequence of this interval between the bones of the pubis.

‖ No further examination, it appears, was permitted; and nothing is said by Dr. M. with respect to the traces of recent disease in the abdomen, such as from the symptoms might have been expected.

glans, a frænum, and the lower part of the prepuce; but the upper part of the prepuce, and the urethra, are wanting.

Immediately above the penis, in the pubic region, is a tumour, irregularly circular, and about two inches in diameter. This tumour forms, or appears to form, a sort of hernia; and, when much distended, it rises two or three inches above the surface of the abdomen. Around its base, the circular band of fibres, mentioned as existing in the preceding case, may be distinctly traced.

Near the lower edge the terminations of the *ureters* appear; they are very perceptible, and rather more than one inch asunder—about $1\frac{1}{3}$d inch. Of these openings, the right will admit a common sized probe; but the left is much larger at present, in consequence of the passage through it of three calculi, two of which were as large as small horse-beans.* Through these openings the urine is constantly dribbling away; and the surface of the tumour around them has a fungoid appearance, and is covered with mucus, whilst every other part of it resembles, in appearance, the adjacent cuticle.

The man is not destitute of venereal desires; and the urine, though rendered naturally only by drops, may, by pressure, be forced into a small stream, shewing, that here, as in the preceding case, something in the nature of a reservoir exists within the abdomen.†

VII. *Hypochondriacal Gastro-Enteritis.*

Medical students, of what is commonly called a nervous temperament, are well known to be at times much afflicted, with the apprehension that they are actually suffering under diseases to which their minds have been forcibly directed. Attendance on a course of lectures becomes, in some instances, from this unlucky propensity, a source of continual but varied suffering. Separated from his home and his friends, anxious concerning his examination, careless concerning his diet, and exhausted with injudicious mental exertions, a very slight exertion of fancy suffices to confirm the juvenile hypochondriac that he has an alarming determination of blood to

* A third calculus, we are told, may at present be felt (or rather was to be felt in April 1825), about two inches from the orifice in this same ureter.

† As Dr. Martland's communication was necessarily addressed to Dr. A. Duncan, the editor of the Edinburgh Medical Journal, it cannot but appear singular that no mention or allusion even is made in it, to an elaborate essay, written by the latter gentleman, on the very subject to which this communication relates.

This essay, by far the best on the subject in the English language, may be found in the 1st volume of the above mentioned Journal, under the title of 'An Attempt towards a Systematic Account of the Appearances connected with that mal-conformation of the Urinary Organs, in which the Ureters, instead of terminating in a perfect Bladder, open externally on the Surface of the Abdomen.'

Can Dr. Martland have been ignorant of the existence of this Essay; and if not ignorant, why silent with respect to it, when addressing the author on the very same subject?

the head, or that his form is that of a phthisical subject. Even the vivacity of a Parisian student is not proof against the attacks of these imaginary maladies. The pupils of Corvisart were so impressed with the diagnostic lessons of their celebrated master, that a great part of the time not spent in the lecture-room was passed by them in finding out that they had got aneurism of the heart. Nor are the more recent prelections of M. Broussais more harmless. Not content with treating every case of pain of stomach as a gastritis, even such as nothing but a sedative or a tonic treatment will ameliorate, his pupils waste a good deal of valuable time in accounting for their own dyspeptic symptoms, according to the dogmata of the great leader of the school of the Irritationists; and the lecturer has the satisfaction of explaining himself to a crowd of young gentlemen, one-half of whom, at least, are inwardly groaning over the very malady, concerning the existence of which his enemies are so obstinately sceptical. Carrying with them such internal evidence of the truth of their master's doctrines, their last resource is to hope that their antagonists may happily arrive at an important conviction by similar sufferings; and those who are proof against argument daily yield to an attack of pain in the stomach.

We are informed by an eye-witness (M. Barras, Revue Médicale, Decembre 1825), that ' in the present day the physicians and pupils of the New School have a continual dread of chronic gastro-enteritis: as soon as they feel a little pain in the stomach, or even a little indigestion, they examine their tongues in a glass, or protrude them at one another; and if they find, or fancy they find, a redness of the tip and edges, they declare themselves, or one another, to be attacked with inflammation of the gastro-intestinal mucous membrane. They straightway apply leeches, have recourse to gum-water and milk, and debar themselves from necessary food. Having persevered in this course for some time, they try to go back to the use of meat and wine; but the susceptibility of the stomach having been increased by the abstraction of blood, by mucilaginous drinks, and the severe atonic regimen to which they have sentenced themselves, a more nutritious diet does not agree with them at all; for as the eye which has long been deprived of light is unable to bear the day, so the stomach which has for some time been deprived of its habitual stimulus, becomes unable to support it. Being now persuaded that the gastro-enteritis is not removed, the patients return to antiphlogistics: the already too sensible gastric system is further acted upon by the imagination, and in its turn reacts upon the brain; and by this reciprocity of moral and physical influences the disease goes on increasing. Serenity of mind, and an appropriate regimen, would still relieve it; but the physiological physicians, who see nothing in the case but an inflammation of the digestive mucous membrane, go on making matters worse by debilitants.'

M. Barras relates some cases in proof of these assertions, including his own; and considers the gastric affection which prevails among the students to be a true hypochondrical affection, arising in nervous

and irritable temperaments, from a sedentary life, too much study, unruly passions of the mind, and other causes; but above all excited by fear, and by the improper system of fasting, and of drinking copiously of diluent beverages, such as *tea*, &c. which is consequently observed by the patients when the mind has become possessed with the idea of serious organic disease existing in the stomach. The symptoms of this neuralgia of the stomach, as contrasted with those of real gastro-enteritis, are concisely stated in the following paragraphs.

'Intermitting pain of stomach, relieved by strong pressure of the epigastrium; the performance of digestion, in some cases even with facility; very rarely, vomiting; inodorous and tasteless eructations; obstinate costiveness; transient febrile movements without regular fever, and not in all examples; undiminished strength, and by no means remarkable emaciation, unless the patient is subjected to too severe a regimen or to detraction of blood; complexion of natural appearance; occasional interruption of all the symptoms for some days, or some weeks, with much tendency to relapses; excessive moral affection in most cases; but the prognosis always favourable, and, under proper treatment, a prospect of certain cure:—such are the principal characteristics of neuralgic affections of the gastric system.'

'Pain of the stomach, often not acute, but continual, and always exasperated by pressure in the epigastric region; digestion invariably incomplete; vomitings in the greater number of cases; acid and corrosive, or fetid and nidorous eructations; frequent diarrhœa, particularly when the mucous membrane of the intestines is implicated; slow fever; loss of strength, and rapid emaciation; complexion wholly changed; steady and uninterrupted march of symptoms; an unfavourable prognosis; and death in the majority of cases:—such are the features proper to chronic inflammation of the gastro-intestinal mucous membrane.'

VIII. *Observations upon Diseases of the Nervous System.*—By M. Serres, Physician to the Hospital la Pitié.

Account of an Organic Change in the Nervous Trigessimus, accompanied with the Loss of Sight, Smell, Hearing, and Taste of the same Side.

Hubertin Joseph Lainé, twenty-six years of age, a potter, entered my department of the Hospital la Pitié, on the 29th of September, 1823. His constitution was delicate, his temperament lymphatic, and his life had been regular, but he had been somewhat addicted to masturbation.

His general appearance was dull; his physiognomy was that of an imbecile man; he appeared to understand slowly the questions that were put to him, and had much difficulty in finding words to answer them. His pronunciation was difficult, and evidently made with considerable effort. His head was so large that some of the pupils imagined that hydrocephalus had commenced, and that there

was a separation of the temporal and parietal bones; but the prominence of the eyes induced M. Serres to form a different opinion. There was a slight separation between the os maxillare and zygomatic process of the temporal bones, with a consequent flattening of the nose. The bones of the right side of the face were rather larger than those of the left, rendering the former the most prominent. The patient had some difficulty in moving his tongue. The sensibility and power of motion in the limbs seemed no way diminished, though sometimes he appeared to use the inferior extremities less freely than the superior. Such were the circumstances in which he was found. M. Serres learned also that he had been subject to epilepsy, the first attack of which had commenced two years before, without any assignable cause. He had a deaf and dumb sister.

The attention of M. Serres was first directed to the epileptic attacks, which were frequent, and always commenced with convulsions of the right side. The right eye also was affected with scrophulous ophthalmia. Some circumstances having been observed in this patient similar to what had appeared in another individual who had died of epilepsy, and the appearances of whose brain on dissection were somewhat remarkable, M. Serres endeavoured to learn from Lainé his sensations during the paroxysms. The effort however he made to comprehend and answer the questions had very frequently the effect of inducing the paroxysms, so that M. Serres was compelled to omit his inquiries from the patient himself.

The change of circumstances, and the quiet in which he was placed, made a very favourable change in the frequency of the paroxysms, which, instead of recurring three or four times a day, as upon his first admission into the hospital, exhibited intervals of from eight to twenty days. His appetite returned, he gained in flesh, and enjoyed better spirits.

About the middle of December, the right eye was attacked by ophthalmia, with œdema of the eye-lid, and opacity of the transparent cornea. A seton was inserted in the nape of the neck, and the inflammation diminished, the opacity of the cornea, however, at the same time increasing, so that when the ophthalmia had disappeared, the cornea had become perfectly opaque. The epileptic attacks were renewed with their former frequency, and principally in the night. The convulsions were confined to the right side, and consisted in an alternate flexion and extension of the leg and arm, but chiefly of the latter, with occasionally a tetanic rigibility of these limbs, of some minutes' duration. Having been led by some of Magendie's experiments upon the nerves, to suspect that this was an affection of the fifth pair, his attention was directed to the nostrils and tongue. The right nostril was insensible to stimuli; the left eye and left nostril were in their natural state. The tongue at this time, June 1st, 1824, exhibited nothing peculiar. On the 7th of June, the right eye and nostril were in the same condition, and pepper placed upon the right side of the tongue made no impression — placed upon the left, it produced a strong impression. On the 20th, the gums of the right side were slightly inflamed, and had the an-

pearance of incipient scurvy. The hearing of the right side was not affected. The gums on the left side were sound.

On the 5th of July, dyspnœa was observed; the scurvy increased; the left gums still were unaffected. Towards the 16th, these also were comprehended in the disease. About the 4th of August, the hearing on the right side was diminished; but improved again after the application of a blister. It remained, however, still less than on the left side. On the 11th of August he died.

The body was opened the next day. The internal surface of the dura mater was injected on the right side; on the left it was thickened, and of a dirty-white colour. The tentorium cerebelli still were thickened, and adhered to the upper surface of that organ. The brain was removed from the skull with great care; but the trunk of the fifth pair was nevertheless detached from the annular protuberance in raising this last part.

The dura mater was detached from the right spheroidal ossa, and the ganglion of the right nervus trigessimus on the right side was in an unusual state. The ganglion was swelled, and of a greyish-yellow colour, and the fibres were separated by effused serum. Internally, the part of the ganglion from which the ophthalmic nerves arose, was red and injected. This redness extended also to the dura mater, covering it. At the posterior part of the ganglion, the nervous fasciculi were isolated by serum. The internal fasciculi were of a duller white than the external, but both were darker than usual. The alteration of the ganglion extended forwards in the three principal branches. The affection of the ophthalmic branch appeared the oldest, and the inferior maxillary nerve was more altered than the superior. These three nerves were of a dirty yellow, which colour continued to their issuing from the cranium. The right optic nerve, just behind the eye, was less than the left. In the remainder of their passage these nerves were similar. That part of the annular protuberance corresponding to the origin of the right nervus trigessimus, exhibited the same yellow gelatinous matter as was found in the extremity of the nerve. The left hemisphere of the brain was softened more or less throughout.

The details of this dissection, given by M. Serres, are extremely lengthy. We have, however, we believe, extracted all the important circumstances.

To this case M. Serres has added, that two similar instances in the incipient stage have been cured, under the superintendence of MM. Magendie and Edwards. We cannot, however, say, that we feel satisfied that the cases are the same, neither has M. Serres stated the mode of treatment that proved so successful. Should any detail of these cases be hereafter given, we shall feel it our duty to lay them before our readers.—*Editors.*

IX. *Note concerning a Species of* Cholera Morbus, *occasioned by eating Ices during the Heat of Summer.*

Towards the end of spring, and in the beginning of the summer of last year, many individuals in Paris suffered so severely after taking

ices as to give rise to a suspicion of their having been poisoned; and although no deaths occurred from this cause, it was thought proper to make it a subject of judicial investigation. Several persons having experienced these inconveniences at the *Café de la Rotonde*, in the Palais Royal, including the proprietor, M. Maseré, and his wife, a most diligent investigation was instituted into the manner of preparing the ice, the vessels employed, &c., and the waiters were subjected to a strict examination. Fortunately, however, for the character of the persons concerned, the same effects soon began to be observed in other French towns. It was found that the same symptoms had in some instances been produced by simple iced water; and it was recollected that in 1822, the summer of which year was also very warm, similar accidents had been observed. *After* these circumstances had become the subject of consideration, a commission was appointed, consisting of medical practitioners and chemists, (MM. Vauquelin, Marc, Léveillé, Marjolin, Orfila, and Pelletier,) before whom were laid the depositions of those who had been indisposed, and the reports of the physicians by whom they had been attended; the latter were also subjected to a cross-examination: and after all this had been done, they pronounced it as their unanimous opinion,—1. That the accidents which had been the subject of examination could not be accounted for except by ascribing them to an irritation of the alimentary canal, caused by the sudden action of cold on the stomach of persons who had been a long time exposed to the action of heat and dryness. 2. That the means of avoiding these accidents consisted in observing great moderation in the use of ices, and particularly of iced water, during the great heats, or on coming out of the theatres, or other crowded assemblies. 3. That the disorder produced by these ices ought to be treated as cholera morbus.

After this statement, the fifth chamber of the Tribunal of '*première instance*' of the department of the Seine acquitted poor M. Maseré of all suspicion; and decreed that the indisposition caused by the ices taken at the *Café de la Rotonde* could not be attributed to negligence, or imprudence, or malevolence.

It is to be regretted that the commission of physicians and chemists did not make any statement of the symptoms which occasioned all this parade of business. We all know the wearisome frivolity, and laborious nothingness, which characterise the minor public offices of Paris; and we dare say the fifth chamber conceived itself to be deliberating on a matter of life and death; but if the *commissioners* meant their report to be useful to the public, it should have detailed those symptoms which are so decisively spoken of as to be treated like cholera morbus.—(*Bulletin des Sciences Méd.*)

X. *Poisonous Food.*

The German journals have during the last year contained not unfrequent notices of the poisonous effects of some of the common articles of food. Thus, in one part of Germany, smoked meats are reported to have excited great disturbance, we think, in the south;

and more recently the northern part of the same country has furnished several examples of poisoning from cheese; although the fatality of the latter poison is far below that of the former. According to the statements we have read, chemical analysis has not furnished any explanation of these circumstances; but the poison is supposed to be developed in the course of putrefaction. The bad effects of smoked meats have chiefly been observed in the spring; those of the cheese seem to occur in all seasons. The symptoms produced by the former arise about twenty-four hours after the food is taken, and, when not fatal, remain troublesome for months, or it is even said for years. The effects of poisonous cheese are earlier observed, and of shorter duration; and these effects have been most commonly observed when the persons have partaken of cheese of the soft kind, which is usually eaten spread upon bread. The principal symptoms are pains of the head, cramps in the stomach, vomiting, coldness of the surface, and vertigo; the common symptoms, in short, of extreme indigestion; and they seem usually to have been removed by an emetic, aperients, diluents, and fomentations of the epigastrium. The accounts hitherto received cannot be looked upon as satisfactory; and it is even doubtful whether the effects have yet been traced to the true cause. We read very lately some most ingenious speculations of a physician practising somewhere in France, who has quite convinced himself, and wishes to convince the Royal Academy of Paris, that the common potatoe, in its early stage of growth, is a most deleterious root; an opinion which will surely cause considerable amusement in some parts of Ireland that we could mention; and can never, we think, be gravely admitted in France, in which country the potatoe has of late years become almost as constant a part of dinner as in this country.

Section III. — Intelligence relating to the Medical Sciences.

I. *Dyspnœa.—Singular Case of.*

The subject of the present article was a woman, about twenty years of age, who had enjoyed good health until about a week before the time referred to in the following extract, when she began to complain of some difficulty of breathing. This had, it appears, increased so much, that the relatives now considered the case as entirely hopeless, as we are told.

'Indeed,' the mother said, as we were going towards the bedroom, 'you are quite too late, sir, you can do no good.' Upon entering the room, I found the respiration so very laborious, and at times so interrupted, that I was of the same opinion. Bleeding, and various other remedies, had been tried during the three days

preceding the time of my visit, without any good effect whatever. I directed the mother to make a long and broad *bandage*, which we applied pretty tight round the thorax, and a good part of the abdomen. The respiration gradually became more easy, and in the course of twenty-four hours it became so easy (*it had become*), that the poor patient could walk gently about the house.—(*Dr. Gilby, of Clifton, in a private letter, dated October* 31*st*, 1825, *and quoted in Lond. Med. Journ. for Feb.*, p. 174.

Observations.—We leave our readers to form their own conjectures respecting the nature of the disease in this case; and to admire, at their leisure, the elegance of the style in which the particulars of it have been conveyed to us by the reporter.

II. *Emplastrum Plumbi.—Water necessary in its Preparation.*

In the formula for the preparation of this plaster, in the Pharmacopœia, a certain quantity of *water* is included, and directed to be boiled with the other ingredients. The reason assigned for this by most, if not all our pharmaceutical writers was, that the water, by its evaporation, kept down the temperature of the mass, and thus prevented the decomposition of the oil and the oxide.

A writer, however, (who signs himself H. H.) in the last Number of the Lon. Journ. of Science (p. 400) states, that in attempting to form the Emplastrum Plumbi of the Pharmacopœia without water, he entirely failed, notwithstanding the other ingredients were kept for several hours (by means of steam) at a temperature of about 220°; and constantly stirred. Upon the addition of a small quantity of boiling *water*, however, the oil and the oxide immediately entered into combination, and the plaster was speedily formed. This experiment was repeated, he states, and with the same result; from which it would appear that the *water* in this process acts a very different, and a much more important part, than has generally been supposed.

As usual, the writer who furnishes the *fact* annexes to it a piece of *theory*, by means of which he is enabled to explain the whole matter, entirely to his own satisfaction.

III. *The Hymen—Disposed and formed in an unusual Manner.*

Dr. Campbell, lecturer on midwifery in Edinburgh, has lately, it appears, discovered in a still-born fœtus a hymen disposed and formed in a very unusual manner.

The *hymen* is in the form of a strong band of condensed cellular membrane, about a quarter of an inch apparently in breadth; and extends in an oblique direction from the pubic to the sacral surface of the vagina, the passage being at the same time open on each side of this ligulated production.—(Vide *New Edin. Med. Journ., January*, p. 244.)

IV. *Wakefield Lunatic Asylum for Paupers.—Report of Admissions, &c.*

This asylum was opened in November 1818, and the following report includes all admitted into it as patients, from that period to December 31, 1824:—

	Males.	Females.	Totals.
Total number admitted . .	331	321	652
Of whom were discharged, cured .	122	144	266
——— ditto by desire of friends .	11	24	35
——— died in the house . .	72	45	117
——— remained, Dec. 31st, 1824 .	126	108	234
Totals . .	331	321	652

Proportion of cures to admissions (according to this report) say as 1 to 2·45, or 2 in 5 nearly.

Observations. — The above proportion of *cures* to *admissions* agrees pretty well with that given by Esquirol in the *Dict. des Sciences Médicales* (Folie), as the general result of his inquiries with respect to different lunatic establishments. According to him, the cures vary from a fourth of those admitted to one-half; to which latter proportion the Wakefield asylum will be found to approach very closely, if due allowance be made for the cures effected subsequent to the 31st December, 1824, among those who 'remained' in the house on that day.

This success is no doubt to be attributed in a great degree to the superior advantages which the patients are said to enjoy in the Wakefield Asylum, with respect to country air, employment out of doors, well-ventilated apartments, and generous diet.—(Vide *Edin. Med. Journ., January*, p. 54.)

V. *Mineral Waters at Windsor.—Chemical Notice respecting them.*

These waters are the produce of two springs, in the Great Park at Windsor. How long they may have been known in the neighbourhood we cannot tell; but as of late they have risen into some repute as medicinal agents, the following particulars respecting them, (extracted from an article by Mr. Brande, in the last Number of the Lon. Journ. of Science) may prove interesting to our readers:—

In *taste* these waters exactly resemble each other, though one is manifestly more abundant in saline matter than the other. This taste is salt, and slightly bitter, without the smallest admixture of any chalybeate flavour.

The *specific gravity* of the stronger water is, 1010·4—that of the weaker 1007·7. Of the former one pint (the measure held one pound avoird. of distilled water at 60°) yielded, on evaporation, 88 grains of dry saline matter. Of the latter, the same quantity afforded 65 grains of the same kind.

As the contents of these waters thus resemble each other in quality, Mr. Brande has only thought it necessary to enter into minute details with respect to the *stronger*. From these details, it appears, that a pint of this water yielded, by destructive analysis, the following substances, and in the proportions stated, viz. :—

	Grains.
Sulphuric acid . . .	33·
Muriatic acid . . .	21·
Carbonic acid . . .	·98
Magnesia	21·25
Soda	10·52
Lime	1·25
Total . .	88·

An analysis of this kind, however, furnishes but little information to the physician ; for various opinions may, with almost equal probability, be formed from it, with respect to the nature of the *saline combinations*, which exist, in what we may call, the ' living waters,' and upon which, as is well known, their medicinal efficacy entirely depends.

The following statement contains Mr. Brande's opinions with respect to their combinations, viz. :—

	Grains.
Sulphate of magnesia . .	38·
Muriate of magnesia . .	24·5
Sulphate of soda . . .	10·8
Muriate of soda . . .	9·3
Carbonate of soda . .	2·4
Sulphate of lime . . .	3·
Total in a pint . .	88·

We have no information before us with respect to the effects of these waters upon the human frame; but from the preceding analysis are led to conclude, that their chief operation must be on the bowels as aperients.

VI. *Vinegar—Its injurious Effects in Dysentery.*

Dr. Godman, one of the editors of the Philadelphia Medical Journal, gives it as his opinion, that *vinegar* is at all times a very improper article for *dysenteric* patients.

This opinion seems in him to have been derived from personal ob-

servation; for he states, that in three patients of his own, to whom, when labouring under dysentery, he had allowed a small quantity of vinegar, so great an aggravation of all the symptoms took place, as to bring their lives into considerable danger.

The experience of Dr. Godman upon this point, however, though it may be very useful to himself, cannot for the present be of much service to the profession,—for he has entirely omitted to state in what *stage* of the disease his patients were, or under what form or variety of it they laboured. In no disease, indeed, is information of this kind more necessary than in dysentery; the early symptoms of which, in the robust and plethoric, differ so widely from those which take place at an advanced period in the feeble and emaciated.

Dr. Godman's statement, above referred to, is contained in the *Philad. Med. Journ.* N° 2 *(new series)*, p. 265.

VII. *Influence of Exercise and Diet, &c. on Respiration.*

It has been found that the quantity of air deteriorated by respiration in a given time, will vary with the *degree of exertion* made by the animal confined in it.

Thus Lavoisier states, that a man, under ordinary circumstances, consumes about 1,300 or 1,400 cubic inches of oxygen in an hour; but that if he be engaged in violent exercise (as in raising weights), the consumption may rise to upwards of 3000 inches in that time.

The practical inference to be deduced from this fact is obvious, namely, that when it is an object to economise the oxygen of the air, we should remain tranquil. It was accordingly observed in the *black-hole* at Calcutta, that those who were quiet and orderly suffered the least. And in like manner it has been affirmed, that a person who falls into the water in a state of *syncope* will remain a much longer time submerged with impunity than one who is in a condition to exert his muscular energies.

The proportion of oxygen consumed by respiration appears moreover to be influenced by the nature of the *diet*.

Thus Mr. Spalding, the celebrated diver, found that he consumed the oxygen of the atmospheric air contained in his diving-bell in a much shorter time when he used a diet of *animal* food, than when he used one of *vegetables*; and therefore he made it a rule to confine himself to the latter when professionally employed. The same effect was observed by him to follow the use of *fermented* liquors; and therefore on these occasions he in like manner drank nothing but *water*.

The consumption of oxygen during respiration seems also to be influenced by the state of the stomach, with respect to *fulness* or *emptiness*, &c. Thus, it appears to be at its maximum while the process of *digestion* is going on, and at its minimum perhaps in the morning, when the stomach is empty and unemployed — a fact well known, in some of its consequences at least, to the Indian pearl-divers, who always abstain from every kind of food for many hours before their descent into the water.

From these remarks, independent even of more particular observa-

tion, the physician may gather how necessary it is to regulate strictly the *diet* and *regimen* of the patient in all cases where the pulmonary organs are morbidly affected.—Vide *Paris's Medical Chemistry*, p. 322.

VIII. *Apothecaries' Act.—Approaching Session of Parliament.*

It may be of importance to the profession in general to be apprised, that the Act which was granted last Session of Parliament, for amending the Apothecaries' Act of 1815, will expire in August next; and that an inquiry into the evils arising from these and other similar acts is likely to take place at an early period of the approaching Session.

It will be well, therefore, in all who may feel themselves aggrieved by existing *acts*, or *charters*, or *by-laws*, to be prepared to apply to Parliament for relief at the time of that inquiry; as, other considerations apart, it is not probable that any second investigation on the subject will be acceded to for some time.

In approaching Parliament, however, we would not have the aggrieved limit their exertions towards obtaining for themselves or others permission merely to practise their profession 'in England and Wales,' as has been *saguciously* recommended by some of our contemporaries,*—but would urge them to include in their applications both Scotland and Ireland; in each of which as many *legal* impediments will probably be met with by the medical practitioner as in any other part of Great Britain.

In illustration of this, it may for the present be sufficient to remark, that no graduate in medicine, not even a graduate of *Edinburgh* or of *Glasgow* itself, can, as such, simply practise his profession in either of those cities; and in *Ireland*, no man can even aspire to be a candidate for a license to practise surgery unless he has been fortunate enough to have acquired the 'art and mystery' of his trade as an 'indented apprentice.'

IX. *Manchester Natural History Society.*

The members of the Natural History Society of Manchester held their first dinner at White's Hotel a few months ago; Sir Oswald Mosely in the chair. As we observe the names of some of the medical practitioners particularly mentioned on this occasion, in connexion with a subject to which we alluded when speaking of the Sheffield Literary and Philosophical Society in our last Number, we have much satisfaction in giving the following extract from an account of the proceedings of the day. 'In the course of the evening, Dr. Holme, the President of the Society, took an opportunity of expressing his wishes for the success of the proposed School of Medicine. He said, it afforded him the 'sincerest

* Vide the *Edin. Med. Journ.*, and *Edin. Journ. of Med. Science* for Jan., pp. 243, 244.

pleasure to drink the health of Mr. Turner and Mr. Barrow, in their capacity as most efficient officers of the society; but he would ask leave to couple the name of Mr. Turner with another institution, to which he hoped the members of the medical profession, as well as the public at large, would afford their patronage and encouragement; he meant the projected School of Medicine. For himself, he was anxious to express his warmest wishes for its success. He had the authority of one of the most eminent professors of the day, to declare his high approbation of the manner in which, even with their present imperfect advantages, the lectures were delivered. Such was the progressive improvement of medical science since he was a student, that he was free to acknowledge it required no little exertion on the part of the older members of the profession to keep pace with the discoveries of the times.' Mr. Turner returned thanks on behalf of himself and his colleague. 'With respect to the kind manner in which Dr. Holme and the company had been pleased to notice his efforts, and those of his brother lecturers at the School of Medicine, he would honestly say, they had no wish but to provide for the young gentlemen who are intended for that profession the most economical and expeditious way of instruction.''—*New Monthly Magazine.*

We have received communications on the subject of proceedings connected with the establishment of literary or philosophical institutions in other places, but which do not call for much remark from us in addition to what was said at page 189 of our last Number. It is pleasing, however, to find, by the above extract, that one of the first efforts to establish the kind of Provincial School of Medicine which we have ventured to prophesy will by and by be instituted in many of the largest provincial towns, has been liberally and even kindly viewed by some of the most respectable, or we might say distinguished practitioners of the place; by those whose attainments and reputation, no less than their years, entitle them to respect. The testimony of Dr. Holme towards Mr. Turner's plan is truly valuable to the latter, and honourable to both. We hope that those young and zealous members of the profession who may contemplate similar undertakings elsewhere, will be equally careful so to act as to insure the approbation of those of their seniors who are distinguished by their acquirements and by their estimation with the public: such a line of conduct is due to the natural repugnance which those who are no longer young feel to the enterprises of those who have yet known nothing of disappointment; a repugnance which will seldom be found to be invincible when the younger party is free from presumption and precipitancy.

X. *Remarkable Case of Rupture of the Uterus, and of the safe Delivery of the Woman by the Cæsarean Operation.* By Dr. Ludwig Frank, at Parma.

Angelica Grossi, aged 44, native of Parma, and the mother of five children, was taken in labour of her sixth child at the beginning of the ninth month of pregnancy, August the 9th, 1817.

A midwife was called, who afforded her the necessary help; but as the patient was standing up, she was suddenly seized with vomiting and faintness, and was therefore immediately conveyed to bed by the midwife and attendants. At the instant she was laid on the bed, she felt something give way in the abdomen, and then, to use her own expression, it appeared to her as if there were two children in the womb. Under these circumstances, a surgeon was sent for, who recommended to her rest, as he conceived the sensations of the woman arose from the motions of the fœtus during the act of vomiting. But the midwife, finding that the abdomen was more and more distended, that the vomiting continued, and the breathing was difficult and interrupted, sent for Dr. Joseph Rossi, professor of midwifery. Professor Rossi, on a minute examination, decided that the uterus was ruptured; and after consulting with his father Dr. Francis Rossi, and other practitioners in the town, he, in common with his colleagues, decided that the Cæsarean operation was absolutely indicated in the present case. The operation was performed two hours after the rupture of the uterus is supposed to have taken place, by Professor Cecconi, in the presence of the two Drs. Rossi, Professor Pizetti and others. The incision was made on the left side of the abdomen, just in the spot where the feet of the child could be felt. After the incision was made, the feet immediately presented themselves to view; and the living child, together with the placenta, were then removed. Forty days after the operation, the patient was perfectly restored, and able to walk out. Her menses some time after this appeared; and in the space of three years from this period, the same woman was delivered of a seven months' child, which lived fourteen days. Over the spot where the incision was made in the abdomen, a cicatrix of the size of an apple remained, which, although it could never be completely healed, caused the patient very little inconvenience.—*Salzburger Medic. Zeiting, Feb.* 1825. p. 255.

XI. *Sub-lingual Pustules.*

M. Marochetti has written from Petersburgh to M. Dupuytren, begging to present a request for him to the Royal Academy of Medicine, that he may have the honour to be sent by that body into Ukraine, that he may repeat the observations and experiments which led to his discovery of the sub-lingual pustules in hydrophobia. Considering it a request in which humanity was, in some degree, concerned, M. Dupuytren has supported it, and a commission is appointed to decide upon it. In the mean time, we must observe that there is much reason to regret that the numerous examples of hydrophobia observed last year in Paris, and mentioned by M. Dupuytren, afforded no opportunity of confirming M. Marochetti's discovery. If M. Marochetti has really made the discovery of these pustules, and if the advantages of their cauterisation have been so great as he says they have, this physician has done enough for mankind; and all that remains to be done is to repeat his experiments, and corroborate his remarks by additional ones. But if, on

the contrary, this is but an illusion, or a wish of Marochetti, he is surely not the person who ought to be sent into Ukraine, for it is to be feared that he will be carried away by his prepossessions, and mistake uncertainties for realities. Besides this, there is no evident necessity for making Ukraine the theatre of new observations: hydrophobia is not more common in that region than in other countries, and all that seems necessary to be done is to recommend physicians not to neglect any opportunity of examining into the truth of what is asserted. Light may be thrown on the subject from Petersburgh as well as from the Ukraine, from the departments of France as well as from Paris.—*Bull. des Sciences Méd.*

XII. *Remedies for Drunkenness.*

The acetate of ammonia, in the form of the *spiritus mindereri*, has been frequently given in Germany to dissipate the effects of drinking. Common vinegar is at least equally efficacious: a wine glassful given to a man who has drank to excess of wine, or, we believe, of spirits, will make him comparatively sober almost immediately.

XIII. *Clinical Remarks on the Diseases most prevalent during the preceding Month.*

February, upon the whole, has been mild. There has been much rain, but warm and genial.

The principal diseases of the month have been fever, pneumonia, and catarrhal affections. Fever has shewn a tendency quickly to assume a low type, though rarely decidedly typhoid. There has been wandering, great heat of the skin, and rapid pulse, which, after continuing a few days, has gradually passed into the convalescent state. The spirits have frequently in these cases been exceedingly depressed, and the patient has, without any particular reason, as has been proved by the event, been very apprehensive of the result. It has not appeared to us, however, that, where no injudiciously severe measures were employed, this has at all retarded the recovery.

Pneumonia has been very frequent and very severe, and several cases that have fallen under our inspection proved fatal. It has seemed to us, in some instances where this happened, that bleeding had been carried too far, as, previously to the last venesection, the patients were represented as having freely expectorated, and afterwards all expectoration ceased. We believe, indeed, that mere dyspnœa is not sufficient to justify the repetition of depletion, and several cases, where this has been extreme, we have seen recover, while taking senega and squills. The older practitioners have always inculcated copious expectoration, as the most favourable mode of resolution in pneumonia, and, so far as our experience goes, they were perfectly accurate. We would on no account, however, be so misunderstood as to have it supposed, that we think copious bleeding in the early stages unnecessary; it is only to its frequent repetition, after the strength has been already reduced by previous depletion, that we object. After all, however, very much must be left to the discrimination of individual practitioners.

Catarrh has exhibited a great tendency to extend to the bronchial tubes, and severe cough with copious expectoration has been common.

Among individual cases of interest, we have seen a woman subject to the most violent tonic spasms in the arms and legs, attended with great pain, and which she herself has named cramp. Her paroxysms frequently endured for three quarters of an hour at a time; they appeared to us to be epileptic, but were not attended with loss of consciousness. Purgatives and the argentum nitratum have for the present suspended the attacks.

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

A Toxicological Chart, exhibiting at one View the Symptoms, Treatment, and Modes of detecting the various Poisons, Mineral, Vegetable, and Animal; to which are added, Concise Directions for the Treatment of Suspended Animation. By William Stowe, Member of the Royal College of Surgeons, &c. The fifth edition. On two large sheets broad folio. Anderson. London, 1826.

Quarterly Report of Prices of SUBSTANCES *employed in* PHARMACY.

		s.	d.
Acaciæ Gummi elect.	lb.	3	4
Acidum Citricum		20	0
——— Benzoicum	unc.	3	0
——— Sulphuricum	P. lb.	0	6
——— Muriaticum		1	0
——— Nitricum		2	6
——— Aceticum Dilut.	cong.	4	6
——— Tartaricum	lb.	5	6
Alcohol	M. lb.	3	6
Æther sulphuricus		8	0
——— rectificatus		10	0
Aloes spicatæ extractum	lb.	7	6
——— vulgaris extractum		16	0
Althææ Radix		1	2
Alumen		0	6
Ammoniæ Murias		1	8
——— Subcarbonas		2	0
Amygdalæ dulces		3	6
Ammoniacum (Gutt.)		7	0
——— (Lump.)		3	6
Anthemidis Flores		3	0
Antimonii oxydum Ver.		6	0
——— sulphuretum præp.		3	6
——— sulphuretum præc.	unc.	0	6
Antimonium Tartarizatum	unc.	0	4
Arsenicum Alb. Sublim.	lb.	2	6
Assafœtidæ Gummi-resina	lb.	4	0
Aurantii Cortex	2 0	3	9
Argenti Nitras	unc.	5	9
Balsamum Peruvianum	lb.	15	0
——— Tolutanum		30	0
Benzoinum elect.		8	6
Bismuthi Subnitras	unc.	1	0
Calamina præparata		0	6
Calcis Murias	unc.	0	3
——— Muriatis solutio	lb.	1	0
Calumbæ	lb.	5	6
Cambogia		7	6
Camphora		4	9
Canellæ Cortex elect.		2	6
Cantharis	lb.	12	0
Cardamomi Semina	lb.	8	6
Cascarillæ Cortex elect.		1	6
Castoreum	unc.	3	0
Castor Russ	oz.	15	0
Catechu Extractum	lb.	1	9
Cetaceum		3	0
Cera alba		3	4
——— flava		3	3
Cinchonæ cordifoliæ Cortex (yellow)		8	6
——— lancifoliæ Cortex (quilled)	7 6	9	6
——— oblongifoliæ Cortex (red)		12	0
Cinnamomi Cortex		14	0
Coccus (Coccinella)	unc.	2	3
Colocynthidis Pulpa Turk.	lb.	6	6
Copaiba		5	9
Colchici Radix (sic.)		2	6
Croci stigmata	unc.	3	4
Cupri sulphas	lb.	1	0
Cuprum ammoniatum		8	0
Cusparíæ Cortex		3	0
Confectio aromatica		6	0
——— Aurantiorum		2	6
——— Cassiæ	lb.	6	0
——— Opii		6	0
——— Piperis Nigri	lb.	3	6
——— Rosæ caninæ		1	8
——— Rosæ gallicæ		2	0
——— Rutæ	unc.	0	6
——— Scammoniæ	unc.	2	6
——— Sennæ		3	0
Emplastrum Ammon. c. Hydrar.	lb.	6	6
——— Cantharidis		6	0
——— Hydrargyri		3	0
——— Opii		3	6
——— Resinæ		1	3
——— Saponis		1	3
Extractum Aconiti	unc.	0	10
——— Anthemidis	lb.	7	0
——— Belladonnæ	unc.	1	6
——— Cinchonæ		3	0
——— Cinchonæ resinosum		4	6
——— Colocynthidis		4	6
——— Colocynthidis comp.		1	9
——— Conii		0	6
——— Elaterii		35	0
——— Gentianæ		0	4
——— Glycyrrhizæ	lb.	7	0
——— Hæmatoxyli	unc.	0	5
——— Humuli		1	0
——— Hyoscyami		1	0
——— Jalapæ	1s. 6d. Res.	3	6
——— Lactucæ Sativæ	unc.	1	0
——— ——— Virosæ	unc.	1	0
——— Opii		4	6
——— Papaveris		0	9
——— Rhæi		2	0
——— Sarsaparillæ		2	0
——— Stramonii Sem.	unc.	5	0
——— Taraxaci		0	9
Ferri subcarbonas præcip.	lb.	3	6
——— sulphas		1	0
Ferrum ammoniatum		3	4
——— tartarizatum		3	4
Galbani Gummi-resina		7	6
Gentianæ Radix elect.		1	6

	s.	d.
Guaiaci resina	7	6
Hydrargyrum purificatum	4	0
——— præcipitatum album	8	0
——— cum creta	3	9
Hydrargyri Oxymurias ....unc.	0	6
——— Submurias ....P. lb.	6	6
——— Nitrico-Oxydum	0	8
——— Oxydum Cinereum	1	0
——— Oxydum rubrum	4	6
——— Sulphuretum nigrum	0	4
——— ——— rubrum	0	6
Hellebori nigri Radix ....lb.	2	6
Ipecacuanhæ Radix	16	0
——— Pulvis	19	0
Jalapæ Radix	6	0
——— Pulvis	7	0
Kino	7	0
Liquor Plumbi subacetatis ....P. lb.	0	9
——— Ammoniæ ....1 0..2 6	5	3
——— Arsenicalis	1	6
——— Potassæ	1	4
Linimentum Æruginis ....lb.	3	6
——— Camphoræ comp.	5	0
——— Saponis comp.	4	6
Lichen	2	0
Magnesia	7	0
Magnesiæ Subcarbonas....2 6	3	6
——— Sulphas	0	4
Manna	12	0
——— communis	6	0
Moschus pod, (32s.) ....in gr. unc.	46	0
Mastiche ....lb.	8	6
Myristicæ Nuclei	14	0
Myrrha	7	0
Olibanum	3	0
Opopanacis gummi resina	20	0
Opium (Turkey)	34	0
Oleum Æthereum ....oz.	2	6
——— Amygdalarum ....lb.	3	0
——— Anisi ....unc.	1	8
——— Anthemidis	6	0
——— Cassiæ	6	0
——— Caryophilli	4	6
——— Cajuputi	4	0
——— Carui	1	6
——— Juniperi Ang.	6	0
——— Lavandulæ	2	6
——— Lini ....cong.	4	0
——— Menthæ piperitæ ....unc.	3	10
——— Menthæ viridis Ang.	4	6
——— Origani ....unc.	1	0
——— Pimentæ ....unc.	5	6
——— Pulegii ....unc.	4	6
——— Ricini optim.	3	6
——— Rosmarini ....unc.	0	9
——— Succini	0	6
——— Sulphuratum ....P. lb.	1	2
——— Terebinthinæ	1	4
——— ——— rectificatum	2	0
Olivæ Oleum ....P. lb.	2	3
——— ——— secundum	1	9
Papaveris Capsulæ ....(per 100)	2	9
Pix Abietina ....lb.	1	0
Plumbi Acetas	1	6
——— Subcarbonas ....lb.	0	8
——— Oxydum semi-vitreum	0	8
Potassa Fusa ....unc.	0	6
——— cum Calce	0	2
Potassæ Nitras 0 6	1	0
——— Acetas	7	0
——— Carbonas	2	6

	s.	d.
Potassæ Subcarbonas	1	0
——— Sulphas	1	0
——— Sulphuretum	3	0
——— Supersulphas	2	4
——— Tartras	2	9
——— Supertartras	1	6
Pilulæ Hydrargyri ....unc.	0	6
Pulvis Antimonialis	0	4
——— Cinnamomi compos. ....unc.	1	0
——— Contrayervæ comp.	0	3
——— Ipecacuanhæ compos. ....unc.	0	8
——— Scammoniæ compos. ....unc.	3	6
——— Tragacanthæ comp.	0	4
Resina Flava ....lb.	0	6
Rhæi Radix (Russia)	28	9
——— (East India) opt.	10	4
Rosæ petala	0	0
Sapo (Spanish)	2	0
Sarsaparillæ Radix (Jam.)	5	6
Scammoniæ Gummi-Resina ....unc.	4	6
Scillæ Radix siccat. ....lb.	1	6
Senegæ Radix	3	9
Sennæ Folia 5 0	6	6
Serpentariæ Radix	4	6
Simaroubæ Cortex	3	0
Sodæ subboras	2	6
——— Sulphas	0	6
——— Carbonas	4	3
——— Subcarbonas	1	3
——— ——— exsiccata	3	6
Soda tartarizata	2	6
Spongia usta ....unc.	1	6
Spiritus Ammoniæ ....M. lb.	4	0
——— ——— aromaticus	4	0
——— ——— fœtidus	4	6
——— ——— succinatus	4	9
——— Cinnamomi	3	0
——— Colchici Ammon. ....unc.	0	0
——— Lavandulæ ....lb.	5	0
——— Myristicæ	3	0
——— Pimentæ	3	0
——— Rosmarini	4	0
——— Ætheris Aromaticus	9	0
——— ——— Nitrici 3 6	5	0
——— ——— Sulphurici	6	0
——— ——— Compositus	6	0
——— Vini rectificatus	24	0
Syrupus Papaveris ....lb.	1	9
——— Sarsaparillæ ....lb.	9	6
——— Tolutanus ....lb.	2	3
Sulphur Sublimatum	0	5
——— Lotum	1	4
——— Præcipitatum	1	3
Tamarindi Pulpa opt.	2	0
Terebinthina Vulgaris	0	16
——— Canadensis	6	6
——— Chia	10	0
Tinct. Ferri muriatis	4	6
Tragacantha Gummi	8	0
Valerianæ Radix	1	0
Veratri Radix	1	10
Vinum Colchici	4	0
——— Ipecacuanhæ	4	0
——— Opii	8	0
Unguentum Hydrargyri fortius	4	0
——— ——— Nitratis	5	0
——— ——— Nitrico-oxydi.	4	4
Uvæ Ursi Folia	3	0
Zinci Oxydum	5	0
——— Sulphas purif.	1	0
Zingiberis Radix opt.	4	0

NEW REMEDIES.

	s.	d.
Brucine ....dr.	28	0
Emetine du Codex ....dr.	25	0
Hydriod. Potass. ....oz. 9s. dr.	1	6
Iodine ....oz.	8	0
——— Tincture ....oz.	2	0
Morphine Crystall. ....dr.	21	0
——— Acetate ....dr.	20	0

	s.	d.
Morphine Acetate Liquor ..oz. 18s. dr.	2	4
Hydrocyan. Acid (Scheele's), twice the strength of Vauquelin's oz. 3s. 8d. dr.	0	6
Quinine Sulphate ....oz. 36. dr.	5	0
Strychnine ....dr.	26	0
Veratrine ....dr.	30	0

Furnished by Messrs. J. and G. Waugh, Chemists and Druggists, Regent Street.

THE METEOROLOGICAL JOURNAL,

From the 19th of JANUARY, 1825, to the 20th of FEBRUARY, 1826.

By Messrs. HARRIS and Co.

Mathematical Instrument Makers, 50 High Holborn.

January.	Moon.	Rain Gauge.	Therm.			Barom.		De Luc's Hygrom.		Winds.		Atmo. Variation.		
			9 A. M.	Max.	Min.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	2 P. M.	10 P. M.
20			37	40	39	30 17	30 18	89	80	NNW	NNW	Fine	Fine	Fine
21			40	41	34	30 05	30 01	82	83	SW	W	——	——	Fog.
22			35	40	31	30 09	30 06	93	95	WSW	W	Fog.	——	——
23	○		36	40	34	30 06	30 10	95	95	W	NNE	——	——	——
24			35	37	34	30 28	30 30	96	93	NE	SW	Fair	——	——
25			36	37	34	30 20	30 16	83	93	SE	E	Fine	——	S.Fog
26			36	37	29	30 19	30 17	83	97	E	ESE	——	——	Fine
27			31	35	32	30 14	30 14	92	89	E	SE	Fog.	——	Fog.
28			36	37	35	30 01	30 04	85	89	SW	ESE	Fine	——	——
29			39	45	37	29 98	29 81	85	82	SSE	S	——	——	Fine
30	☾		42	47	42	29 67	29 60	89	85	SSE	SW	——	——	S.Rn
31		4,	45	47	40	29 64	29 66	82	86	SW	SW	——	——	Fine
1			46	47	43	29 72	29 72	86	86	E	SSW	Fog.	——	Fog.
2			47	50	46	29 73	29 73	85	83	SW	SSW	Fair	——	Fine
3		4,	50	52	43	29 55	29 54	74	84	SW v	SW	Fine	——	S.Rn.
4			45	47	42	29 76	29 75	80	81	SW	SSW	——	——	Clo.
5			50	50	45	29 75	29 65	72	78	SW	SW	——	——	S.Rn.
6	●	12,	50	54	43	29 45	29 65	82	77	SW	SW	Rain	Rain	Fine
7			45	48	36	29 83	30 14	72	70	W	WSW	Fine	——	——
8			39	46	35	30 22	30 19	82	74	SSW	SSW	——	——	——
9			38	42	30	30 14	30 11	84	86	S	SE	——	——	——
10			31	36	34	30 09	30 06	89	80	E	SE	Fog.	——	——
11			36	40	38	30 01	29 93	76	86	S	SSE	Fine	——	——
12			45	47	40	29 92	30 02	79	87	SSW	SW	——	——	——
13			41	47	41	30 02	29 84	88	78	SW	S	Fog.	——	——
14			44	45	44	29 80	29 84	85	88	SSW	SSE	Rain	Rain	Rain
15	☽	15,	45	51	45	29 81	29 67	88	72	S	S	Fair	Fine	Fine
16			46	50	43	29 60	29 57	85	80	SSW	SSW	——	——	——
17			46	47	35	29 37	29 44	80	78	SSW	SW	——	——	——
18			37	47	37	29 64	29 75	80	80	SW	SSW	Rain	Fair	——
19		20,	45	52	43	29 41	29 41	85	87	SW	WSW	S.Rn.	——	Rain

NOTICES TO CORRESPONDENTS.

THE Readers of the MEDICAL REPOSITORY may perceive, from this Number, that it is our intention to extend our monthly limits to at least six whole sheets, or 96 pages, and to print the greater part of the work in a closer and more uniform type than formerly, which will be equal to a still farther extension of the limits of the work.

Several Communications are received, and are under consideration.

Literary Notices, &c. cannot be inserted in the body of the work, unless with a very few exceptions, which will rest with the Editors.

Correspondents, and authors of works, or of papers in other Journals, who may wish to have their productions noticed, may send them under cover (post paid) to the Editors, 1 Bulstrode Street, Cavendish Square, or to the Publishers', Fleet Street.

The Index to the preceding Volume will be delivered with the next Number.

Errata in the last Month's Repository.

Page 154, line 9, *for* on, *read* over.
— 157, — 1 *for* In, *read* For.
— 159, — 4, *for* formed, *read* found.
— 161, — 13, from foot, *for* horse-fly, *read* house-fly.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the EDITORS, to the care of Messrs. T. and G. UNDERWOOD, 32 Fleet Sreet.

THE LONDON MEDICAL

REPOSITORY AND REVIEW.

No. 148. APRIL 1, 1826. Vol. XXV.

No. X.——NEW SERIES.——Vol. II.

PART I.

REVIEW.

I.

HISTORY OF THE RECENT PROGRESS OF SURGERY.

Histoire des Progrès récens de la Chirurgie. Par M. le Chevalier Richerand, Chirurgien en Chef de l'Hôpital St. Louis, etc. etc. Paris, 1825. Pp. 344.

The task which M. Richerand has imposed upon himself in this work is very far from being of such easy performance as persons who have never investigated the history of surgery may be inclined to suppose. It has, indeed, been the custom latterly, in all publications on surgical subjects, to insist much upon the rapid and decided progress that has been made in the science within the last few years; and certainly such statements might justify us in expecting that many particular points might be specified in which the advance had been effected. But though it is certainly very true, that surgery has received great and valuable improvements, it is not yet easy, in giving its history, to mark any particular period from which they may be dated; for, excepting in some few instances, such as the operation for aneurism, invented by John Hunter, the progress has been so gradual, that, though at length some one name is distinguished as the great improver of his art, this has only happened from his embodying or first publishing the practice and opinions of many of his predecessors. We make this remark with no invidious intention. It is the natural course of the human intellect. Materials are slowly collected; prejudices are difficultly overcome; conviction is not easily

induced; and often must a new generation spring up before a bad practice is thoroughly rejected, or a great improvement properly valued and adopted. Moreover, the mind of men must be gradually prepared for the amelioration of which their pursuits are susceptible, otherwise those gifted individuals who have been emphatically described as before the age in which they lived, are only suspected and contemned. Thus it was with Roger Bacon; and vainly had even Newton philosophised, had not some great mathematicians lived before him. When we have arrived at a great height, we are too much disposed to forget the steps by which we have gradually ascended, and to undervalue the efforts of those to whose assistance we are mainly indebted for the station that we occupy. Yet in every case our progress must be gradual; and in the history of any art, not only ought we to notice that mind by which a particular department was perfected, but those also by whose industry and intelligence the first ground-work was laid. But this is no easy matter in any subject, and in surgery less easy perhaps than in any other; for the study of books alone gives only slight impression, and it is not till experience has been added, that we are sensible of the value of many observations they contain. And though perhaps we may have been led by their perusal to the deductions we draw from our own experience, it is often without our own consciousness; and hence, when we publish them to the world, we give them, as we honestly believe them to be, as the result of our own observation and reflection: and frequently the profession to which they are addressed have not much less reason of gratitude, since we thus become the means of extending principles, which, if entertained at all, it was but very vaguely, and without any useful result.

There are, however, periods when improvements very rapidly succeed each other; when, as it were, the first difficulties overcome, the various departments of a science are simultaneously and successfully cultivated. Some such period we appear to have just passed in the history of surgery, during which the treatment of wounds, the simplifying of operations, and the more rational explanation of the processes of nature, have all received most valuable additions. Yet in truth, even in this case, the progress has not in reality been less gradual; but more minds have worked together, more materials have been collected in the same time, and hence conclusions have been more readily and securely arrived at. It is an account of this period that M. Richerand has proposed to communicate. Of the manner in which he has executed the work we cannot speak

very favourably, principally, however, on account of its extreme scantiness; though we must at the same time give him credit for the possession of far more candour and liberality than are generally found in French surgical writers. We have, indeed, been much gratified to observe, that French authors generally are becoming more sensible of the scientific efforts of other countries, instead of indulging in that childish vanity, which, rather than acknowledge merit in foreigners, would forego any advantage that might be derived from industry and ingenuity. M. Richerand appears most laudably anxious to refer every improvement to its proper author; and if we sometimes find him neglecting the name of British practitioners, it is evidently the result of imperfect information, and not of dishonest concealment. He, indeed, most decidedly gives it as his opinion, that surgery is more indebted for its advancement within the last half century to England than to France.

Admitting, as every body must do, that the art of surgery has been materially improved, it must be interesting to all who have any real love of their profession, to know what has principally contributed to its progress. Unquestionably two great sources may be immediately pointed out as the chief, though not the only causes of the advancement; viz. the more rational and the more extended cultivation of physiology, under the guidance of Haller and the two Hunters; and the experience, which the long and sanguinary war of the latter end of the eighteenth, and the first fifteen years of the nineteenth century, afforded. The first rendered army surgeons much more capable of deriving advantage from their experience than they could otherwise have been; and the latter, compelling them frequently from circumstances to leave their patients to nature, rendered them more acquainted with her resources, and more inclined to rely upon them. It is time, however, to enter somewhat more minutely into the recent history of surgery, to the benefit of which these two circumstances have so much contributed.

The most important improvement in surgery, after it had obtained an existence independent of medicine, was certainly the union by the first intention. But for very many years this was supposed only applicable to simple incised wounds; or, in the language of the schools, to wounds which were not accompanied with loss of substance. Hence in the removal of tumours, in amputation, &c. the wounds were always suffered to heal by granulation. In the 'Elements of Surgery,' published in London, in 1746, the directions are very minute on this subject, and very decided, that wherever there is loss of substance, there must be 'digestion' and

'incarnation,' before a wound may be permitted to be cicatrised. Upwards, however, of a century since an approximation was attempted to be made to the present custom of treating an amputated limb. The operation then proposed by Loudham did not, as it would appear from the account we have of it, profess to enable the surgeon to effect a cure by the first intention through the whole extent of the wound, but partially only, and upon the same principle as simple incised wounds were treated before union by the first intention was adopted into the regular practice of surgery; for the greater part of a wound was permitted, even under this system, to be healed immediately, a tent being inserted only into the inferior part, and (unless the propriety of its continuance was supposed to be indicated by pain) being withdrawn after the first or second day. Mr. Alanson, however, endeavoured the first, so far as we know, to heal a stump entirely by the first intention; and for this purpose considerably simplified Loudham's operation, which had been practised also in France by Verduin, and much improved by Garengeot—the latter tying the vessels, and employing two flaps instead of one. Many minor alterations were made in both countries in this operation, all of which were intended to facilitate the cure, and to prevent the exfoliation which had been so frequent in the older methods. Still, however, it does not seem, that in France they yet generally admit the possibility, or at least the propriety, of completing the cure at once by union by the first intention. We speak upon the authority of M. Roux, as well as of Professor Richerand. But in England, for many years this has been inculcated, and many attempts have been made to accomplish it. We should be sorry to be so uncandid as to assert, that in amputation in England a cure is always effected in the manner we have mentioned; yet unquestionably it is always so in a very great degree, and sometimes entirely, with the exception of the small fistulæ, which remain till the escape of the ligatures. Formerly, three weeks or a month was a short time for the cure of an amputated limb: we have frequently seen it thoroughly accomplished in seven days. The incision now made is circular, and the knife is always carried upwards and inwards, the vessels are tied, the wound is dressed, so that every part is in contact with an opposite wounded surface, with which it may unite; and thus, without suppuration, incarnation, or exfoliation, to employ the verbiage of the old school, a cure is effected; and certainly the extension of union by the first intention to such wounds as these is a splendid feature of modern surgery. The principle of surgery in this respect is to heal every wound by the first inten-

tion which will admit of it, if, perhaps, we except those which are supposed to be poisoned. Nay, even a part which it was formerly thought useless to preserve, we mean the scalp, after the operation of the trephine, has, for more than twenty years, been returned to its former situation in contact with the dura mater, if the bone was deficient, or with the pericranium of the surrounding part. The first individual to suggest the preservation of the scalp was the late Mr. Wilmer of Coventry, in his 'Cases and Remarks in Surgery,' published in 1779. In this work, he maintained that it was not necessary to remove any portion of the scalp, even when the fracture of the skull was extensive; that the wounds heal much sooner when the scalp is left; and that he has seen but one case thus treated where the exfoliation of the bone was necessary. In 1783, Mr. Mynors of Birmingham practised this mode of dressing in a boy about five years old. A piece of the skull, the size of a halfpenny, was removed, and the flaps of the scalp, which had been preserved, applied closely to the pericranium and dura mater: with the former, adhesion was completed in a few days; and with the latter, in the course of two or three weeks, granulations having met from the exposed part of the dura mater, and internal surface of the scalp. Who first applied union by the first intention in the removal of tumours, we are ignorant: it was most probably, however, practised by several individuals at nearly the same time. The more extensive application, then, of the union by the first intention, deserves the first notice among the improvements of surgery, because it is at the same time one capable of the most frequent employment, and of the most undoubted utility.

The next department of the art which, being of most general application, demands our attention, is that which has been named medical surgery. This, however, is not altogether of modern origin, although formerly, from the limited education of surgeons, it does not appear to have been much attended to in practice. It has likewise undoubtedly improved in rationality.

Surgery, it ought always to be recollected, is the offspring of medicine in modern times. For centuries, surgeons were nothing more than the servants of the physicians; and as such, were, what their title of *Cheirurgeon* indicated, mere handicraftsmen. During this early period, medicine itself was disgraced by the most puerile theories; and it is not to be supposed that surgery, even after obtaining an independent existence, would not partake in the ignorance of its parent It did so in an eminent degree; and in a book of surgery,

containing much interesting matter, entitled the 'Chirurgia parva Lanfranci,'* and done into English by John Halle, chirurgeon, we have the following observations respecting the medical treatment of ulcers. 'But mark this well! that the purging of the body by vomit helpeth much, if the evil ulcers be in the nether parts; and by a laxative medicine, if they be in the upper parts; for this is a way most sure, because the matter that ran to the ulcers is turned from the ulcered place, and goeth away, whereby the ulcer is better mundified.' Medical surgery became more respectable in the course of the seventeenth century, and much attention was paid to the dietetic part. 'Purgationes et venæsectiones,' is the observation of P. Barbette respecting the cure of ulcers — 'aliquando prosunt et necessariæ habentur; at *diæta bona* semper.' Still, however, surgeons in general regarded very little the medical treatment of their patients, this being committed to the physician. Thus in the 'Praxis Chirurgica' of J. Munnicks, 1689, after giving the general directions for the treatment of phlegmon, he observes, 'Ad curam febris quod attinet, ea ad medicum potius, quam chirurgum spectat;' the cure of the febrile symptoms belongs rather to the physician than surgeon. In this country, however, it is evident that this precise division has more and more gone into disuse; but the first work with which we are acquainted, particularly directed to the consideration of medical surgery, is 'An Inquiry into the Present State of Medical Surgery; including the Analogy betwixt External and Internal Disorders, &c., by Thomas Kirkland, M.D., 1783.' This work, though, as might be expected, much noticed at the time, seems to have had very little effect upon the great body of the profession; and it was left for Mr. Abernethy to impress successfully the importance of attending to the general health in all surgical cases. Much likewise has been effected by this accomplished surgeon, in directing attention particularly to the state of the primæ viæ, and recognising the important sympathies existing between the digestive organs and every part of the body. To what was formerly contained in vague directions, he has given a local habitation and a name; and his situation as a lecturer in a great hospital, his high talents, the respect and almost affection with which he is regarded by his pupils,

* Published 1565, in Fleet Street, near to St. Dunstan's church. This was probably on the same site with the shop now occupied by Messrs. Underwood, which has been a bookseller's almost from the introduction of printing. This book contains some curious histories of quacks—'those beastly abusers of the noble art of chirurgerie.'

have contributed widely to extend his opinions, and to raise surgery to a science as well as an art. For though unquestionably, as we have already stated, the connexion of medicine and surgery was recognised, yet to Mr. Abernethy alone do we owe its adoption into, and influence upon, surgical practice. Having thus presented the two most general features of improvement in modern surgery, we proceed to the progress that has been made in individual cases. In this we shall not confine ourselves to any very particular order. We shall begin with injuries of the head.

The treatment of injuries of the head is an illustration of the remark we made in the commencement of this article, that the progress of surgery has been extremely gradual. The time certainly was, and that not very long ago, when the application of the trephine was recommended in every case of depression of the skull, and almost of mere fracture; and even by Mr. Pott, not as a remedial, but a preventive measure. Now, however,—and for the determining the question we are mainly indebted to Mr. Abernethy—no surgeon will trephine excepting for symptoms; and, instead of confining the operation to cases in which there is manifest depression, he will recur to it where the symptoms appear strongly to indicate hæmorrhage upon the brain, although the skull may be perfectly whole. The doctrines and practice thus defined, however, have been of slow growth; and from a very early period of modern surgery cases are recorded, in which not only the skull, but the brain also was severely injured, while very slight symptoms were manifested. Munnicks quotes a case from Hildanus, where the skull was fractured, and a portion of the brain escaped, ' in quo viro nihil plane illorum signorum, quæ auctores requirunt, apparuit toto morbi decursu, præter symptomaticam febriculam, quæ brevi cessavit.' Ambrose Parè likewise had witnessed cases of fracture, to which no bad consequence succeeded. The directions for discovering fractures, trephining, and filing the skull, where a crack was perceived, till it had disappeared, were nevertheless carried to very great length; and principally, it cannot well be questioned, as a preventive measure. It is, however, clear, that these records were gradually effecting a change in the opinions of surgeons; and even as early as 1746, in ' The Elements of Surgery,' the teacher says, ' Yet I am not so forward as some for using the trepan upon every slight occasion.' Between forty and fifty years later, and very nearly at the same time, Desault in Paris, Dease in Dublin, and John Bell in Edinburgh, more decidedly adopted an opposite

practice, inculcating the use of the trephine, not for the mere kind of injury, but the symptoms to which it might give rise; and at last, Mr. Abernethy in London, noticing the opinions of these writers, and adding valuable facts and reasonings from his own experience, appears to have placed the proper mode of treatment in such case upon certain and scientific principles.

But though the mere existence of fracture and depression is no longer a good ground for trephining, this operation may be called for when no fracture exists. M. Richerand has cited a case that occurred in the practice of Beclard and Dubois, in which, being led by circumstances to suspect the presence of effusion on the dura mater, they trephined in three places, and removed a considerable coagulum. In this case, however, a fracture did exist, but no depression. We have known a similar case in a provincial town in England, in which the first effect was beneficial, the man recovering from a state of stupor in which he had lain for several days, on a coagulum being removed. He lived for nearly a fortnight after. The rule in such cases would appear, that the trephine should be applied on the side opposite to that on which the blow had been struck, experience having shewn that hæmorrhage generally takes place in that situation. Very much, however, must be left to the acumen of the surgeon respecting the proper situation for applying the trephine in such cases; and attention certainly ought to be paid to the criterion of the separation of the dura mater from the inner table of the skull laid down by Mr. Abernethy.

M. Richerand has passed in review several particulars which we purpose merely to enumerate, as in some respects it may be questioned whether they are really improvements, and have certainly as yet had no general effect upon the practice of surgery. Of this kind is the perforation of the tympanum by Sir Astley Cooper, the different modes that have been proposed of operating upon the harelip, the manufacturing of noses by Carpue, the slight alterations that have been proposed in lithotomy, the instruments invented for comminuting the stone in the bladder, with many others of not more importance. The radical cure of hydrocele, though but lately introduced into general practice in France, has been long well known in this country; and we need only mention that surgery is indebted for this improvement to the late Mr. Pott.

The subject, however, in which the greatest improvements have been made—improvements which have already had

immense influence upon practice, and will perhaps have still more—is the treatment of aneurism, and on this account demanding from us a more particular review. We must premise, however; that even this must necessarily be very disproportionate to the extent and importance of the subject, and can comprise only a reference to the advancement in the different departments.

In the first place, it may be stated, that, from a more accurate knowledge of the causes of aneurism, the principles upon which its treatment must be conducted are far more certainly known than they were even fifty years ago. Hence, therefore, even the management of internal aneurisms is better understood, and the necessity of abstaining from every stimulant, of insisting upon perfect quietude, and of diminishing the force of the circulation, rest upon the securest foundation. These indications are equally evident in every aneurism, whether external or internal; but as it is in the treatment of external aneurisms that we are now more particularly interested, we shall confine ourselves merely to an historical exposition of their treatment.

In the 'Praxis Barbettiana,' published 1669, compression and depletion are recommended; and with regard to the operation for aneurism, it is observed, 'Quidam volunt ut sanguis affluens intercipiatur arteriam supra et infra aneurysma ligando, illudque postmodum excidendo curare. Sed hoc remedii genus dolorificum nec tutim est; mallem ego vitæ conservandæ ergo brachium vel pedem amputare.' We have quoted this passage as confirming the statement of Mr. Hodgson, to whom this department of surgery is so greatly indebted, that the old operation was so dreadful, that many preferred the amputation of the limb, both as less painful and less hazardous. The operation 'consisted in cutting open the tumour, cleansing it of its contents, and tying both ends of the artery at each extremity of the sac. The cavity was then filled with lint and various medicines—a dreadful suppuration was induced, and in a few instances the sore granulated, and the patient recovered.'* When we consider that this was the only operation for many years proposed, that aneurism was scarcely ever curable by compression, and rarely underwent a spontaneous cure, and that its result was consequently almost always fatal, we may be able in some way to estimate the great benefit that Mr. Hunter has conferred upon mankind, not merely in teaching the operation (for one, though not precisely the same, yet not very unlike, had been performed before), but in establishing it upon such

* Hodgson on 'Diseases of Arteries and Veins.'

sound and scientific principles, as to insure its immediate reception in practice. The operation is at least not dangerous from suppuration, nor from hæmorrhage, and has now little more to contend with than most surgical operations, viz. the constitution of the patient.

Mr. Hunter tied the artery at a distance from the sac, and without opening the sac itself, but leaving it to be diminished, and it contents removed, by the action of the absorbents. Not many years after Mr. Hunter's operation was made known, Richerand and Bichat claimed the merit of its first performance for Desault, not, however, detracting from Hunter's originality; but in the present work the former has done full justice to our illustrious countryman, and acknowledges that there can be ' no comparison between tying an artery close to the tumour, without opening it, as Anel and Desault had done, and placing a ligature upon a sound portion of the artery, readily accessible, and at a distance from the tumour.'

When Mr. Hunter first performed this operation, he was ignorant of the precise mode in which the ligature acts upon the coats of the artery; and though in his later operations he employed only one ligature, this was a very strong one. It is to Dr. Jones that we are indebted for those facts, which have enabled Mr. Hodgson to lay down precise rules, both respecting the kind of ligature, and the manner of applying it. These rules are, that ' the cord should be thin and round,' should be tied very tight; the vessel should only be detached from its connexions to such an extent as is necessary for the passage of the ligature beneath it, and the immediate adhesion of the wound should be promoted by all those means which assist that process in general.' To those who are not acquainted with this subject, we most particularly recommend an attentive perusal of Mr. Hodgson's work, as no where else can they find so clear and accurate an exposition of the phenomena and treatment of aneurisms.

Many other modes have been proposed of tying the artery, all, however, relying upon the principle laid down by Mr. Hunter, that it was sufficient to retard the course of the circulation. Mr. Abernethy applied two ligatures, and divided the artery between them. Scarpa interposed a cylindrical roll of linen between the artery and knot of the ligature; and Mr. Travers attempted to substitute the temporary application of the ligature, so that the wound might be entirely healed by the first intention. Of these different propositions, the two first, we believe, may at least be pronounced innocent; but they have the inconvenience of being

far less simple, and certainly not more safe, than the plan advocated by Mr. Hodgson. Of the last, it is only necessary to observe, that it has been abandoned, and condemned by its author.*

Through Dr. Hunter a knowledge has been obtained of a species of aneurism, to which the name of aneurismal varix has been given, and which is always, so far as we know, the consequence of accident. It consists in a communication between the artery and vein, either immediate, or at a short distance from each other, and by means of which the blood passes from the former to the latter. When the vein is not in close contact with the artery, Mr. Hodgson has named it varicose aneurism; and as an operation is more likely to be required in this case than in the former, it seems perfectly just to make the distinction, though unquestionably they are both varieties of the same affection. In the only cases on record of the latter aneurism, both ends of the arteries were tied.

The aneurismal varix has been generally looked upon as rather a curious than a dangerous affection; but M. Richerand has related an instance which appears to us worthy of notice, and which we shall, therefore, present to our readers at full length: we do not, however, feel sure that, had it not been interfered with, any very great mischief would have ensued.

'M. F., a young merchant of Sedan, received an injury in the middle and internal part of the fore arm; but the hæmorrhage that succeeded was arrested by compression, and the wound healed. The veins of the limb, however, remained swelled, and the symptoms of varicose aneurism were developed, with the noise peculiar to this affection. The arm was weak, but free from pain. From the fear, however, of worse consequences, he went to Paris, and consulted M. Dupuytren, who tied the brachial artery above the cicatrix. The operation was succeeded by enormous swelling of the limb, which at the same time became cold and insensible; the hands and fingers were bent and wasted. The limb at length became merely a burthen, and was therefore amputated. The arm was dissected by M. Richerand and Jules Cloquet.

'A large communication was established between the artery and vein, two inches below the ligature. The opening was large enough

* The consequence of Mr. Hunter's improved mode of operations upon popliteal aneurism, founded as it was upon an intimate knowledge of the animal laws, has been an extraordinary boldness in surgeons in operating upon blood-vessels. Mr. Abernethy first tied the external iliac, and scarcely is there a single artery of importance which has not been tied: to enumerate every instance would be tedious, nor, amidst the attention now paid to the subject, can it be necessary.

to admit the index finger; and the blood returned so readily by the vein, that it never arrived in sufficient quantity to the extremity to nourish it, or to preserve its natural heat. The most curious part, however, of the examination was the state of the vessels themselves, the veins having been considerably thickened, and the arteries having become shrunk, and their walls thin, and resembling the venous structure.'

The nature of those congenital tumours, which have been termed nevi, was first accurately explained by Mr. John Bell, who termed them aneurisms by anastomosis. They ' consist of a congeries of cells into which arteries pour their blood, and veins receive it, so that in their structure they resemble the fabric of the penis, placenta, or spleen.' The early removal of these tumours is recommended by the highest surgical authorities, where their situation will admit of it.

In the commencement of this article we have referred to the different attempts that have been made, by varying the incisions, to insure adhesion by the first intention after amputation. In addition, however, to the improvements that have unquestionably been made in this respect, as also in the rejection of composite dressing after this and every other operation, the late war has enabled surgeons to lay down precise rules for amputation, which, though they had been performed before, had scarcely been admitted among the allowed operations of the art. The cases in which the thigh and arm have been amputated from their articulations are now numerous, and have been performed by many surgeons of the present day. To M. Larrey, however, and Mr. Guthrie, we are indebted for the best descriptions of these operations. M. Larrey usually tied the femoral artery, above the origin of the profunda, in the first instance; but Mr. Guthrie contented himself with compressing the artery with the finger against the os pubis, and tying it after the separation of the limb. The other large branches from the iliacs were tied as they were cut through. Other operations have been proposed, and partially practised—such as Parke's amputation of the ends of the bones, leaving the soft parts *in situ;* Chopart's partial amputation of the foot when the metatarsal bones are diseased, &c.; but these can scarcely yet be regarded as real improvements of the art, at least, they have not yet been adopted in general practice.

In the general treatment of fractures and dislocations also there has been a decided improvement, an abstinence from all interference, after once the limb has been replaced in its natural situation, the rejection of all complicated machinery, the less frequent recourse to amputation, and a complete

alteration in the treatment of compound dislocations, particularly those of the ancle joint. Thirty years since, it was deemed impossible to save a limb in this case; now it would be unjustifiable not to attempt, at least, to preserve it. With respect to what is the best position in the fractures of the thigh and leg, surgeons still appear considerably divided. We have the testimony of M. Richerand in favour of the bent position, which we believe to be that most frequently employed in this country. It cannot be expected, however, that we shall enter into the minute directions that have been given respecting the treatment of particular fractures; it is sufficient to have indicated the improved principles upon which the cure of such accidents is conducted.

There is yet one other department of surgery which appears to us to have received such additions and improvements as to demand a particular notice—we mean, the distinction of tumours, and the more perfect definition of the schirrous or cancerous tumour. For this, we are almost exclusively indebted to Mr. Abernethy; and, whether the terms that he has chosen be in every case happy or not, he has certainly been the means of making surgeons much better acquainted than formerly with the varieties of these structures, and the great difference of the danger attendant upon them. To this also it ought to be added, that he has inculcated a more rational treatment, and taught us how to mitigate the concomitant evils, where we may not think it right to extirpate the tumour.

M. Richerand has a section upon the extirpation of cancers; and, though acknowledging the almost certainty of a relapse, yet advocates the operation, and denies that, if it prove not successful, it in any manner exasperates the disease. Our own experience, we are sorry to say, is diametrically opposed to the correctness of this last remark. We have witnessed no small number of real schirrous tumours which have been extirpated; and we can honestly say, that we have never known any in which the disease has not very quickly returned. We have seen the operation performed by surgeons of the highest eminence, in the very early stages of the complaint, within a very few weeks after the tumour had been discovered, and in every such instance not only have we witnessed a relapse, but a fatal event has appeared to us to have been accelerated. So convinced, indeed, do we feel of the correctness of this opinion, that though, several years since, we always recommended the immediate extirpation of the schirrous mamma, we cannot now even imagine the case in which we would consent to it. Of the disputes, whether it is a local or constitutional disease, we profess to know nothing, we only know that in every case

that has fallen under our notice, the removal has not prevented the return after a very short interval; but we do know, that attention to the general health (unless we are indeed greatly mistaken) has retarded the progress of such tumours, and maintained the patient in much greater comfort, and for a longer period, than ever appeared to us to have been effected by an operation.

Within the last few years, many operations of extreme boldness have been ventured upon, the real value of which at present must be considered *sub judice*. The principal of these are the operations upon the contents of the abdomen and pelvis, for the removal of invagination of the intestines, the extirpation of the enlarged ovary or diseased uterus. Whether these operations are to be received among the legitimate performances of surgery, or to be regarded only as extraordinary instances, not capable of general application, remains yet to be decided.

One department of surgery in this review we have entirely omitted: viz. ophthalmic surgery. This is entirely of modern growth, and, to treat it properly, would require much more space and time than we can now allot to it. We have preferred its entire omission, with the hope, however, in no long time, of giving a full and correct history of its progress.

M. Richerand appears to be somewhat attached to Broussais' school, and to hope, that, through its means, much benefit may be conferred upon surgery. For ourselves, we can entertain no such expectation, and most earnestly do we deprecate any attempt to make surgery a second time a dependent upon medicine, or rather, upon medical theories. True, indeed, it is, that they ever must be intimately connected; yet we cannot help regarding as a chief cause of the greater advance made by surgery, its almost perfect freedom from system; and hence its greater readiness to profit by experience. Never, certainly, was any doctrine less likely to advance a science than that of Broussais, since, in its principles, it is maintained, that every thing has been already done, physiological medicine has been created, medical science is perfected.

While on all hands it is acknowledged, that surgery is much more indebted to Great Britain than to any other country for the improvements it has received, it does certainly become us to regard, with something like religious veneration, that freedom and those institutions under which it has ran so prosperous a course. Unaided by royal patronage, unexcited by ministerial rewards, and left merely to its own native energy, British surgery has attained a rank not unworthy of that country which, by the blessing of Heaven, has been the birthplace and nurse of liberty; and when we

reflect, that to its utter freedom from corporate impediments we owe the residence, nay, perhaps the very being, of the Hunters, as men of science among us, we cannot but behold with dread any measure that appears calculated to impose a control, which at best was only fitted for a barbarous age. We must, indeed, ever condemn that intemperate language which too often retards the good it is intended to effect; yet, when we look back upon the history of surgery, we cannot but feel that the late proceedings of the College of Surgeons are not more unjust to the body, of which it purports to be the representatives, than they are injurious to the best interests of the science itself; and though we cannot expect certainly that this learned body will communicate with those whose professed object is to deprive them of their charter, while they still continue such purpose, we yet hope that its own better feelings will lead to a revision of the regulations, which the profession at large have felt as such severe grievances.

We have partly stated our grounds for considering them as grievances; and when we know how capable pupils generally are of judging of the talents of their teachers, we much more fear lest one highly-talented individual should be prevented from lecturing than that any harm should arise from incompetent professors. We question, indeed, if these last would ever obtain hearers.

II.

*THE LIFE OF DR. BAILLIE.**

The Works of Matthew Baillie, M.D.; to which is prefixed, an Account of his Life, collected from authentic Sources. By JAMES WARDROP, Surgeon Extraordinary to the King, &c. &c. &c. 2 Vols. 8vo. London. LONGMAN and Co. 1825.

IF there be any student ready, in the dreary length of a hard-working winter, to give up the study of physic in despair—if there be any young physician languishing in the country, just deprived of all the excitements of his college life, and thrown upon the resources of his own anxious mind—if there be any physician newly fixed in London, tantalised with the spectacle of surrounding opulence, eager to take a share in the bustle in which he is involved without being engaged, at once restless and unoccupied, his nightly dreams of that

* As the present article may appear in some respects different from the account of the life and professional character of the late Dr. Baillie, by Dr. Copland, published in this Journal, (see the 20th Volume, p. 520, Old Series), it is therefore proper to state that it is written by our friend and colleague, Dr. Conolly.

wealth and eminence, to attain which he is sometimes half disposed to venture on some novel and eccentric experiment,—we would recommend to him the quiet perusal of Mr. Wardrop's life of Dr. Baillie. From the biography of this eminent physician he may derive lessons of labour, perseverance, humility, and patience, as well as encouragement and hope. He may there learn, not only to expect the sure rewards of exertion, but what the extent, and how applied, that exertion should be.

We have not now for the first time to express our opinion of the general value of biography, which we consider as not only the most fascinating, but the most useful kind of literary reading. Indeed, we are firmly of opinion, that more good resolutions have been formed or fostered, more aspiring characters created or confirmed, more noble enterprises suggested, and more amazing achievements prompted, in public or in private, in active or retired life, by reading the lives of illustrious men, than by any other description of study. However eloquent or dignified abstract exhortations to the exercise of prudence, or courage, or virtue, or industry, may be, every day shews us that they make very little impression: the maxims by which they are supported are unfitted to attract the attention of the young, and are regarded with coldness and doubt by the old—by the inexperienced they are soon forgotten—by the less unsophisticated they are disbelieved. But when we peruse the authentic life of a man distinguished by any great degree of virtue, actively and usefully exercised for his fellow-creatures, we can no longer doubt the possibility of its attainment; all the sympathies of our minds are acted upon; and, if even better feelings should be wanting, our vanity rouses us to emulation, and feels a lively interest in our not being left immeasurably behind. The models and examples thus presented to us cannot, it is true, be faithfully copied, nor can any great good arise from too slavish an imitation of them; but neither can they be wholly forgotten or disregarded, or contemplated without furnishing hints for the design of our own character, and adding to our capacity of working it slowly and carefully into perfection.

It would be difficult to mention any man of whom the history would be likely to be more interesting to physicians, however situated, than that of Dr. Baillie. Universally acknowledged to possess talents of no common order; deferred to by the whole profession, to an extent seldom seen before, and perhaps never hereafter to be equalled; his name synonymous in the public ear with all that was perspicacious in the detection of disease, and judicious in its management; honoured by his sovereign; his opinion eagerly sought for by

persons of the highest rank and figure in society, and consequently enriched by a most extensive practice, he seems to have attained all that can animate medical ambition, and all that this world possesses in the way of reward for medical talents and virtues. To trace by what successive steps he acquired this knowledge, and the influence which flowed from it; to mark the parts of his long and brilliant career; to learn something of the character of his mind, and the habits of his life; are things at once exciting and deserving of our curiosity: and to watch the preservation of his amiable simplicity and disinterestedness in all the varieties of situation in which he was successively placed, is both delightful and salutary to those who are still called upon to act or suffer in a crowded and busy world.

Our readers do not require to be informed, that Dr. Baillie was by birth a Scotchman, the son of a country clergyman, who was afterwards Professor of Divinity at Glasgow. Young Baillie acquired the rudiments of education at Hamilton, and then became a student at the Glasgow University. He afterwards removed, in the eighteenth year of his age, to Oxford, having first been introduced to his maternal uncle, Dr. William Hunter, who at that time, 1779, resided in Windmill Street. Being soon convinced that medicine was not to be learnt at Oxford, and wise enough to know, that whoever aspires to excellence in any one pursuit, must proportionably debar his attention from many others, he passed all his vacations, after his first year of collegiate study, in London with his distinguished uncle—from whose lessons and society he doubtless reaped sufficient advantages to compensate him for the necessity he was consequently under of remaining unacquainted with some of the schools of medicine then most celebrated, and particularly that of Edinburgh. It is no small proof of the early steadiness of Baillie's character, that even when about to commence his studies at Oxford, he should have asked the advice of his uncle in such terms as these:—'I would wish likewise to talk over with you the manners of the place, that I may not go unguarded or unprepared to it. I am told that there is a great deal of dissipation in it: I would therefore wish your warmest advice with regard to my behaviour.' Every part of the letter from which this extract is taken is indicative of the sincerity, the affectionateness, and the composure of the writer's character, in what is usually the most unsteady and the least reflecting part of a man's life. We have an equal proof of the early maturity of his talents, and of his great industry, in the fact that two

years after commencing his studies he became a teacher in the anatomical theatre. In a year afterwards, his uncle, who had been, it would seem, a father to him, died, bequeathing to him the *use* of his museum (now possessed by the University of Glasgow), the house and theatre in Windmill Street, and a small family estate in Scotland, which Dr. Baillie at once resigned to his surviving uncle, John Hunter. William Hunter's doctrine with respect to legacies was such, however, as to deprive his nephew of any great pecuniary benefit from his death; the old gentleman having indeed avowed, 'that it was his intention to leave him but little money, as he had derived too much pleasure from making his own fortune to deprive him of doing the same.' He could not have been ignorant that the pleasure of spending a fortune liberally might be no less, whilst it might be more widely useful, than the pleasure of accumulating it; but it is probable, that he saw, and justly confided in, the remarkable qualities in the character of his nephew.

This was the part of Dr. Baillie's life in which were laid the foundations of his future eminence; and they were laid deeply, and securely, and with unwearied care, in the diligent and almost continual practice of dissection, and in the most studious attention to the objects collected in the splendid museums of the two Hunters. No man can contemplate these monuments of indefatigable labour and profound science without admiration and surprise; but those only can know their real value who have been, or are enabled (which we fear too few have been or are,) to examine leisurely, minutely, repeatedly, and methodically, the invaluable illustrations of anatomy, pathology, and physiology contained in them. We trust the professors at Glasgow are not negligent of their preparations: we know they are careful enough of the books, and remember the sad kind of curiosity with which we contemplated some very splendid bindings through gratings never opened to a student. Of the collection in London, we need say nothing; for much has been recently said. It is at least carefully preserved, and patiently and lucidly exhibited, by the very excellent conservator, Mr. Clift; and has, we doubt not, kindled the flame of emulation in many a young physiologist. But we do think it merits much consideration on the part of those who are *now* gradually accumulating collections, whether the progress of science has been generally promoted, or the utility of private collections increased, by the latter being bequeathed to corporate bodies of any kind? The preparations, specimens, books, pictures, and all the objects gathered together in a

whole life of labour, during which a fortune has been spent under the direction of taste and understanding, too often become a mere *property*, guarded with jealous care from all but those who are least disposed to profit by them, or least in want of the assistance which they afford. Students resorting to the different schools of medicine and surgery, who, after the completion of their period of study, are to return into retired parts of the country, and will have very few subsequent opportunities of access to museums, as well as those whom a certain independence of fortune enables to devote more time to scientific study than the generality of young men who are preparing for practical duties are able to do, are, we imagine, the persons whose benefit has been in general contemplated by the donors of museums of all descriptions; but it is to be regretted that many petty difficulties are so often allowed to lie in the entrance of these collections: so much bowing, and name-writing, and leave-asking, —such a superfluity of servility is to be undergone, that many resign the advantage rather than incur the conditions attached to them. We shall be truly glad if Dr. Baillie's *own* collection of preparations, amounting to upwards of a thousand, and containing 'many excellent and well-chosen specimens, illustrating almost every diseased change in the human body,' almost all prepared with his own hands—we shall be glad, we say, if this collection, and his own selection of books, ancient and modern, together with the copper-plates of the morbid anatomy,—all which are deposited in the College of Physicians, should furnish an honourable exception to the exclusiveness and inutility of so many other scientific legacies and presents, and become extensively serviceable towards the promotion of zeal for the cultivation of those branches of medical knowledge with which they are connected.

Two years after William Hunter's death, and consequently only five years from the commencement of his studies, Baillie became an anatomical lecturer, being then only twenty-two years of age.

'As a lecturer he soon attained considerable eminence, being remarkable for the simplicity and perspicuity of his demonstrations, the order and method of his style, and the clearness and distinctness of his delivery. 'There was something in his mode of lecturing,' to use the language of one of his most distinguished pupils, 'which, though not eloquent, irresistibly commanded the attention of his hearers: it was that of a person completely master of his subject, and anxious to convey knowledge to others. He was singularly clear in his demonstrations, yet concise and condensed; he was never at a loss for an appropriate word or phrase; never

made repetitions; never introduced an observation out of its proper place; and he had nothing to assist him, except in a few introductory discourses, but the mere heads of his lectures. His manner was not without animation, yet always modest, and most unostentatious; and the attention of the student was excited, not by brilliancy of composition, but by a remarkable fluency and precision of expression."—P. xxvi.

At the age of twenty-nine, he was appointed physician to St. George's hospital, by which appointment his opportunities of acquiring practical knowledge, which had hitherto been very limited, became ample.

'Up to this period his opportunities of studying the practical part of his profession had been comparatively limited; but great assiduity and attention, united with his natural sagacity, enabled him to acquire that tact in discriminating diseases in the living body, which formed a striking feature in his future character—an acquirement which few attain who have not had constant opportunities of visiting the sick early in life; for in medicine, as in all other practical professions, the youth obtains with facility certain parts of knowledge, which those more advanced in years find it very difficult, if not impossible, ever to acquire.'—P. xxix.

The work on Morbid Anatomy, which has had such deserved reputation, not only in this country, but throughout Europe, was published in 1795, and will always be valued as containing a greater quantity of exact and important knowledge than perhaps any other book of the same size which was ever printed. Although the style of this work, as of all the writings of Dr. Baillie, is so plain and perspicuous, it always appears to us to have been formed with peculiar care, arising perhaps out of that conscientious desire by which the author was always influenced, of avoiding to lead his readers into error of any kind, even by an unguarded expression. Of his language in general, it may be said, that it conveys valuable information so briefly, and at the same time so accurately, that whilst to add to it would be to injure and weaken its effect, nothing can be taken away without injury: it is the very condensation and essence of facts, '*nihil detrahi potest;*' and the effect was, in this example no less than in that to which these words were applied, by one of the most judicious critics of antiquity, the result of care. The following extract at once confirms our judgment and our conjecture concerning this:—

'Dr. Baillie's writings are all remarkable for the simplicity of their style, and for the truth and conviction they never fail to convey to the mind of the reader, creating no other feeling than that he wrote only for the purpose of conveying information. No one can

form a just notion of his power of compressing matter without comparing his 'Morbid Anatomy' with the voluminous works on the same subject which preceded it; or by attempting to add to it from the writings both previous to, and since its publication. This is strikingly illustrated by the little importance that can be attached to the notes of the different translators of that work; and there is scarcely a pathological fact in the stupendous folios of Bonetus, Lieutaud, and Morgagni, which is not to be found in Dr. Baillie's small volume. But this style is only to be obtained by great labour and a perfect knowledge of the subject; and a review of his MSS. exhibits the numerous and tedious steps by which he was at last enabled to produce what has come before the public. The same clear and distinct mode of expression also appeared in all his correspondence; and his style of answering letters of consultation, whilst it was brief, was yet copious, and well calculated to impress on the mind of the patient his knowledge of the case, and the propriety of the mode of treatment which he suggested.'—P. xxxiii.

Every year of Dr. Baillie's life now engaged him more deeply in practical duties, and of course more detached him from the anatomical labours by which his early life was so much distinguished, and which have conferred upon him such durable fame. In 1799, he gave up lecturing, and resigned his appointment at the hospital. But the young and impatient should be reminded, that it was not until he had nearly reached his fortieth year, and not until after a long course of almost unintermitting labour, scarcely cheered by any confident hope of future success in practice, that he became much known as a physician, although after that period his reputation rapidly advanced. There are doubtless many roads, to what is in a wordly sense called success; but the surest, and the only one which a medical man can take with honour, is to be diligent and patient, and trust to his real value being in time found out. This road, it is true, is long, and tedious, and wearisome, and at many turns presents difficulties too well calculated to produce despondency; but it is not connected with any of those seductive paths which, appearing far shorter and more agreeable, do but lead to danger or disgrace, or that remorse which can neutralise all the much-desired blessings of prosperity. So long as we pursue this road, we may feel assured that the termination of our journey will present no disappointment; and if our most uncertain measure of life should be ended first, we shall run no risk of leaving a dubious or a 'wounded reputation,' nor shall we have wholly lived in vain. It was Dr. Baillie's good fortune to accomplish all this; to live respected, and to descend with honour to the grave. Many reasons might be given to account for no man having succeeded, or being

likely to succeed, to the place at the head of the profession which became vacant by his death; some of which are to be found in the circumstances which contributed to elevate him to it. It was neither his merit alone, great as it was; nor his manners, which were very unpretending; nor his connexions in the profession, though unusually advantageous, that gave him, as it were, the empire of medical opinion; but his minute acquaintance with some branches of knowledge in which the race of physicians in the preceding age were very deficient, particularly with anatomy, both healthy and morbid. It is curious to be told, that several of his contemporaries conceived that his attachment to anatomical pursuits would be ruinous to his prospects as a physician: so erroneously do men judge who measure the qualifications required by the time which is before them by that required in the time that is past. This advantage, it need scarcely be observed, or indeed any advantage of mere attainment, cannot at present be said to be exclusively possessed by any man in the profession.

This particular period of his life, when his practice, though fast increasing, was not yet so great as to absorb all his time, and when he had given up his lectures and hospital attendance, appears to have been his happiest. Possessing every amiable quality, he was well fitted to enjoy domestic and social pleasures; but it was the effect of his great reputation soon to involve him in professional engagements far beyond his physical powers, and this was productive of a loss of health, and an interruption of mental tranquillity, from the irritating influence of which he was seldom afterwards, except at brief intervals, happy enough to escape. We must here gratify our readers with an extract, in which some of the distinctive merits of Dr. Baillie's practice are touched upon with a very judicious discrimination.

'Dr. Baillie possessed in an eminent degree a facility in distinguishing diseases—one of the most important qualities in the practice of medicine, and which can only be acquired by an intimate knowledge of the natural structure of the human body. Habits of attentive observation had also enabled him to know, with great accuracy, the precise effects and extent of the powers of medicines; indeed, there was no class of cases more likely to fall under his observation than those in which they had been abused, younger practitioners being apt to carry particular systems of treatment beyond their proper limits. Dr. Baillie's quickness, therefore, in perceiving this abuse, rendered his opinion in many such cases of great value.

'In the practical part of medicine, which, in its application to individual cases, may be said in many respects to be conjectural,

the more a man advances in years, the more does he find how limited has been his knowledge, and how much he has still to learn. No one seemed more aware of this than Dr. Baillie; and I have frequently observed this superior knowledge of his art lead to the remark, that his practice was inert; for when he perceived certain and irremediable changes in disease, or when they had a fatal character from their commencement, he would merely attempt to palliate, whilst a practitioner not possessing his accurate knowledge would have made fruitless efforts to cure the disease.'—P. xxxvii.

We cannot help interrupting our quotation to recommend the latter remark to the consideration of those whose ambition it is to be considered *bold* practitioners; a word which, we verily believe, has deluded many ardent spirits into most destructive practice, and hastened many patients out of existence. Boldness is a very useful quality in many situations of life: it is the soldier's virtue, the barrister's support, the adventurer's weapon, the clergyman's shield in evil times; but it is not exactly the quality most frequently called for, except in contradistinction to indolent timidity, in our attempts to rectify the movements of a machine so complicated and delicate as the human body. Few practitioners want boldness to bleed, and that at least sufficiently, in inflammation or in apoplexy; but a love of the lancet, that instrument which (like the *mistura salina*) always seems to be thought of when the practitioner is at his wit's end, has, we doubt not, helped to fill the graves of many a churchyard in this country, as well as in that luckless town in Spain, the very towers and steeples of which seemed reproachful to the sight of *Gil Blas*. But we proceed with our extract.

'In nothing did he excel more than in the clearness, the conciseness, and the unaffected simplicity in the mode of delivering his opinions. He had the particular merit of leaving no ambiguity in the mind of a patient; and the language he employed was so plain, and so free from scientific jargon, that I have often heard a patient repeat, word for word, all he had said on such occasions. He possessed also in an unusual degree the power of simplifying, and of illustrating by analogy what appeared complex and unintelligible, and was thus able to give patients a correct and satisfactory idea of the nature of their complaints. He frequently expressed himself in striking and original language; but always without the slightest affectation. Strong, clear sense, was that for which he was most remarkable. He could admire and praise ingenuity; but it never for a moment imposed upon him.

'He had a most natural, unassuming, but decided and impressive manner, which, in the exercise of his professional duties, was the same to all persons, and on all occasions: his benevolent prin-

ciples led him to disclaim all distinctions in his mode of addressing the sick. His slender form, together with the great modesty of his deportment, and the simplicity of his manners, often appeared very striking to strangers, who, from his distinguished character, had been led to expect something more imposing in his person and manner. His mind was always quietly, but eagerly directed to the investigation of the symptoms of his patient's disease; and he had so distinct and systematic a mode of putting questions, that their answers often presented a connected view of the whole ailment, which could not fail to impress them with his clear and comprehensive understanding. He was modest in his estimation of himself; he would say to his own family, 'I know better perhaps than another man, from my knowledge of anatomy, how to discover a disease; but when I have done so, I don't know better how to cure it.' There was one pleasure which he sometimes received from this confidence in his sagacity in detecting diseases, and that was when he could convince any person who came to him under the impression of having some fatal malady, that there was nothing materially the matter with him. Years of peace and comfort, that would otherwise have been years of apprehension and misery, he was conscious of having thus bestowed on many.'—P. xxxix.

There seem, indeed, to have been few parts of this great man's character which did not present something to be admired, and worthy of imitation: his candour and kindness towards his junior brethren; his liberal recommendation of those who had perhaps no other friend to say a word for them; his overflowing kindness towards those young practitioners on whom too many among those already established look with coldness and contempt; his punctuality in all his appointments; his attention to all applications, by letter or otherwise; his conscientious discharge of very laborious duties, often when he was himself suffering more than his patients, and sometimes incurred because he had in a moment of irritation and fatigue spoken hastily and roughly to them;—all these, and many other traits, are such as it is truly gratifying to any lover of man to reflect upon; but doubly so to him who, filled with a proper ambition, can exclaim, like the young artist when contemplating the masterly works which first roused the emulation that led to his future celebrity, 'And I too am a physician!'

A letter of introduction is a sad thing enough any where; but there are probably several persons who remember, as we do, the agreeable surprise resulting from a first introduction to Dr. Baillie. The many stories which had been related of his roughness and want of polish, added to our fervent admiration of his talents, made us wait upon him with more trepidation than we would willingly confess to an enemy; and the mildness and tranquillity of his countenance, the

delicacy of his figure, his unassuming deportment, his calm but singularly impressive manner, and the kind and apparently quite unaffected expression of his good wishes, left an indelible impression upon us.

'His disposition was very communicative, and he used to narrate in the most open manner the history of his own life, and describe to the younger members of his profession the rocks and shoals which he had met with, contrasting these with his long-looked-for, but ultimate success. Scarcely any medical person commenced practice in London without being introduced to him; and such introductions usually led him to make some observations on what his own experience had shewn him to be the necessary qualifications to insure their success, and the probable progress they must expect to make in their professional career. He pointed out the necessity of integrity and of industry, and the slow progress of the most eminent men who had gone before them; and, on the other hand, the transitory fame of all those who had ever attempted to gain professional reputation as if by storm. Such observations, coming from such an authority, were of the greatest use in checking the too warm imagination of the youth, and thus enabled him to see his situation in life, as it really was, and not as perhaps he had allowed his imagination to paint it. Again and again I have heard him remark, that he never knew an instance of a practitioner settling in London who made a large income at first, continuing afterwards to do so. I have been informed by one of the intimate companions of his early days, that he long considered his own success as hopeless, and never contemplated acquiring any thing like celebrity, or even competency. He used, in pointing out the difficulties in the road to medical fame, which he had often occasion to do, to impress on young men the impropriety of living expensively, and the error of considering equipages, and parade, and entertainments, necessary for their success, candidly illustrating these opinions by his own experience.'—P. xliv.

His own habits appear in all things to have remained, even in his greatest fame, and when he had amassed a considerable fortune, as simple as those of the country clergyman's son. Among other things, 'he seemed to have a particular dislike to the affectation and peculiarities of dress displayed by some medical men, as derogatory to the respectability of their profession.' He was eminently possessed of that delicate generosity which it is the peculiar and truly proud privilege of medical men to be able to evince, when they give without reward that assistance and comfort for which no money could be a remuneration; and seems to have exactly preserved the happy medium between the weakness which refuses recompense where nobody is benefited by the refusal, and the hard and convulsive avarice which closes its hand upon every offered fee. There is not a more delicate point in

medical ethics than this. The frequent refusal of fees has probably no very favourable operation on the opinion which it is desirable the patient should entertain of his physician; and it is but too notorious that persons by no means sparing of expense in other matters are sometimes reluctant to give money for so shadowy a thing as advice, for a thing which they can neither see nor feel, which neither adorns their persons, nor enriches their houses, nor gratifies their palate; and they will consequently allow the physician, if he happens to be of an easy indolent temper, to exert that skill in their service for nothing which he obtained by the sacrifice of an independence in the first instance, and of the best years of his life. Against this spirit it is the plain duty of all physicians to act firmly; for, even if they do not think the sacrifice of themselves of much consequence, they have no right to sacrifice the interests of their profession. On the other hand, instances are presented to the practitioner, even daily, in which to receive fees would be a kind of crime; and here he is to remember, that he is not a tradesman, but exercising a dignified branch of his profession; and that if he has been fortunately enabled to attain that knowledge which is purchased by his rich patients at a high price, it is doubtless *required* of him that he should not withhold the exertion of this enviable knowledge—by which health is preserved, or disease cured, or suffering relieved—from the poor and the distressed. Nor is it the abject and squalid poor alone that are here meant. In the numerous gradations of society, there is a class far more to be pitied, consisting of persons liberally educated, and accustomed to good society, and who must attend to appearances—whose circumstances are limited, and whose situation is such, that they cannot by any exertion add to their scanty income. But we are wasting words on this subject. No reflection is more delightful to those really attached to our profession than that *all* the respectable members of it are in the continual practice of exercising an unostentatious charity of the kind to an incalculable extent. The most frequent miracles of the Divine Author of the Christian religion were wrought in favour of those labouring under disease; and we should be grateful that we are called to act in a station where, compared with the consequences of neglect, miracles are put into our power, to be effected by mere care, attention, and professional skill. Dr. Baillie was not insensible to the pleasure arising from the exertion of this godlike attribute; and he even *gave* money in some instances with a liberal hand, where his advice could not be followed for want of it; whilst, at other times, with a refinement of delicacy most honourable to him, he received

his fees during the illness of a patient whose mind would have been harassed by the idea of gratuitous attendance, and returned the whole sum after recovery.

From the private character of medical duties, and their want of connexion with any link of political interest; and perhaps even more from the general want of leisure in our profession, it arises that, taking them altogether, medical men feel less warmly concerning all questions of public interest than any other class of men, and would for the most part consent to any incroachments on the part of power, provided their studies and their practice were left undisturbed. We have occasionally felt disposed to quarrel with this apparent want, not only of patriotic feeling, but of public spirit, which is unquestionably characteristic of us; but we have recollected the quiet nature of our duties, and the pious offices which most become us, and corrected ourselves. Still, however, it gives us some satisfaction to find, that Dr. Baillie, the physician of the great, even when residing within the very precincts of the court of Windsor, respiring an air generally supposed to be as little favourable to freedom of thought as to freedom of speech, acted in the same plain, straight-forward way in his capacity of a freeholder that he would have done within the liberties of the dissecting-room and anatomical theatre. The following passage contains the circumstance to which we allude :—

'Whilst he was thus in attendance at Windsor, a circumstance occurred which marked the candour of his character. There was much canvassing for a representative in Parliament for the county of Gloucester, where he had purchased an estate; and a nobleman, zealous in the support of the ministers then in office, applied to him by letter for his vote. He wrote for answer, that he was so very much engaged in business as to make it impossible to take a journey to Gloucester to vote for any candidate; but at the same time, he thought it right to inform his lordship, that he had always voted for the Whig interest, and should continue to do so.'—P. lvii.

It is well known, that Dr. Baillie's health and strength sunk under the harassing duties of his profession, from which he ranked too highly with the public to be at any time quite emancipated, or indeed to have, what could really be termed, relaxation; for relaxation, to be complete, demands not only freedom from engagements, but freedom from an apprehension of them.

'His physical frame, far from being originally robust, began gradually to fall into a state of exhaustion past relief from repose; and this, continuing without intermission, wore out his body more than the tranquillity and annual retirement of a few months in the coun-

try were sufficient to restore. A manifest change at last took place in his appearance: already much wasted, he now became emaciated and feeble; and, though the faculties of his mind remained perfect, there were times when even these were deprived of their wonted vigour.

'In the early part of the summer of 1823, he had an attack of inflammation of the mucous membrane of the trachea, which, though it at first created little disturbance, became in the month of June very troublesome, being attended with some fever, and a frequent cough. In this state he quitted London for Tunbridge Wells, and returned in a few weeks, the more teasing symptoms of cough having been relieved by local bleeding and blisters; but in no respect had his general health improved. His feebleness was now so great, that even conversation was a considerable effort; and he had completely lost all relish for food. Though aware that his situation was precarious, he seemed to entertain the hope of being able to return to London in the ensuing winter, and to resume, to a certain extent, his professional avocations; for he was persuaded that he had no organic affection, and that by repose and living in the country the digestive organs, whose functions were so much deranged, would be restored. Such were the expressions he then used when adverting to his situation.

'With these hopes he went down with his family to his residence in Gloucestershire; but, instead of gaining strength after his arrival there, he became daily more and more enfeebled; and after much bodily suffering, but with a mind unshaken, he expired on the 23d of September, 1823. Thus terminated the life of a man, at once an example to the living by his virtues, his inflexible integrity, his great moral worth, his benevolence to his afflicted fellow-creatures, and his high intellectual endowments!'—P. lxi.

With this passage, which cannot fail to interest every feeling reader, we shall conclude our notice of this piece of biography, on which we have dwelt long, because it has afforded us much gratification. It is written with equal taste and judgment, and presents in a small compass many instructive, as well as interesting, particulars of the life of a man whose name will be mentioned with honour as long as virtue and talents are thought worthy of esteem.

In one respect, we fear the interest of the bookseller has been consulted in opposition to that of the public. No practitioner, and scarcely any student, is unpossessed of a copy of Dr. Baillie's 'Morbid Anatomy;' and it is, therefore, a circumstance to be regretted, that their desire to possess the life of the author, and those of his papers which were heretofore scattered about in different publications, should be taken advantage of to force upon them a duplicate of a work to which very few additions were made of late years. The first volume, containing the account of Dr. Baillie's life, his various papers, and very interesting notes of dissections,

would have been very eagerly purchased, but for this incumbrance; and the General Account of Diseased Structures prefixed by the able editor to the second volume, would with great propriety have accompanied that part of the present publication in the separate form of a new edition of the Morbid Anatomy. We know how much literature owes to the liberality of booksellers; but in this age of publishing, we cannot help saying a word for the readers. It would give us pleasure to see the biographical part neatly printed by itself as a companion to, and, as it were, a commentary on, the elegant lectures on the Duties and Qualifications of a Physician, by Dr. John Gregory, a little work which cannot be too often looked into; and it would thus form an appropriate and useful present to every student of medicine.

Yet we speak perhaps unadvisedly — for in the perusal of Mr. Wardrop's Life of Dr. Baillie, the reader cannot fail to be struck with one great and unaccountable omission. Although much is said of the means by which Dr. Baillie attained so great a share of temporal prosperity, and ample justice is done to the virtues which first merited, and afterwards so much graced, that prosperity, not one syllable is said of the piety or religious feeling of that good as well as great man; not the slightest possible allusion is made to the existence in his mind of any feeling beyond that of a mere creature of this temporary world; of any high and governing principle from which flowed all the good that he did, and by which he was restrained from whatever of evil he avoided.

How will Mr. Wardrop explain this to the friends of Dr. Baillie? Will *they* allow those who knew him not to draw the conclusion, that their valued friend lived and died without any religion at all? Will they sanction the belief, that the piety of the Scottish youth, of the clergyman's son, was sunk and lost in the profound researches made by him into the works of an Almighty hand? God forbid! Was the beautiful eulogium of Sir Henry Halford nothing but a vain and fulsome panegyric? was the '*hinc* pia illa vivendi regula, *hinc* spectata integritas; *hinc* omnia graviter, humaniter, amabiliter; *hinc* candor, caritas,'* the mere vanity of scholarship and pomp of words, without meaning and truth? We cannot, we will not believe it.

* We would direct the reader's attention to the whole of this passage in the learned president's oration, beginning, 'In hoc dilecto nomine.' The readers of this Journal will remember that it is inserted without abbreviation in the 3d Number of the 1st Volume of this series, for September 1825.

Will Mr. Wardrop accept the alternative? Was it fear of being accused of cant? Was it deference to fashionable indifference, the test in these times of pure and praiseworthy orthodoxy? Was it a belief, that any allusion to Dr. Baillie's piety would be unwelcome to the mass of medical readers? or is this the *tone* of the talented circle of the profession in which Mr. Wardrop is so well entitled to move? or was it an opinion, that the matter was of no consequence to the young and ardent admirers of excellence in a profession they are just beginning to cultivate? We shall be slow to think so poorly of medical philosophy, or to believe Mr. Wardrop so destitute of courage, of judgment, of good sense.

Whatever may have been the motive, whatever may be the excuse, we should justly be charged with a carelessness respecting what we consider to be our duty, if we did not notice the fault. Until some explanation is given, we will look upon it as merely an omission, though far from a slight and unimportant one; and we trust it will not be long before some one able to speak positively on the subject steps forward to shield the memory of BAILLIE from the imputation thus tacitly cast upon it.

III.

OF THE DISEASES OF INDIA, AND OF CALOMEL IN THEIR CURE.

Topographical and Statistical Reports of the Diseases most prevalent in the Different Stations and Divisions of the Army under the Madras Presidency.

Practical Observations on the Effects of Calomel on the Mucous Surface and Secretions of the Alimentary Canal, and on the Use of this Remedy in Disease, more particularly in the Diseases of India. Being Parts II. and III. of Sketches of the most prevalent Diseases of India. Illustrated by Tables and Plates. By JAMES ANNESLEY, Esq. Madras Medical Establishment, lately in Charge of the General Hospital, Madras, and Garrison Surgeon of Fort St. George. 8vo. Pp. 500. London, 1825.

IN the Numbers of this Journal for January and February, we gave a full account of the pathology and treatment of the epidemic cholera which has lately ravaged, and still continues to ravage the countries of the East. In this we were principally indebted to Mr. Annesley's able and interesting work on the diseases of India, which furnishes more precise information respecting the nature and cure of this dreadful disease than any other of the several works which have appeared on the subject. The attention which, in the first part of this work, he bestowed upon the early stage of the epidemic cholera, the clear and methodic manner in which

he traced its subsequent stages, viewing them as the ultimate effects of that condition of the vital energies induced by the efficient causes of the disease, to a recognition of the nature of which condition the early or premonitory symptoms of disease are the surest guide—the minute researches into which he entered as to the changes produced in the solids, fluids, and secretions of the body, during the disease, and after death had supervened from it—and the great extent of his experience of this and of the other disorders most prevalent in India, have induced us to turn again to his work, in order to convey some idea to our readers of the equally interesting parts of it, which have not yet been brought before them. We confess, however, our inability to perform our task to our satisfaction; for the author's statistical reports are all illustrated by the most interesting and laborious tables which we have yet seen in a medical work, and which, with the exception of two or three, we cannot in common honesty transfer to our pages. Of these tables there are no less than thirty-one, of the excellence of which our readers will be best enabled to judge from the specimens we shall place before them.

Our respected author introduces his reports to us in the following terms :—

'The object of the following Report is to shew, in as condensed a form as possible, the several diseases which were prevalent, at different periods of the year, in each division of the army; to give a sketch of the medical treatment required, and to exhibit the degree of mortality which prevailed during the period embraced by these statements. I have added some observations on the nature of the climate, and on the comparative effects of disease upon the constitutions of the Europeans and natives, of the same military class, subject to the same duties, and exposed to similar vicissitudes.

'That something of this kind may be highly beneficial to the public service, will be readily admitted by all who are acquainted with the medical practice of India; and that it has not been before attempted by those who have long had possession of the necessary documents, must be a matter of regret to medical officers arriving in the country, and who, being strangers to its climate, are in some measure ignorant of the peculiarities of its diseases, as observed in its different localities. This has induced me to contribute my individual efforts, however imperfect they may be found, to supply the deficiency.

'The occasional publication of reports, similar to those which I am now about to attempt, may lead the way to an investigation of diseases otherwise imperfectly known to the mass of the medical community; and, by lightening the labour, and extending the knowledge of the military surgeon, may become the means of preserving many valuable lives that might otherwise be lost to the service. It is not an unfrequent occurrence, that corps are suddenly

ordered into countries wherein the medical officers can have had no previous experience, and where the prevailing diseases differ materially from those he may have been in the habit of treating. Having no experienced guide, therefore, to guard him against the causes of disease prevalent in the district he is about to visit, or to direct him in the treatment which has been found most successful in combating their effects, he must feel at a loss, till time and observation put him in possession of what recorded experience might have at once furnished him with. Such has been my lot. I have often and painfully felt the difficulty of which I now complain, and had long since determined to remedy the inconvenience, if ever I could collect materials for the purpose, being *well aware* that, by assisting the medical officer in the performance of his duties, I should benefit the public service, and promote the cause of humanity.

'The period from 1815 and 1821 inclusive, having been that of the most active service which has occurred in India for many years past, has therefore been selected, as it was the best calculated to try the constitution of the troops. During this time, the country was the seat of war, and the troops were obliged to make most harassing marches, and to perform the severest duties of an active warfare. They were exposed to epidemic cholera, which prevailed the greater part of this time, to the influence of seasons more than usually variable, to excessive heat, heavy monsoons, and sudden vicissitudes of weather. During this period, too, the army traversed a space of country, from between the 8th and 9th to the 25th degree of north latitude, and from the 75th to the 80th degree east longitude.

'It was my good fortune to be with the army during the whole of this time, as a regimental, a staff, and a superintending surgeon, successively; I had, therefore, such opportunities as fall to the lot of few, of collecting information, and I now offer the result of them with deference to the public, with a view of leading to farther investigation; not with a feeling that they possess any other merit than that which a devoted zeal to forward the interests of the public service and the cause of humanity can give them.

'I cannot but think, however, that if similar statements were made and followed up at the sister Presidencies, a mass of highly-valuable information, regarding the climate and diseases of India, might be collected, which might be the means of establishing a system of medical practice upon some rational footing. That this is imperiously called for, must be at once admitted, when we consider that, extraordinary as it may seem, there is at the present moment as much diversity of opinion respecting the treatment of the diseases of India as there was fifty years ago.

'The various situations of importance which I have held in the service, have enabled me to enter upon a work of this kind with some confidence, having had the opportunity of personal observation, in every important station and district under the Madras Presidency; and having had the direction of very large establishments, both European and native, and the superintendence of general hospitals both in field and in garrison quarters.'—Pp. 252—254.

By consulting the map accompanying the author's topographical reports, it will be seen that they refer to the largest portion of the British empire in the East. They embrace the whole of the peninsula, and extend northwards as far as the 25th degree of latitude. After giving a general explanation of the tables of disease, he commences with the report of the '*Presidency Division*,' and illustrates its diseases with two tables, the second of which we have subjoined. This division consists of three military stations, the climate of which and of the adjoining country is first succinctly stated, and next the seasons of the year in which disorder is most prevalent. The most destructive diseases in this division are stated to be fever, dysentery, and hepatitis. The first of these is the most prevalent and most fatal; the second is more the result of the gross irregularities and indulgencies of the patients, than of the climate; and the number of hepatic cases partly arises from the 'practice of sending chronic cases of liver complaint from out-stations to the Presidency General Hospital.'

The form of fever which prevails in this division, as well as in the centre and southern divisions (the Carnatic being divided into these three divisions), 'nearly resembles that called by Cullen synocha. It shews itself with full, hard pulse, hot skin, suffused eyes, head-ache, and general pains; but it is easily checked, if immediately attacked, and boldly treated.'

In the treatment of this fever, Mr. Annesley recommends bleeding and active purgation in its early stage; and he advises the use of purgatives 'as long as there is any degree of excitement in the system, and as long as the dejections are viscid, of a dark colour, or otherwise morbid.'

'I have known an emetic check the fever at once, particularly amongst the natives; and if it be given in an early stage, I have not a doubt, that, amongst them, the tartar emetic mixture will rapidly effect a cure; but it *must* be taken in an early period of the fever, because, when the disease is neglected, even for a day or two, which is often the case, it becomes of a very different character, and assumes a form not unlike typhus, indicated by black, foul tongue; stupor; low, languid pulse, &c. &c., without possessing, however, the specific character of contagious typhus, as described by Cullen. We have no disease of this latter kind in India; but as the symptoms, with this exception, partake very much of the typhoid character, I am at a loss to know what else they should be called.

'The tartar emetic mixture consists merely of six grains of tartrate of antimony, dissolved in a quart of water. A wine-glassful taken every ten or fifteen minutes, will prove an emetic; if taken every two or three hours, it will be purgative; and every five or six hours, sudorific. In either of these ways it may be given according

Abstract of Diseases of the Presidency Division of the Army, for a period of Six Years, from 1815 *to* 1820, *inclusive.*

Europeans admitted into hospital.	Natives admitted into hospital.	Total admitted in six years.	Europeans cured.	Natives cured.	Total cured in six years.	Europeans transferred.	Natives transferred.	Total transferred in six years.	Europeans dead.	Natives dead.	Total dead in six years.	Remaining.
1,7912	18,737	36,649	16,402	17,550	33,952	266	50	316	738	551	1,289	1,092

The European force never exceeded 1486.
The Natives never exceeded.... .... 5130.

Europeans cured ..... 91 per cent.
Natives ditto ..... 93 per cent.

DISEASES.	Nominal admissions.			Remains of the nominal admissions.			Actual admisssions.			Per centage of diseases upon the effective strength.	
	Europeans.	Natives.	Total.	Europeans.	Natives.	Total.	Europeans.	Natives.	Total.	Europeans.	Natives.
Fever	4,892	7,240	12,132	2,593	2,810	5,403	2,299	4,430	6,729	$30\frac{4}{10}$ per cent	$16\frac{6}{10}$ per cent
Hepatitis.....	4,156	95	4,251	2,203	37	2,240	1,953	58	2,011	$25\frac{8}{10}$	$\frac{12}{10}$ .....
Dysentery ...	7,586	843	8,429	4,021	328	4,349	3,565	515	4,080	$47\frac{2}{10}$	$1\frac{9}{10}$ .....
Diarrhœa	1,314	1,078	2,392	697	419	1,116	617	659	1,376	$8\frac{1}{10}$	$2\frac{4}{10}$ .....
Venereal.....	4,298	3,356	7,654	2,278	1,303	3,581	2,020	2,053	4,073	$26\frac{7}{10}$	$7\frac{7}{10}$ .....
Cholera.....	129	424	553	69	165	234	60	259	319	$\frac{7}{10}$	$\frac{2}{10}$ .....
Ulcers	1,906	1,874	3,780	1,011	728	1,739	895	1,146	2,041	$11\frac{8}{10}$	$4\frac{3}{10}$ .....
Rheumatism	2,832	3,647	6,479	1,501	1,416	2,917	1,331	2,231	3,562	$17\frac{6}{10}$	$8\frac{3}{10}$ .....
Ophthalmia..	2,349	534	2,883	1,245	208	1,453	1,104	326	1,430	$14\frac{6}{10}$	$1\frac{3}{10}$ .....
Other diseases	8,608	11,508	20,116	4,563	4,466	9,029	4,045	7,042	11,087	$53\frac{5}{10}$	$26\frac{4}{10}$ .....
Grand Total	38,070	30,599	68,669	20,181	11,880	32,061	17,889	18,719	36,608		

Total strength of the force, during these six years, were Europeans 7,553
Total strength of the force, during these six years, were Natives... 26,598
The proportion of sickness, amongst the Europeans, per cent 217
The proportion of sickness, amongst the Natives, per cent 70
The proportion of deaths, amongst the Europeans, per cent..... 9
The proportion of deaths, amongst the Natives, per cent 2

to circumstances. I have scarcely ever known it fail to check the progress of the fever in natives, when had recourse to as an emetic and purgative soon after the attack of disease, and continued for two or three days as a sudorific.

'Amongst the natives, this disease should be narrowly watched, and quickly opposed, because if it be not at once removed, the patient is either liable to linger under chronic visceral obstructions, which will render him unfit for service, or he may at once fall a sacrifice to its violence. It is worthy of remark, that while the fevers peculiar to the northern Circars, Mysore, and all other stations above the Ghauts, terminate in obstinate intermittents, this form of fever, which is that most prevalent in the Carnatic, if neglected or badly treated, terminates invariably, as far as my experience serves me, in those symptoms which mark the last stage of typhus. When the case proves fatal, the patient dies in low muttering delirium.'—P. 266.

Passing over the author's report of the '*Southern Division*,' we are arrested by his remarks on dysentery, contained in his report of the '*Centre Division*.' This disease 'prevails in a greater or less degree in every division of the army where European troops are stationed; but it is much more prevalent in this,' and in the Presidency and Southern divisions. In the European troops, the proportion of dysenteric cases to their effective strength is calculated in our author's important tables as follows:—In the Presidency division, $47\frac{2}{10}$ per cent; in the Southern division, $33\frac{9}{10}$ per cent; the Centre division, $38\frac{1}{10}$ per cent; Hydrabad, 36 per cent; Ceded Districts, 30 per cent; Field force, 24 per cent; Nagpore, 24 per cent; Mysore, 22 per cent; Travancore, 16 per cent; and Northern division, 12 per cent.

From these tables, it would appear, that if an army of 6,000 European troops were to be stationed in any part of the territory embraced by the centre division for the period of one year, the medical man at the head of his department ought to expect, from the average of seven years, to which our author's tables relate, $38\frac{1}{10}$ per cent, or about 2,300 dysenteric cases within the year; and he ought therefore to provide the hospitals, &c. in the different stations of his division with the suitable medicines and necessaries for such a proportion. The extreme utility of these tables, in as far merely as they relate to the per centage of particular diseases, and the gross amount of sickness, must be apparent, not only to the military physician and surgeon, but also to the heads of the Indian government. The fact that they furnish a tolerably accurate estimate of the extent of sickness, both as respects particular disorders, and the aggregate disease, must be obvious from the circumstance of their having been cal-

culated upon accurate registers kept for a period of seven successive years. That those at the head of the various departments in India, more particularly the heads of the Medical Boards, actually require such valuable data to be furnished them, is very evident from the author's regrets respecting the frequent deficiency of medicines and necessaries for the sick, under which he laboured whilst in charge of divisions and hospitals in the out-stations under the Madras Presidency. Now, we cannot suppose, if the valuable data contained in his reports had been then published, that any such deficiency—that any such inhumanity (for we cannot call it by a softer name), could have existed. We cannot readily conceive any thing more truly distressing to a feeling, zealous, and anxious officer, at the head of the medical duties of an hospital, military station, or division, than the want of medicines and the necessary comforts for the sick entrusted to his care, and in the recovery of whom the better feelings of his nature are interested, and his professional reputation at stake. That a deficient supply of medicines, &c. for the sick has existed on various occasions, in stations under the Madras Presidency, sufficient evidence is in our possession. The question, was there also a deficiency in the stores at Madras, naturally suggests itself? Whether this be answered in the affirmative or negative, the alternative equally inculpates the Medical Board to which this important matter is entrusted. In hopes that it may come under the eyes of the Directors, who have evinced a very praiseworthy desire to encourage, and hence promote, the science of their medical officers, we pass on to notice some of our author's remarks on the dysentery which is met with in that part of India called the Carnatic. He divides the disease into the acute or phlegmonoid, and the erythematic.

'The first is clearly inflammatory, and if not checked by bold and decided practice, will very soon terminate fatally, or lay the foundation for that chronic stage of dysentery which disables so many men, and is the cause of the great number of discharges annually from the service.

'Dysentery amongst the soldiery in India arises unquestionably more from irregularity and diet, than climate; though I admit that, in some instances, it is intimately connected with functional derangement of the liver. The sick-list of a regiment is always increased after pay-day, and dysentery is the general disease. The symptoms are well marked: severe pain in the bowels; straining; full, strong pulse; foul, loaded tongue; motions very frequent, and small in quantity; sometimes consisting of morbid, offensive matter, but generally, in the first instance, of mucus with blood; and it is

not unusual to see very considerable discharges of blood from the bowels. Upon examining the abdomen, a very considerable fulness and tension are observed, with great tenderness of the whole abdomen, and particularly at the caput cæcum coli, and sigmoid flexure; the tongue is sometimes white and dry, and the pulse quick, small, and irritable, with general febrile excitement.

'The indications of cure are, to diminish general vascular excitement, to remove acrid and accumulated matter from the bowels, to allay the irritation of these viscera, and to restore them to healthy action. As this disease is entirely confined to the large intestines from the cæcum to the rectum, attention should be directed to that particular seat; and therefore emollient injections should be used frequently, to clear away any matter that may lodge in the lower bowel. Leeches should be applied in the course of the colon, or wherever there is tenderness of the abdomen. Calomel, in ℈j. doses, will always allay irritation of the stomach, and should therefore be given, and be followed up by oily purgatives. In full, plethoric subjects, general bleeding will always be attended with benefit; but in those who have been long in India, I have found leeches answer better, because they diminish action without destroying power, and any quantity of blood may be taken by them.

'So long as pain continues, leeches may be applied; and, till the dejections become natural and healthy, the calomel in ℈j. doses should be given every night, and oily and saline purgatives every morning. Injections in the course of the day will be administered with benefit; and after the pain is removed, if a general soreness continue, a large blister over the whole belly will always be useful.'—P. 277.

'Local pains may be removed by the occasional application of leeches. Tenesmus, which depends upon inflammation or irritation of the rectum, will be alleviated by anodyne enemas, not exceeding ʒiss. or ʒij., which will generally remain in the bowel; but calomel, as a purgative, with oily and sometimes saline laxatives, must be prescribed till the secretions assume a healthy appearance, when tonic laxatives may be given, and continued till the cure is completed.

'The erythematic dysentery is much more obscure, and consequently more dangerous; the symptoms are a dull, deep-seated pain in the bowels, sufficient to distress a patient, but not so severe as to excite alarm; there is no external pain at all, the pulse is not materially altered, neither is there any increased febrile action; the tongue is excited, and the alvine discharges are exceedingly morbid, and acrid. This disease is confined to the mucous membrane of the colon, and consists of a less acute form of inflammation of this membrane. If not treated successfully, it runs at once into ulceration throughout the whole intestine. Full doses of calomel, with such other purgatives as act upon the mucous glands, are required here, and should be continued without intermission, till healthy action is produced. Leeches, and blisters over the abdomen, are always attended with benefit; and the purgative I have always

found to answer best, in combination with calomel, is castor oil, and the following bitter aperient mixture:

Infus. Gentian. ℥xij.
Infus. Sennæ ℥vj.
Tinct. Cardam. ℥ij.

quickened occasionally by two or three drachms of sulphate of magnesia.'—P. 278.

In his report of the '*Northern Division*,' our author states, under the head of 'Prevailing Diseases,' that fever and dysentery are the disorders most frequently met with in the stations under this divsion, and that they prevail most between the months of August and November. The number of admissions of these diseases amongst the Europeans and Natives, with the deaths, &c., is given in the table which accompanies this report, and which is on the same plan with the one we have already quoted. It may be proper to state that similar tables accompany each report.

'The type of fever is bilious remittent. It sometimes takes the quotidian and double tertian form, with some of the marked symptoms of typhus, such as stupor, black, dry tongue, and great debility, but without its characteristic contagion. The name which this fever generally goes by in India is jungle, or hill fever. When it is not completely eradicated, it always terminates in intermittents, which come on at particular periods of the moon. It has been known to continue for years to afflict those who became its subjects, whether they remained in India, or returned to Europe.'—P. 284.

'The *treatment* of this fever in its worst form, is similar to the treatment of the fever occurring at Seringapatam; but what I wish to enforce—and I cannot impress the necessity of it too strongly—is active and decided treatment in the early stage. A copious depletion at the commencement, aided by emetics and purgatives, according to circumstances, may save much trouble, and preserve many lives; while a timid temporising treatment will lay the foundation for a broken constitution, and a protracted sickness.'—P. 285.

Our author's report of the '*Travancore Division*' is particularly valuable for some interesting remarks which it contains on hepatic diseases. In this division, he remarks, 'liver diseases and dysentery are those which require most particularly to be looked after. The latter frequently depends upon the former: this dependence ought to be recollected when we enter upon the treatment of dysentery.'

'Disease of the liver is sometimes very insidious, and not easily detected, particularly when the parenchymatous texture of the viscus is the part affected. The strictest attention, therefore, as well as professional tact, is perhaps more required in the management of this, than in any other disease in India; and although it is a difficult task to point out clearly what close observation and ana-

tomical research alone can best disclose, yet there are some symptoms that may be depended upon, and those I shall endeavour to state briefly.

'Acute pain is present only when the coats of the liver are the seat of disease. This symptom is generally attended with febrile heat, full, quick pulse, and white, excited tongue, which are often the only signs that indicate inflammation of the internal structure of the organ. To remove these derangements, general and local bleeding, with smart purgatives, should be resorted to without loss of time, and repeated till they are completely subdued; after which an alterative course of mercury, for a fortnight or three weeks, will effect a cure. This acute form of hepatitis usually affects healthy, robust men, on their first arrival in India, and frequently terminates rapidly in abscess, if not checked at its commencement: the practice, therefore, should be bold and energetic, in order to subdue inflammatory action at the onset of the disease.

'The chronic stage of diseased liver generally occurs amongst old, debilitated Europeans, and amongst those who have suffered from the first or inflammatory stage, and who, having been discharged from medical treatment, had returned to their duty before this organ had recovered a healthy action.'—P. 290.

After inveighing very justly and very judiciously against the indiscriminate use of mercury in the hepatitis and other diseases of India, and after stating that mercurial remedies are generally employed too liberally and too long in these disorders, and in a manner but too injurious to the soundest as well as to the worst constitutions, our author thus proceeds:

'When the mouth becomes affected, it is very satisfactory, because it shews that the absorbents and the glandular system are not in a state of torpor; but to continue the mercury for months, or even till ptyalism is produced, I must contend, is most injurious to the constitution. I look to its effects upon the alvine secretions, and when I see them changed, and find healthy discharges produced, I consider that the use of mercury is beneficial. When I find my patient's strength and spirit recover, I feel quite satisfied, whether the mouth be affected or not.

'There is another state of diseased liver, which is more common and more obscure than either of these I have already noticed, and this is a congestive state, in which the *portal* system partakes very largely, accompanied by a distended state of the gall-bladder, and by obstruction in its ducts.

'The symptoms of this state are oppression, and weight at the præcordia, without pain, but with a sense of fulness and distension about the chest, as if there was not room to breathe, or as if there was a heavy weight in the neighbourhood of the stomach. Alterative mercurials, with aloetic purgatives, are, in this particular form of disease, of great importance. These, with local bleeding by leeches, warm poulticing over the whole epigastric region, and fre-

quent friction with stimulating liniments, is the practice I have used with advantage.'

After giving an account of the stations included under the '*Mysore Division,*' and describing the seasons and climate of each, our author states many valuable particulars respecting their diseases. Here we consider his remarks so very judicious, particularly as respects the impropriety of prescribing bark until the disordered alvine secretions are removed, that we shall give them in his own words.

'*Prevailing Diseases.*—To the generally moist state of the climate, and to the sudden transitions from heat to cold, may be attributed the diseases peculiar to this division; which vicissitudes, according to concurring circumstances, produce fever, dysentery, or liver diseases. Fever and dysentery, however, exist in the largest proportion; and although fever is eight, and dysentery four per cent more than liver complaints, yet I am disposed to believe that a deranged state of the functions of the liver is to be found in almost every case of this fever; but in whatever degree the liver may be affected in the first instance, there cannot be a question that it becomes seriously disordered in the progress of the disease, for alterations of this viscus, and indeed of other viscera, are invariably found on examination after death.'—P. 298.

'In the treatment of this fever,—which partakes, at the commencement, of strong inflammatory action, with hard, full pulse, white, excited tongue, &c. &c.—bleeding, either local or general, or perhaps both, according to circumstances, is of the greatest importance in checking its activity. This remedy, with the addition of purgatives, may be said to comprise the whole treatment: but the efficiency of both depends upon the boldness with which they are resorted to, in the first stage of the disease.

'Bark has been much used, and, I have heard, with the best effects; but from what I have seen of this fever, I would certainly recommend, that the inflammatory and congestive symptoms should be removed, and the alvine secretions restored to a healthy state, before the bark be had recourse to. When the fever takes the regular intermittent form, it is wonderful how bark checks the paroxysm; but even in this case purgatives are requisite, between the monthly paroxysms, but it is unnecessary to continue the bark more than a few days, before and after these accessions.

'When a fever of this kind comes under my care, I always ascertain the time of its accession, which is generally governed by particular periods of the moon; I prescribe the purging practice till a day before the expected paroxysm, then I throw in the bark, and continue it either till the accession of fever, or for two or three days after the period has passed over, when purgatives are again commenced with, and followed up till the paroxysm is again expected, &c. A course of alteratives and laxatives ought to be always continued for three or four months afterwards, until the alvine secre-

tions are restored to a healthy condition, when I consider the cure effected.'

'I consider that, when bark is exhibited in this fever before the inflammatory derangements, which frequently exist in the large abdominal viscera, are subdued, and before the disordered secretions are removed by appropriate treatment, that the disease will frequently terminate in chronic obstructions of these viscera, and in the other disorders contingent on such a state.'—P. 302.

The number of admissions of disease in this division, amongst Europeans was 17,228, amongst natives, 42,004. Of these, 536 Europeans died, and 1,692 natives: 94 per cent of Europeans were cured, and 91 per cent of natives. The ratio of sickness amongst Europeans was 128 per cent; amongst natives, 91 per cent. The proportion of deaths of the former was 4 per cent; of the latter, 3 per cent, calculated upon the strength of the respective forces. The admissions of fever were, in relation to the effective strength, $26\frac{8}{10}$ per cent in Europeans, and $46\frac{9}{10}$ per cent in the natives:—of hepatitis, $18\frac{1}{10}$ per cent for Europeans, and only $\frac{2}{10}$ per cent for the natives;—of dysentery, $22\frac{4}{10}$ per cent of the former, and $2\frac{3}{10}$ of the latter.

Mr. Annesley describes the *climate* of the '*Ceded Districts*' as changeable, and the atmospherical vicissitudes as both great and sudden. He mentions the range of the thermometer in each month, and the extent of its daily changes, for which we must refer the reader to the work itself.

'*Prevailing Diseases.—Fever* and *dysentery*, as in other divisions, are the principal diseases amongst the European troops; but diseased liver bears a greater proportion to these diseases in this division than in any other, with the exception of the Presidency, Mysore, and Travancore divisions: and I am disposed to consider this disease as the endemic of the climate. At Kurnool, where I was stationed with an European regiment for eight months, the liver was found diseased in almost every case of death that happened during that period, from whatever disease the fatal termination occurred. I am induced, therefore, to consider European constitutions as peculiarly liable to diseased liver in this climate, while fever may be considered the endemic in regard to the native constitution.'

'The diseases peculiar to Europeans in this division of the army require as active a treatment as those in any other division—bleeding, local and general, aided by purging, being the chief remedies. I was much struck at the rapidity with which disease ran its course in this division, and that, in almost every instance, the liver should be found diseased. Various circumstances, however, appeared to me to be the cause of this; and amongst them I must not omit to mention the unqualified use of narcotic drugs and intoxicating liquors—not such spirits as Europeans usually drink, but such as

are more destructive to life than the climate is, with all its vicissitudes.

'The liquors to which I allude are made as follows; viz. fermented toddy, mixed with opium and stramonium, to which chunam or lime is occasionally added to promote fermentation. This is a very common and destructive beverage, and is used by European soldiers at all times, and in every part of the Madras territories.'—P. 307.

In this division there were 16,886 Europeans and 25,971 natives admitted into hospital during a period of six years, of whom 313 Europeans died, and 449 natives, within that period. The Europeans were cured in the proportion of 91 per cent, the natives in the ratio of 94 per cent. The proportion of sickness amongst Europeans was 142 per cent, amongst the natives 69 per cent. The number of cases of fever was 24 per cent upon the effective strength of European troops, and 20 $\frac{2}{10}$ per cent on the effective strength of the native force. The cases of hepatitis were 21$\frac{4}{10}$ per cent in Europeans, and only 0$\frac{1}{10}$ per cent in natives; and dysentery was 30$\frac{4}{10}$ per cent amongst the former, and only 1$\frac{8}{10}$ per cent amongst the latter. The proportion of deaths from all diseases, calculated on the effective strength of the troops, was 5 per cent in Europeans, and 2 per cent in natives. (See the interesting tables accompanying each of the reports.)

[We are unavoidably obliged to postpone the conclusion of this article to our next Number.

PART II.

COLLECTIONS OF MEDICAL FACTS, WITH OBSERVATIONS.

Section I.—Original Papers.

1. *Report of the more important Medical Cases treated at the Kent and Canterbury Hospital, from January 1st to December 31st*, 1825. By H. W. Carter, M.D., F.R.S., Ed., Senior Physician to that Institution; and Fellow of the Royal College of Physicians, &c.

General Report of In-patients.

	Males.	
Remaining upon the books from last report -	8	88
Admitted since - - - -	80	
Carried forward -		88

Brought forward - -		88
	Females.	
Remaining upon the books from last report -	18	123
Admitted since - - - -	105	
Total - - -		211

	Males.	Females.
Cured - - -	22	25
Received great benefit -	12	14
Received benefit - -	12	19
Received no benefit[1] - -	1	5
Made out-patients - -	25	33
Referred to the surgeon -	4	4
Died[2] - - -	5	6
Discharged for irregularity -	2	0
Discharged for non-attendance[3]	0	3
Remain upon the books -	5	12
Unaccounted for - -	0	2
	88	123

Observations.—I. The patients who received no benefit were the following:—

1st. Edward White, an individual of decidedly scrofulous habit, and much broken down by long illness and bad living. After remaining only a few days in the hospital, he begged to be discharged, saying he was persuaded he should not recover, and wished to die at his own home.

2d. Mary Sandy, aged twenty-four. She had for several years been labouring under hysterical affection, almost bordering on derangement of mind, and had been long under medical treatment. Upon further inquiry, subsequently to her being admitted, it was ascertained that she had experienced attacks of epilepsy; and a slight epileptic fit occurred, more than once, while she was in the hospital. At one time, I thought she improved under the use of carbonate of iron, with occasional warm laxatives; but the improvement was neither considerable nor lasting.

3d. Mary Thursby, a middle-aged woman. Hemiplegia of a year and a half standing.

4th. Mary Hodgman, aged thirty-three. Symptoms of scirrhus pylorus. She had been under medical treatment for some time, but had experienced scarcely any relief. From February 25th to July, she was an out-patient, and was once free from sickness for ten days, viz. from March 19th to the 28th. At that time she had been taking half a grain of calomel, with three grains of extract of conium, thrice a day; and her mouth had become sore. I began to flatter myself with the hope that a disease was arrested, which every thing seemed to indicate was more than functional disease; but unfortunately the vomiting, as well as the pain and tenderness of the region of the stomach, returned on the 29th, when the effect

of the mercury had scarcely disappeared. The tartar emetic ointment was now prescribed. Hydrarg. submur. gr. j., extract. conii gr. v.; omni nocte. Infus. quass. ℥j., inf. sennæ ʒiij., liq. potassæ ♏x., tinct. humuli ʒj. ter die. No relief up to June 11th, when six leeches were applied to the region of the stomach, and followed by a blister. The calomel and extract. conii were laid aside, and pil. hydrarg. gr. jss., pulv. rhei gr. ij. were given thrice a day.

July 23d.—She was made an in-patient upon trial. She was put upon the most simple diet. The stomach obstinately rejecting solid animal food of every description, and in every form, and even bread, she had biscuit, and small quantities of broth, and drank lime-water. The medical treatment consisted chiefly in frequent bleeding by leeches, repeated blisters, and gentle aperients. By these means she sometimes escaped vomiting for a few days; and the pain, and wringing, and heat of stomach, seemed to be mitigated. As for all the other medicines, which were from time to time exhibited, not one was of the slightest use; and at length, September 13th, finding that nothing was of marked or lasting service, I was obliged to discharge her.

5th. Mary Bruce, aged fifty-six; married woman, but who never had been pregnant, was admitted with an enormous tumour of the abdomen, almost of cartilaginous hardness to the touch, movable, somewhat unequal. This tumour had been coming on for a long period; but as the patient had never felt any pain from it, and did not materially suffer as to her general health, she paid little attention to it, until from its size it became cumbersome. When she was admitted into the hospital, her health was but little impaired; her pulse was natural; tongue clean; bowels regular. All she complained of was the weight of the tumour, and oppressed respiration. The application of leeches to the abdomen, and mercury, both internally and by inunction, were tried, as might be expected, however, to no purpose. The patient was seen, and examined by, I believe, all the medical officers of the hospital; and she was discharged in consequence of their opinion, which coincided with my own, that nothing could be done by medical or surgical treatment. To me this tumour seemed to consist of a vast mass of hydatids.

6th. Maria Pope. Partial paralysis of lower extremities, from lying on a bed placed on the ground. The patient might doubtless have been relieved; but her temper was so impatient and fretful that nothing could be done. It was ascertained, upon questioning her mother, that she had once been completely deranged.

II.—The patients who died were, 1st. Edward Wood, aged nineteen; admitted July 14th, with affection of heart from childhood. The great difficulty of breathing, palpitation, and strong pulse, induced me to prescribe bleeding. The blood, however, was in a very dissolved state. He took inf. rosæ, with a grain of quinæ sulph., and twenty drops of tinct. of digitalis, ter die till the 21st, when the pulse was somewhat reduced in frequency and strength;

and nausea came on, with vomiting. The lower extremities were anasarcous. The mixture, with digitalis, was omitted, and a cordial mixture given. He died on the 23d; and, I regret to say, the chest was not examined.

That extensive and irremediable disease existed in this case can hardly be questioned; but I am of opinion that I should have done better had I abstained from bleeding the patient, and treated him upon a more cordial plan in the first instance.

2d. Edward Burville, aged fifty-six, a person of shattered constitution. Liver much enlarged, and hard. He sank with general dropsy.

3d. Edward Thurton, aged twenty. Confirmed phthisis.*

4th. John Sutton, aged twenty-eight. Psoas abscess; much worn down when admitted. He had constant diarrhœa, and took hardly any nourishment or medicine.

5th. Thomas Standen, aged fifty-four. This man had been several times an out-patient. When he first applied, November 19th, 1824, he complained of fluttering at the heart, and pain in the region of that organ, especially upon using any exertion, and when the stomach was distended by food. He complained also of pain of the left arm. His respiration was hurried; pulse irregular and intermitting; bowels rather costive; and he was greatly annoyed by flatulence. The medicines prescribed at that time, were pulv. digit. gr. j., pil. hydrarg. gr. iv., mane et horâ somni. Inf. aurant. comp. cum tinct. rhei comp. ʒj., syr. aurant. ʒj., ter die. Magnes. sulph. ℥ss. pro re nata.

On the 26th, it appeared that his bowels had been freely moved, and he was, in every respect, much better.

On the 18th December, he complained of vertigo, and the digitalis was discontinued. The pulse was now perfectly regular, and about sixty in the minute.

By the 7th January, 1825, he was so much better, and so well able to work at his trade, that of a carpenter, that he considered himself cured, and was discharged, with a caution, not to exert himself to the extent he had formerly done. No sooner, however, had the poor man left off medicine, than all the distressing symptoms returned; and, at the close of the same month, he again became an out-patient. Again he got better, under the use of the tartar emetic ointment, gentle laxatives, and antispasmodics. In June, he was once more discharged, as cured; and continued, according to his own statement, in perfect health for about six weeks, and worked hard, till, being employed in a damp church, his old complaints reappeared; and, added to them, he had gout of one hand. This yielded to leeches, and a draught, containing forty drops of vinum colch. twice a day. An issue was made in the left thigh. The colchicum draught, after about six days, produced purging; and it was laid aside for a cordial one. There

* This young man was an in-patient for only a short time, and died after his return home.

was an appearance of gout afterwards (September 2d) in one foot, with considerable tumefaction and pain, for which six leeches were applied.

November 5th.—There was little alteration. The patient continued at his work, his circumstances not allowing him to rest. He was now, though not without difficulty, induced to come into the hospital.

On the 8th, I saw him there, and he appeared rather better than usual; but on the evening of the same day he, all at once, exclaimed he was much worse, and expired in the night. The body was examined on the following day. The heart was greatly enlarged; its muscular structure was rather flabby; and in one or two places its parietes were thinner than natural. There was, however, no remarkable disease of the structure of the heart, nor were any of the valves ossified. The coronary arteries were healthy. There was rather more than the usual quantity of fluid in the pericardium. Effusion in the right side of chest to considerable extent. There was no other morbid appearance of any moment.

6th. —— Lemon, aged sixty-four, one of the hospital nurses. Pneumonia. This poor woman had been a soldier's wife, and had for years followed the camp, and been, of course, rather a free liver, yet, till within a few days of her death, she was wonderfully active, and enjoyed, for her time of life, excellent health. She first complained, November 3d, but the symptoms were by no means urgent. A dose of calomel, with tartar emetic, was ordered that evening; and a saline aperient on the following day. She also took a saline mixture, with spirit. æther. nitr. every three hours.

On the 5th, she had more cough, pain of chest, and difficulty of breathing. The pulse was full, and rather strong; tongue furred. She had very properly been bled before my visit, to the extent of ten ounces, which was as much as she could bear without actual deliquium. The blood was cupped, and slightly buffy. The spirit. æth. nitr. was omitted, and tinct. digital. added to the mixture; and it was determined that, should the pain and difficulty of breathing continue, she should again be bled in the evening. The bleeding was repeated accordingly; but she became extremely faint after losing only four ounces. The blood was healthy in appearance. Late in the evening there was alarming collapse, with anxious oppressed breathing, on which account the saline medicine was discontinued, for camphor mixture with ammonia. This revived her in some degree. In the morning the pulse was regular, but feeble; tongue loaded; bowels freely evacuated by medicine; urine scanty, and high coloured; respiration still laborious; rigours. The patient complained of pain of left hypochondriac region. She was at times very incoherent, and had torn off a blister which had been applied to the chest.

On the 7th, she continued much the same; but on the following day she was evidently sinking, and death took place early on the morning of the 9th.

Upon examination a few hours after death, the pleura covering

the lungs, as well as the lungs themselves, were found in a high state of inflammation. The cavity of the chest in the left side contained serous fluid, with some pus.

7th. Ann Chadville. Disease of rectum.

8th. Catherine Mills, aged thirty; admitted July 15th, with general dropsy, and in a state of extreme debility. She took scarcely any medicine, for on the 18th she had an apopletic fit, and lost the use of the left side. Of her previous history no particulars could be gathered, excepting that she had before had a similar attack, and that she had suffered greatly from anxiety of mind, owing to domestic disturbances. The power of deglutition being totally lost, purgative enemata were administered. A blister was applied between the shoulders, and she was largely bled from the temporal artery. Croton oil was also put upon the tongue, in the hope that it might find its way to the stomach. The symptoms, however, were not in the least relieved; and she expired on the 19th.

9th. Frances Pattison, aged thirty-five; admitted May 20th, with profuse uterine hæmorrhage, of long duration, following a miscarriage. This was after a time checked, or perhaps ceased spontaneously; but the patient sunk under general dropsy.

10th. Phœbe Phillpot, aged thirty-six. Chronic peritonitis.

11th. Elizabeth Bristley. Confirmed phthisis. This patient was minuted down for admission upon trial, but died at her own home, having never been able to attend a second time.

III. —Those discharged for non-attendance were individuals who, after being minuted down, returned home, and were not heard of afterwards.

General Report of Out-Patients.

	Males.		
Remaining upon books from last report -	31		
Admitted since - -	88	143	
In-patients made out-patients - -	24		
	Females.		
Remaining upon books from last report -	50		
Admitted since - - -	147	229	
In-patients made out-patients - -	32		
		372	

	Males.	Females.
Cured - - -	38	56
Received great benefit -	5	23
Received benefit - -	20	51
Received little or no benefit[1] -	7	17
Made in-patients - -	10	17
Referred to the surgeon -	6	4
Carried forward	86	168

	Males.	Females.
Brought forward -	86	168
Died - - -	14	11
Discharged for non-attendance, or as unable to attend - -	29	17
Discharged being a vagrant -	1	Pregnant 3
Remain upon the books -	13	28
Unaccounted for - -	0	2
	143	229

Observations.—I. Of the male out-patients who received little or no benefit:—Nos. 1 and 2 were cases of spinal affection.

3d and 4th. Phthisis.

5th. Malformation of heart. The patient was an infant, aged three months.

6th. Pain of back, ascribed by the patient to his having lifted great weights, gravel. The man, I have no doubt, did experience some pain; but there was reason to suspect his account of himself, and to suppose that he was not very fond of work.

7th. Was a case of epilepsy. The patient, William Wellard, aged thirty-seven, by trade a cabinet-maker, was admitted into the hospital March 11th. He stated that he had been for some months subject to epileptic attacks, induced, as he thought, by hard work, and poor living. He complained of severe pain, extending from the vertex to the occiput. His pulse was feeble; tongue somewhat furred; bowels constipated. The approach of a fit was indicated by loss of power of articulation, and confusion of head; and these warnings generally gave him sufficient time to reach his bed, and thus to save himself from a fall. His articulation was, even in the intervals of the attacks, indistinct; and he had a peculiarly dull expression of countenance. Cupping and leeches had been freely employed, and a seton had been made in his neck, but without any beneficial result. The tartar emetic ointment was ordered to be rubbed in the nucha, and a pill, with half a drop of Croton oil, to be taken every three hours, till the bowels should be fully evacuated.

On the 16th, he had a slight fit. He appeared so very weak and low, that inf. gent. comp. cum vino ferri was prescribed, thrice a day.

On the 21st, he reported himself as having been free from attacks. His bowels were very costive, and he was directed to take a laxative draught every other morning. The tonic was continued; and as the neck was now sore and troublesome, the ointment was rubbed on the left arm.

He had an attack on the 27th and 28th; and on the 30th, as he seemed not to improve, his former medicine was exchanged for argent. nitr. gr. j. ter die. Under this plan, he considered himself as getting better, till April 14th, when he had two very strong fits. He was bled to ℥xvj., and all medicine was laid aside, excepting a mixture with inf. gent. comp. and inf. sennæ, to regulate

the bowels. An issue was made in the left arm. He remained in the hospital till May 5th, when he was made out-patient, and returned to Deal.

June 24th.—I did not see him, but he was reported as having had a slight fit on the 22d and 23d of May. Bleeding repeated. Ol. terebinth. ♏ xxx. ter die. Laxatives pro re nata.

In September, I learned that he was not at all better—indeed, his general health seemed to be worse, and he was unable to attend. He was therefore discharged.

Of the female out-patients of the same class, Nos. 1 and 2 were cases of chronic debility, of many years' standing. The patients were somewhat relieved by tonic and cordial medicines.

3d. Was a case of organic disease of uterus.

4th, 5th, 6th. Phthisis.

7th, 8th. Chronic rheumatism, rendered inveterate by repeated attacks, the patients being constantly and unavoidably exposed to cold and damp.

9th. Hysteria.

10th. A singular case, which I know not what to call, unless it were chorea. The patient, Maria Foreman, aged eighteen, had, for a long period, been affected by continual shaking of the left arm, accompanied with excessive pain whenever the arm was at liberty; but both the tremulous motion and the pain were absent so long as it was supported in a sling. The girl had once before been in the hospital, and had afterwards been attended by a very judicious practitioner in this neighbourhood. Under his treatment her general health improved materially, but the arm became more troublesome. She asserted that the local affection was always worst when her general health was best. Her mother told me, that there was often a most offensive, cadaverous smell of the affected limb. She became an in-patient, April 22d. At that time she was in tolerable health. There was no derangement of stomach or bowels, and she menstruated regularly. Her complexion was naturally sallow. The arm, when out of the sling, was in perpetual motion. It was certainly wasted; but the wasting might have been the effect of its being always unemployed, and in one position. Neither when I first examined the limb, nor at any subsequent examination, was I conscious of the peculiar odour mentioned by the mother. Various topical applications and general remedies were tried in vain; and I could not help entertaining some suspicion that the patient imposed upon us. After remaining, perhaps too long, in the hospital, she was made an out-patient; and, the complaint still continuing obstinate, she was at length discharged. From what I have since collected, I am rather confirmed in the opinion that this strange affection, though perhaps not altogether simulated, was exaggerated.

11th. Mary May. Nervous headach, an old complaint, occasionally relieved by leeches, blisters, and tonic and antispasmodic medicines.

12th. Mary Ann Spicer, aged twenty-one. Mesenteric disease.

13th. Sarah Webb. Incipient phthisis.

14th, 15th. Two aged women, broken down — the one by flooding, the other by diarrhœa. They were both extremely poor, and of course lived wretchedly. They were recommended to the guardians of the poor as proper objects for the city workhouse.

16th. A poor woman, who became unable to attend, being far advanced in pregnancy.

17th. A young woman, who pretended she was labouring under amenorrhœa only, but whose real complaint was one of more consequence, or I am much mistaken, though certainly one more easily cured.

Eleven out-patients died of confirmed phthisis; four of mesenteric disease; one of abscess of lungs; one of chronic peritonitis; two of disease of uterus; one, an infant, of inflammation of mucous membrane of the intestines; one of general dropsy; one of hydatids of abdomen, which were distinctly felt during the patient's life; one of icterus, with enlarged, and probably tuberculated liver; two of hydrothorax, with ascites and anasarca. The former of these two patients had been a very intemperate man, and the liver was greatly diseased—the latter was a hard-working, athletic countryman, whose habits had been regular. In him the dropsy arose, not from any liver affection, but from disease of heart. He was first admitted in January 1823, and continued upon the books till the end of May 1824. The tartar emetic ointment, occasional bleedings, diuretics, blue pill with squill, and digitalis, were the means chiefly employed; and the patient was freed from his dropsy; and the pain and uneasiness about the heart, and difficulty of breathing, were considerably relieved. Still, however, the pulse never became regular, or ceased to intermit; little exertion could be borne; and there was occasional faintness, though never actual syncope. From May 20th, when he was discharged, to the latter end of August, he continued pretty well, and did some light work; but, on the 10th Sept., he returned with all his former complaints. Again the anasarca was removed, and the other symptoms were much relieved—so much so, that in November he once more tried his old occupation of a thresher; but the exertion, as well as the dust, proved of course very hurtful to him. After discontinuing this hard labour, he went on tolerably well for about four months, but died suddenly in April. There was of course no opportunity of examination after death. The same relief, which followed the exhibition of medicines in the foregoing case, took place also in three similar instances of disease. The symptoms in each of the cases were as much alike as possible. In each there existed disease of the heart, or large vessels. After a long time I was obliged to discharge the patients, their maladies, though they admitted of palliation, precluding the possibility of cure.

Having thus briefly noticed the unsuccessful cases, I proceed to

the more pleasing task of recording a few instances in which the event was more fortunate; and I commence with

Epilepsy.—1st. Thomas Hughes, aged fourteen, a stout-built lad, was made out-patient February 25th. He had been affected by epilepsy for ten years. He assured me again and again (and I questioned him most minutely) that *since the first attack he had never enjoyed an interval of so long a period as a fortnight.** Nothing was ordered but the tartar emetic ointment, to be rubbed on the left arm, and a common laxative pill to be taken occasionally.

March 2d.—He had a fit. Pustules were just beginning to appear on the arm. This case may be despatched in very few words. From the date just mentioned to May 27th, during nearly the whole of which time an eruption was kept up, the patient had not one fit, or any threatening of a fit.

May 27th.—He was discharged.

2d. Charles Hunt, aged fifteen. Epilepsy for seven years. Admitted August 12th. The fits were not so violent as in some cases; but they had latterly become very frequent, occurring several times in the day. He used the ointment, and took oleum terebinth. rectif. in the dose of gut. xxv. thrice a day.

On the 20th, there was considerable effect from the unction. The 18th was passed without an attack; and those of the 19th and 20th were slighter, and of shorter duration than usual. There was no recurrence of fits till the 28th. On that day, as well as on the 30th and 31st, the disease returned.

September 3d.—There was remarkable depression of spirits, a sensation of fulness of head, and more than ordinary indifference to surrounding objects. The pulse, at the same time, was very feeble; and he complained of general debility. The oil of turpentine was now laid aside; four leeches were applied to each temple, and a mixture of inf. gent. comp. cum vino ferri, was ordered thrice a day. Pil. aloës cum sapone, gr. xv. omni nocte, the bowels being in a torpid state.

9th.—No fit for three days.

13th.—Continued free from fits. His general health was decidedly improved, and his intellects were clearer. He was now well enough to be employed, with other convalescents, about the hospital. He was made an out-patient; and some time afterwards I received a favourable report of him through his father. He was not cured; but he was so much better as to be able to resume the little occupation which used to employ him before the fits became so frequent, and so decidedly of epileptic character.

3d. Maria Hayward, aged sixteen. December 31st. Disease recent. She had been bled, and purged freely, but without much

* This inquiry was more than once repeated, after the boy had been for several weeks free from an attack, and had become more intelligent than he was when I first saw him.

benefit. Her appearance was plethoric, but the circulation was extremely languid; extremities always cold; bowels costive. She was inactive and drowsy. Temper never was good; but had become much worse since her illness. Depletion having failed, she was, after taking a dose of calomel and antimonial powder, and a laxative draught, put upon mist. ferri comp. and the ointment was used to the left arm.

January 7th, 1825.—No fit since last report. Complains of headach. Pergat, et utatur capiti lotione mist. camph. cum liquor. ammon. acet. She had fits on the 14th, 15th, and 16th, but they were less severe than former ones. Pulse frequent and small; tongue moist, but white; bowels regular. Inf. gent. comp. cum vini ferro ʒij. ter die. Lotio mist. camph. cum sp. æther. sulph. capiti.

From January 21st to February 18th, she remained free from attacks. She was charged to attend to her bowels; a box of laxative pills was given her, and she was dismissed. The sore produced on the arm by the ointment was, at this time, nearly well; and no sooner had it healed completely than the fits returned.

February 25th.—She was again put upon the books. The ointment, as well as the steel mixture, was resumed; and she took a laxative draught twice a week. From that time to June 1st, when she was finally discharged, she had no fit.

4th. William Dove, labourer, had been for some weeks under my care for sub-acute inflammation of liver, which was removed by general and topical bleeding, mercurials, and saline purgatives. He often, while in the hospital, complained of pain of head, for which leeches were several times applied to the temples, and he had a blister between the shoulders. Early in May he was discharged, apparently free from complaint; but on the 27th of the same month, he again applied, having had several epileptic fits. Upon inquiry, as to whether he had previously been subject to this disease, both the patient and his friends assured me that he had not. Tartar emetic ointment to the arm; four leeches to each temple.

June 10th.—No fit; complains of pain of head. Occiput to be shaved, and a blister applied. Infusi sennæ ʒx., magnes. sulph. ʒiij., tinct. jalap. ʒij. bis in septimana.

17th.—Ointment continued, and blister to be kept open. How long the discharge from the blister was maintained, I do not exactly remember; but the patient had no fit up to August 26th, when he was discharged cured.

5th. Sarah Westall, aged twenty-one. In-patient. Jan. 14th. Fits recurring at uncertain intervals, in consequence of a blow on the nucha, received about a year ago. The longest period that had elapsed between these fits was eleven weeks. The precise nature of the attacks was not ascertained until the 22d. On that day she had a fit, not indeed very severe, but certainly epileptic, preceded by yawning and convulsive catching of upper extremities.

Upon examination, a tenderness was discovered about the third and fourth cervical vertebræ, the spot where the blow had been received; and she complained of considerable pain at the back part of the head. Hirud. vj. nuchæ; unguent. antim. tart. occipiti raso. A bitter infusion, with carbon. sodæ, pulv. rhei, and tinct. humuli, was continued; and she took decoct. aloës comp. ℥j. occasionally. She also had full diet, with half a pint of porter a day; for with the local affection there was great general debility.

24th.—The fits had returned. Cont. unguent. Injiciatur quamprimùm enema cum olei terebinth. rectif. ʒij.; mitt. sanguis è brachio ad ℥xij.; inf. rosæ cum magnes. sulph. ʒss.; tinct. card. comp. ʒj. ter die.

February 4th.—There had been no actual fit, but the pain of head and neck had returned. The discharge having nearly ceased, the ointment was again applied with relief. Still, however, on the 7th, there were some pain and tenderness when the third and fourth cervical vertebræ were pressed upon. Admov. statim regioni dolenti hirudines octo, et repet. die 9no. persistente dolore.

10th.—Repet. hirudines. Mist. camph. cum liquore ammon. acetat. ʒij., sp. æther. sulph. gut. xx., tinct. hyoscyami ʒss. ter die. Decoct. aloës comp. ℥j. omni mane. Omittantur alia.

14th.—The pain having returned, leeches were repeated, with great relief.

March 7th.—She was much improved, and was made out-patient. As she lived at some distance, I saw her but three times afterwards. The plan above mentioned was persevered in till the epileptic attacks and the pain were entirely removed. I kept the patient's name upon the books for about three weeks after she had left off all remedies. She was discharged, cured, May 17th: and I have not heard that she has had any return of her complaints since.

Bronchocele.—1. Sarah Barlett, aged twenty, was made an out-patient Feb. 13th, 1824. She had been affected by bronchocele for two years. The tumour, from small beginnings, had gone on gradually increasing till it had become very large (the circumference of the neck being, when she applied, 16 inches), and hard; and had much impeded respiration, and altered the voice. Her general health was good, and she menstruated regularly. For a month she used the iodine ointment, and took six drops of the tincture thrice a day, without any impression being made on the swelling. A blister was then applied, the dose of the tincture was increased to gut. x., and she took a mercurial pill occasionally.

March 19th.—Ointment resumed, in the proportion of ʒjss. of iodine to ℥j. of lard, and it was used night and morning.

April 2d.—The tumour had for some time remained stationary, whereas, previously to the employment of the ointment, it had been constantly increasing. Ointment to be used three times a day. Tincture increased to gut. xv.

9th.—Leeches were applied to the throat, and afterwards the ointment was resumed.

16th.—Tumour now certainly diminishing. Repet. hirudines, et deinde unguent.

May 7th.—Dimensions of the throat as at the former report. On account of considerable inflammation and pain, both external and internal, leeches were twice repeated. On the 21st, the ointment was resumed of inferior strength; tincture discontinued. Pil. sodæ cum sap. iv. ter die.

June 11th.—Decrease of tumour 1¼th inch.

July 16th.—No further progress had been made. Leeches were again applied, and followed by a blister. Infus. gent. comp. cum sodæ subcarb. Pil. aloës cum myrrha pro re nata.

Aug. 13th.—The stronger ointment was again tried, and medicines omitted.

Sept. 3d.—The tumour was softer, and something less; and from this date to Dec. 31st, it slowly diminished, till the circumference of the throat was less by 2½ inches. The iodine was then laid aside, and decoct. cinch. with soda given. The patient was not discharged till March 11th, 1825, when the throat remained precisely the same as it was Dec. 31st.

2. Mary Knowler, aged thirty-one. Had been affected by bronchocele for several years. The disease had, however, increased more rapidly since her last confinement, viz. for about eight months. The tumour was excessively hard, and the left lobe of the gland was larger and harder than the right. When the patient was admitted, Feb. 27th, 1824, the measurement of the throat was 15¼ inches. Her general health was indifferent; she had short, harassing cough, at first dry, but afterwards attended by expectoration, or rather rejection of much mucus by vomiting, brought on by the fits of coughing. The respiration was hurried, and there was loud wheezing; the pulse was very frequent and small; tongue morbidly clean; pulse habitually relaxed. There were rigours, followed by increased heat. Headach was always present, and it was sometimes severe. She was for above two months an in-patient, and constantly used the iodine ointment, of the usual strength, ʒj. to ℥j. The tincture was tried, but could not be taken beyond a week, as it appeared to aggravate the cough, and increase the fever. Leeches were applied once during the period just mentioned, and also a blister. The demulcent saline mixture, with tinct. digital. was given first, and afterwards, when the strength seemed to be failing, tonics. In a word, the internal remedies were varied according to circumstances. At the expiration of the two months, there was scarcely any alteration in the size of the gland. She became an out-patient May 19th, and the use of the ointment was steadily persevered in till the beginning of July, when the tumour was sensibly diminished. By August 13th, the diminution was 1¾ inch.

27th.—Troublesome diarrhœa came on, with considerable pain and tenderness of abdomen. The ointment was discontinued, and demulcents with syr. papav. ordered.

Sept. 2d.—The diarrhœa continuing, an opiate pill was given at

bed-time. Tumour considerably less at the upper part, but lower down very hard and uneven. Four leeches were applied.

17th.—The ointment was resumed, and early in Oct. the tumour was much softer. There was little alteration till Dec. 10th, when owing to casual cold, the swelling had increased, and respiration was again more difficult: a blister was applied.

Dec. 31st.—All medicine was laid aside for three weeks, and then the patient took bark with soda, and used liniment. ammon. fort. to the throat.

March 11th.—The dimensions of the throat remained exactly the same as in August, but the gland was certainly softer than it was at that time. The poor woman was now discharged. Her general health was decidedly improved, and respiration, though still difficult, and sonorous was less laborious.*

3d. Elizabeth Knowler, aged ten, daughter of the preceding, was made out-patient July 2d, 1824. The throat measured 12 inches. She began using the ointment on the 3d, and by the 30th the diminution was 1 inch. She continued the remedy, the throat being still fuller than natural, till towards the end of October, omitting it once only for a week, when leeches were applied.

Oct. 29th.—The bronchocele had vanished; but the girl's general health being bad, she continued on the books for several weeks longer, taking lig. calcis muriat. and hydrarg. cum creta. She was discharged as having received benefit.

4th. Charlotte Rigden, aged seventeen; made out-patient Sept. 24th, 1824. Bronchocele for several years, which first appeared after hooping cough, and which was probably, as the patient supposed, induced by the violent straining in that complaint. Tumour had increased rapidly since she attained the age of puberty, and had been remarked to be always rather larger at the menstrual periods. It was uniform, and not particularly hard. Circumference of neck 18 inches. There were great fulness and pain of head; troublesome dyspeptic symptoms; respiration difficult and sonorous; pulse quick, but not strong; tongue clean; catamenia regular, but scanty. The iodine ointment produced no effect till after the application of leeches and a blister; but in a fortnight after they had been applied, and when the ointment had been resumed for about a week, the tumour was much softer, and had decreased a quarter of an inch. This improvement I was, however, inclined to attribute to the leeches and blister alone. The patient lived too far from Canterbury to be able to attend regularly; and she was, therefore, at length made in-patient.

March 25th.—The ointment had, after a month's interval, been resumed (March 11th); but it was again laid aside upon the 24th, on account of the external inflammation it had produced, and the pain of head. Four leeches were applied behind each ear.

* In this case there was very perceptible wasting of the mammæ during the employment of the iodine.

29th.—The tumour was now perceptibly diminishing; and from this date to June 3d, the ointment was alternately resumed and discontinued, according to the state of skin. No medicine was given.

June 23d.—The decrease was 1½ inch—the swelling was soft—the respiration nearly natural.* Discharged.

5th. In the case of Elizabeth Fuller, aged twenty-five, who had been affected by bronchocele upwards of a year, I was compelled to abandon the iodine ointment; for, though the swelling decreased 1½ inch in rather more than a month, dysenteric symptoms came on, and proved too troublesome for me to venture upon the remedy again after those symptoms were subdued. In this patient the catamenia had been suppressed for five months.†

Case of Scrofula Externa.—Sarah Elgar, aged twenty-three, was admitted March 5th, 1825, with scrofulous enlargement of the glands of the neck; short, tickling cough; rigours, followed by increased heat; frequent, small pulse; tongue presenting that peculiar mottled appearance so characteristic of strumous habit; bowels costive; catamenia absent some weeks. These unfavourable symptoms, conjoined with my knowledge that the patient's family was of highly strumous temperament, made me fear that the lungs were diseased, and that the case would soon become one of confirmed phthisis. The tumours were covered with the iodine ointment; but friction was not employed. She took decoct. cinch. with sodæ carb. ℈ss. ter die; and pil. hydrarg. gr. v. extract. hyoscyam. gr. ij. omni nocte.

March 10th.—The hyoscyamus seemed to affect her head, and was therefore omitted. Other medicines continued, and a demulcent draught with tinct. camph. comp. given at night.

18th.—Swellings as before; complained of retching towards evening; cough troublesome and dry; pulse very feeble; tongue florid; great lowness of spirits. Mist. ferri comp. ℥j., mist. camph. ℥ss. ter die. Mist. amygd. cum acid. prussia ♏ij. omni nocte, et repetatur horis quatuor interjectis, si opus fuerit.

26th. —Return of catamenia; she feels much better; appetite improved. Omitt. medicamenta. Ointment still to be applied.

April 2d.—Swellings continue to diminish; general health much improved. Some pain of head and sense of fulness. Hirudines iij. temp. utrisque. Repet. mist. ferri comp. Pil. aloës cum myrrha, gr. x. omni nocte vel alternis noct. Ointment as before. Omit the night draught.

5th.—The mixture was discontinued; and from that time to the 26th, she took no medicine of any description. The ointment

* In the above cases, leeches were several times repeated while the young woman continued as an out-patient, and she had a second blister. Neither, however, seemed to influence the bronchocele after the first time, viz. in October.

† I am at present treating a case of enormous bronchocele, of full twenty years' standing, which I propose recording hereafter, and with which I shall conclude my report of the effects of iodine on that disease.

was still applied. Her appetite was now good; her general appearance healthy; cough gone; spirits excellent.

26th.—Discharged, as having received much benefit; and I have very lately learned, that she continues to enjoy better health than she had known for two or three years before.

Case of Paralysis of the Lower Extremities from Cold.—Charles Landall, aged twelve, from Dover, was brought to the hospital August 26th, with complete paralysis of lower extremities. There was difficult micturition, and the bowels were torpid. The upper extremities were not affected, and no symptom of cerebral disease had preceded the paralytic affection, or was discoverable at the date of the patient's admission. Upon examining the spine, no external mark of disease was to be seen, but uneasiness (it could scarcely be called pain) was experienced upon pressure about the lower dorsal vertebræ; and the lad asserted he always felt some uneasiness in that situation. Neither the patient nor his mother could call to mind his ever having had a fall or a blow; but it was ascertained that he had, some weeks before, sat in wet clothes at school. It also appeared, that he had been similarly affected between two and three years ago, and that the paralysis was then ascribed to cold. Twelve leeches were applied, and the bleeding kept up for several hours. A cathartic draught was given, and an emulsion with ʒss. of ol. terebinth. rect. ordered thrice a day. The volatile liniment with tinct. of cantharid. was also used to the lower extremities.

Leeches were again applied, Sept. 10th; and it was at about this time that the patient regained, in some measure, the power over the paralytic limbs. He could now draw them up as he laid in bed; but the attempt gave him great pain, and brought on the most distressing catchings. He was bled with leeches once more, viz. on the 14th. When he first began to take the oil of turpentine, he passed his urine with less pain and straining, and in larger quantity; but the medicine soon lost its power, and it was discontinued on the 17th. The liniment had produced a copious eruption over the legs and thighs; a blister to the back. Sumat mist. camph. ʒxj., tinct. cantharid. gut. x., syr. ʒj. ter die. Hydrarg. submur. gr. ij., extract. papav. gr. vj. omni nocte.

27th.—No improvement; caustic issues were now had recourse to; medicines continued. No sooner had the issues begun to discharge than a manifest improvement took place, which was progressive, until, by Nov. 28th, the patient had the use of the lower extremities nearly as perfect as before the attack. A slight check occurred, owing to his bowels having become deranged; but in a few days he was discharged, free from complaint.*

Case of general Dropsy, with Disease of Liver.—Elizabeth Flicker, aged thirty-nine, was admitted Dec. 31st, 1825. It is

* Whether the calomel was taken to the last, I am not quite certain. It however did not affect his mouth at all, or but in a trifling degree.

needless to go into a tedious detail of symptoms: suffice it to mention, that the patient was much broken down, that she had ascites to considerable extent, anasarca of lower extremities, and suspicion existed of hydrothorax. There was a jaundiced hue of skin—the motions were deficient in bile—the urine high coloured. The left lobe of the liver was enlarged and hard. My prognosis could but be unfavourable, especially as I knew the patient to be naturally of infirm constitution, and to have been for between two and three years in very bad health. A drachm of strong mercurial ointment to be rubbed in every night. Pil. hydrarg. gr. v., pulv. scillæ gr. iij. bis die. Inf. armorac. comp. ʒx., spirit. æther. nitr. ʒj, tinct. digital. ♏vj., sp. junip. comp. ʒiij. ter die. Haustus cum sp. æther. comp. ʒss., pulv. ipec. comp. ℈ss. horâ somni. Imperial for common drink.

On the 10th Jan., half a grain of digitalis was added to each dose of the pills—the tincture was omitted in the draughts, and twenty drops of the wine of colchicum seeds added.

13th.—Elaterii gr. ¼ in pill to be taken every three hours till the bowels be freely moved

16th.—One pill produced considerable effect; motions charged with bile; urine copious, but very thick and high coloured; pulse feeble; great debility.

Elaterium to be repeated, and fifteen grains of subcarb. of potass added to each draught: pills as before: two glasses of port wine daily. By the 22d, her mouth became very sore, and there was troublesome diarrhœa; but the dropsy was nearly gone. The mercurial ointment and pill were omitted: three grains of pulv. ipec. comp. added to the draughts.

27th.—Dropsical effusion entirely gone; mouth very sore; salivation; diarrhœa; great debility. Mist. cretæ cum tinct. opii gut. xxv., tinct. cinnam. comp. ʒj., syr. ʒj. omni nocte. Mist. ferri comp. ℥j., mist. camph. ℥ss., tinct. digital. ♏vj. ter die. She complained of hæmorrhoids, which were soon removed by cooling ointment and a few leeches.

Feb. 21st.—The tinct. of digital. was discontinued; and, as she complained of flatulence and sinking at stomach, pil. galban. comp. ℈ss. was ordered night and morning, and a warm plaster was applied to the epigastric region. She had also a gargle, for her mouth was still troublesome.

On the 25th, she was made an out-patient, and so continued till July 8th; for though there was no return of dropsy, and the enlargement of liver had disappeared, still great debility remained, and constant dyspepsia. A variety of remedies was prescribed; but the compound galbanum pill combined with pil. aloës cum myrrha, and the steel mixture, were most useful.

July 8th.—She was discharged, in as good health as she usually had previously to the appearance of dropsy.

Case of obstinate Vomiting, and supposed Organic Disease of Stomach.—Mary Holland, aged twenty-four, came to me Aug. 26th, 1824, with vomiting of food, generally soon after it was taken,

burning pain at the pit of the stomach and between the shoulders. Her complaints had subsisted for two years. During the first year there were nausea and pain, without sickness; but afterwards vomiting came on, and had increased to that degree, that food was hardly ever retained, excepting perhaps when she was in bed at night, or before she rose in the morning. Her pulse was very frequent and feeble; tongue clean; bowels constipated; catamenia regular. There was tenderness about the scrobiculus cordis; countenance expressive of distress; palpitation: emaciation had commenced, and was described as going on rapidly: temperament scrofulous. There certainly was good reason for suspecting organic disease. The patient had been under medical treatment for some time previously to my seeing her, and had been bled, and blistered, and had taken various remedies. She was again bled with leeches; took small doses of calomel with extract. conii, oxyd. of bismuth with opium, gentle laxatives, and used the tartar emetic ointment. None of these remedies, however, afforded her the smallest relief; and Sept. 7th, she was seized with excessive pain of stomach, lasting for some time, and which, at last, was only relieved by her bringing up a mass of brownish matter, more resembling sponge than any thing else, as well as half a basinful of dark-coloured mucus. After this the pain was mitigated, but by no means removed; and it soon became as distressing as ever. Prussic acid was then tried. When she became an out-patient of the hospital, May 20th, 1825, she took pil. hydrarg. submuriat. comp. Decoct. aloës comp. omni mane. Sulph. of quinine in infus. rosæ comp. The medicines she kept down; but the pain, and rejection of every kind of food, and other symptoms, continued unabated. The girl, however, though not better, was certainly not worse by Aug. 19th, when I prescribed as follows:—℞ Extract. flor. calendulæ gr. iij., pulv. glycyr. q. s. ut fiat pil. tertia quaque hora sumenda. All other medicine was laid aside.

26th.—There had been no return of vomiting. Augeatur extract. calendulæ ad gr. v.

Sept. 2d.—Vomiting had not returned; but the pills were omitted pro tempore, as they seemed to increase the pain and heat of stomach.

23d.—As I wished to watch the case more narrowly, the patient was admitted into the hospital. Eight leeches were applied to the region of the stomach. Decoct. aloës comp. was directed to be taken every morning, in such a dose as might suffice to keep the bowels regularly acting; and the pills were resumed. They were continued for rather more than a week, and there was no return of vomiting; but still the pain was considerable, and she was so weak as to be unable to stand without support. Six more leeches were applied—the pills were omitted, and no medicine was given,* excepting decoct. aloës comp., half an ounce of which was now

* A cordial mixture was tried, but it did more harm than good.

enough to move the bowels moderately. A glass of port wine was allowed daily. The patient gradually improved, losing the pain in a great measure, and gaining strength and flesh; and she had no return of vomiting up to Nov. 3d, when she was discharged.

While many circumstances in the foregoing case, and among the rest, the constancy of the pain, the emaciation, and the appearance of the matters thrown up by vomiting, seemed to warrant the notion that the stomach was organically diseased, its event militates strongly against such a notion being well founded. But, whatever were the nature of the disease, it resisted every remedy exhibited previously to the extract of marigold. The extract was prescribed, because it occurred to me that I had read, in a foreign journal, of its efficacy in scirrhus and cancer. It has been seen, that upon the extract being given, the vomiting ceased, and did not return for nearly three months. Should any one be inclined to ascribe this improvement to the patient's having relinquished all other medicine, my answer is, that the experiment of discontinuing medicine had before been made, but the vomiting continued as obstinate as ever. The leeches, rest, nutritious diet in small quantities at a time, and port wine, had nothing to do with arresting the sickness. They had all been tried in vain at a former period. The leeches, however, were of service after the vomiting had ceased.

It is hardly necessary to observe, that the calendula is a medicine of ancient, though almost forgotten reputation. In chronic affections of stomach, it seems to deserve a trial. Of its palliative powers in scirrhus and cancer, I cannot speak from experience. In one case, however, of organic affection of uterus, the extract was taken, and a saturated infusion of the fresh leaves was used as an injection; and, as it seemed, with the effect of mitigating pain and lessening the discharge.*

Case of Renal Affection.—Ann Willis, aged forty, became outpatient Oct. 8th, 1824. She had been for several years subject to pain of the left side, and of the region of the kidneys, from gravel. Red sand had, from time to time, been passed in large quantities; leeches were applied to the side; a demulcent mixture, with potass. subcarb. was ordered, and occasional saline laxatives; but neither this plan, nor the soap and soda pills, nor liquor potass. afforded relief.

Dec. 10th.—The patient began the following:—℞ Infusi folior. buchu, ℥j., liq. potass. ♏xv. Haust. laxat. ex inf. rhei cum potass. tartar. et tinct. jalap. pro re natâ, ut antea.

16th.—The pain was much less, and the calculous deposit in the

* The preparation employed in the above cases was an aqueous extract of the flowers, and was furnished by Mr. Battley; 1 lb. 2 oz. 3 drs. 20 grs. of the flowers produced 1 oz. 3 drs. of aqueous extract. The resinous extractive matter afterwards obtained from the same flowers, was 1 oz. 2 drs. In the journal to which allusion is made in the text, the extract of the leaves is recommended.

urine much diminished. The patient expressed herself very decidedly respecting the good effects of the medicine. It was taken regularly till towards the end of February, but not repeated so often in the day as at first. At the beginning of March the patient continued easy, and passing little sand. She was then discharged, with medicine for a fortnight. The opportunities that have been afforded me of making trial of the buchu have been few; and this is the only case where I have found it unequivocally useful.

Case of Rheumatic Palsy.—Sarah Weller, aged twenty-two, married, was made in-patient Dec. 18th. She had totally lost the use of the right arm and leg, from exposure to a current of air. The face was not affected; the arm and leg were much swollen, and acutely painful at all times, but especially upon the slightest motion. The fingers were firmly closed upon the palm; and the attempt I made to straighten them was fruitless, and produced intolerable anguish. The pulse was, in both wrists, extremely feeble; tongue loaded; bowels constipated; menstruation regular; appetite and rest none, owing to the pain of the affected limbs. A cathartic draught was ordered immediately. Catamenia appeared on the following day; and little or nothing was done till the 23d, when, on account of the great debility, inf. gent. comp. cum vino ferri ʒij. was ordered thrice a day. Vapour was tried to the arm and leg, leeches twice, and stimulating liniment.

29th.—There was scarcely any improvement. The patient could indeed move her little finger, but it was in a very slight degree. The pain was still great: she complained much of her head. The tongue continued much loaded, and the bowels constipated. Inf. gent. comp. cum vino ferri omitted. Calomel gr. v., and afterwards ʒvj. of magnes. sulph. Fiat V. S. ad ℥x. Mist. camph. cum liq. ammon. acet. ʒij., vini semin. colch. gut. xl., pulv. ipec. comp. gr. v., horâ somni, et repet. sextis horis, persistente dolore.

Jan. 1st.—Bowels freely evacuated; blood exhibited no sign of inflammatory action going on; but, on the contrary, it was in a very dissolved state; pulse feeble; local affection not at all diminished. We now returned to a tonic plan: mist. ferri comp. ʒx., mist. camph. ℥ss. ter die. Full diet, and porter. The draught at bedtime was continued.

3d.—No alteration. Cont. med. Electricitus partibus affectis. From the first day she was electrified, she began to regain the use of the arm and leg; and by the 24th, she had recovered completely.

I saw the patient after the lapse of several months, and she continued perfectly well.

I select the following, from among several cases of a similar character, as an instance of at least temporary recovery from, I will not say phthisis, but an affection of lungs whose symptoms so closely resembled those of phthisis, as to have made me very doubtful whether the patient ought to be admitted into the hospital.

Charles Merit, aged twenty-five, upholsterer, was admitted for trial Aug. 19th. He had been ill for some weeks with strongly-marked symptoms of pulmonary consumption; and there was pain and enlargement of one knee, which made me apprehend scrofulous affection of the joint. One of his brothers had died of mesenteric disease, and another of the family is subject to swelling of the glands of the neck. Under these circumstances, the prognosis could not be very favourable. An issue was made in the left side. Inf. rosæ comp. cum acid sulph. dil. ℥iij., quinæ sulph. gr. j., tinct. digital. ℥v., tinct. card. comp. ʒj. were ordered three times a day; and pil. styracis gr. v. every night. A laxative draught to be taken when necessary.

30th.—The knee was much better, so that he could walk about without uneasiness; and the patient was, in every respect, somewhat improved, but complained of pain of chest and shortness of breathing. Six leeches were applied, and repeated Sept. 3d, over the region of the heart, which he described as the chief seat of pain, and where there was irregular and strong action. The leeches afforded considerable relief. On the 10th, he had an emetic. Pulv. ipecac., zinci sulph. āā gr. v. The pulse came down to its natural standard; the harassing cough abated; and the expectoration, which had been copious and purulent, became less in quantity, and of better character.

Sept. 13th.—The symptoms of disease of lungs, and the affection of knee, were almost entirely gone; but he was annoyed by troublesome diarrhœa, which obliged me, two or three days afterwards, to discontinue the medicine first prescribed, and to order chalk mixture with laudanum at bed-time; and a saline demulcent mixture with tinct. digital. in the day. The latter was also soon omitted; and the only medicine taken for some days was the chalk with tinct. opii and tinct. catechu, in small quantities, and as often as the state of the bowels required. This, in some degree, checked the diarrhœa; but it did not leave the patient till Oct. 3d, he began to take inf. cuspariæ cum extract. hæmatoxyli, tinct. opii, and tinct. card. comp., which soon put a stop to it; and on the 11th he was discharged, with very little remains of complaint, and having, notwithstanding the diarrhœa, gained very considerably in bulk. He considered himself sufficiently recovered to resume his employment, and I believe went to London.

Cases of Psoriasis Diffusa.—I. Ann Kettle, aged thirty, was admitted July 29th, with psoriasis diffusa, affecting chiefly the extremities and upper part of the body. The case was a recent one, but well marked. It yielded completely to the following remedies: ℞ Zinci sulph. ʒj., aq. distill. ℥v., acid. acet. ℥ij. Misce, fiat lotio partibus affectis utend. ℞ Ung. hydrarg. nitr., unguent. cetacei āā partes æquales. Utatur pauxillo partibus præcipue affectis omni nocte. Sumat pil. hydrarg. submur. comp. gr. v. hora somni. Decoct. cinch. cum sodæ carbonat. gr. xv. bis die, et habeat balneum cum potass. sulphuret. bis in sept. From this plan not the

slightest deviation was made till the patient was discharged, cured, Sept. 20th.

II.—The success which attended the plan just mentioned, in a recent case of psoriasis, encouraged me to pursue it in one of above two years' standing. The patient, Harriet Wraight, aged eighteen, was in the hospital for above three months in the early part of 1824. She had previously been under the care of an experienced and able practitioner. Upon her admission, Jan. 30th, 1824, the disease occupied the whole body: on the extremities it was diffused; while on the neck and back it exhibited a most perfect specimen of psoriasis gyrata. There was little constitutional disturbance, and but little irritation from the eruption. I therefore directed the sulphuretted bath, small doses of sulphuret of potass, in the form of pills, internally, and grs. v. of pil. hydrarg. submuriat. comp. at night. The sulphuret of potass, however, produced nausea, and a degree of pain of stomach, and it was consequently laid aside, Feb. 7th, for a saturated solution of chlorate of potass, which I had already found of use in several cases of cutaneous disease. The patient at first took ʒiij. of this solution in mint water, and in a few days the dose was increased to ʒv.

17th.—There was severe headach and pain of stomach. The face was flushed; pulse frequent; tongue white. At this period the eruption was certainly less vivid; but the symptoms just mentioned clearly enough pointed out that a fresh eruption was about to appear. The solution was for the present omitted; a dose of castor oil taken, and afterwards mist. camphor cum spirit. æther. nitr., liquore ammon. acet., pulv. ipec. comp., et syr. papav. tertiis horis. By the 20th, the constitutional disturbance had ceased, but the cutaneous affection was greater. The solution was resumed, with three drops of tinct. opii to each dose, and ung. hydrarg. nitrat. lowered with common ointment, was used to the parts chiefly affected. From this period to March 22d, the eruption slowly but regularly faded; and the improvement was particularly observable on the back, where it had been most vivid. The girl's general health continued good: still the skin was not freed from the disease, nor was it clear when, at her own desire, she was made out-patient, May 16th. At that time she was taking decoct. dulcamaræ ℥jss. cum liquor. potass. ♏xv. ter die, pil. picis ij. ter die; and used an ointment with sulphur. From May 16th to July 30th, I had no tidings of the patient; but when she again made her appearance, I discovered that she had continued the medicines till within the last fortnight. Since they had been discontinued she had been working hard in the fields, and the cutaneous affection had become as bad as ever, or even worse than formerly, on the parts exposed to the sun. On the arms it was excessive, and now closely resembled lepra. How long the girl took medicine after July 30th, I cannot tell,* for she never came again till March 25th, 1825, and was con-

* The out-patients had, at this period, got into the habit of sending week after week for their medicines, without the knowledge of their medical

sidered as discharged for non-attendance. Upon her earnest entreaty, however, she was again put upon the books as out-patient, and again used nearly the same remedies; but finding that, on account of the distance she lived from hence, she still was unable to attend with any regularity, I was induced, Sept. 2d, to give her another trial as in-patient, and immediately put her upon the same plan with Ann Kettle. She left the hospital Nov. 15th, not indeed cured, but considerably more free from eruption than she had been at any former period. Indeed, I have little doubt but a complete cure would have been effected, had the patient been content to have remained a short time longer at the hospital.

Canterbury, February 1826.

II. *Some Practical Observations on Bronchocele.* By Jonas Malden, M.D., Physician to the Worcester Infirmary and to the Worcester Dispensary; and Physician Extraordinary to the Tewkesbury Dispensary.

TO THE EDITORS OF THE MEDICAL REPOSITORY AND REVIEW.

Gentlemen,—I am induced to submit the following remarks and cases to you, for insertion in your Journal, should you deem them worthy of it, from its appearing to me, that practical writers on bronchocele have not sufficiently insisted upon the kind of danger from this disease to which it is my wish to draw your attention and that of your numerous readers.—I remain, &c.

Worcester, February 6th, 1826.

'Bronchocele varies much in its size and form. Sometimes it is a circumscribed tumour at the fore part of the neck; at other times the whole neck is preternaturally thick.'* If the enlarged lobes of the thyroid gland, or tumours connected with them, do not protrude anteriorily at an early period of their growth, they pass laterally under the muscles of the neck; many of which, when the enlargement has attained a certain size, co-operate in pressing it on the larynx and trachea. Even the delicate platysma myoides has its share in producing this dangerous effect; for 'those who have once dissected a tumour from under this muscle, will never forget the strength of its fibres in the living body, although they appear so trifling in the dead subject.'† The cellular membrane beneath the platysma, too, is very firm, dense, and unyielding; and is apt to be more than usually so in cases where tumours of this kind have attained a considerable size. The sterno-cleido-mastoidei, sterno-hyoidei, and sterno-thyroidei muscles, exert forcible compression in these cases, particularly the muscles first named, which are of great

attendant. This abuse has since been done away with; and the out-patients, as well as those in the house, are much better managed than they were formerly.

* Foderé, in Annals of Med. 1796, pp. 19, 20.

† Shaw's Manual of Anatomy, p. 348.

length and strength; and from the relative position of their origin and insertion, as well as from their frequent action, are peculiarly liable to confine and compress any morbid growth on the sides of the trachea. That there is occasionally in bronchocele great danger to life from this cause alone; and indeed that the disease may thus terminate fatally, the simple narration of the following cases is sufficient to prove.

The circumstance of the tumour being pressed inwards in the mode above described, will also account for its sometimes producing bad effects upon the respiration, by pressure upon the wind-pipe, before it excites attention by the appearance of external enlargement.* Symptoms which indicate a narrowing of the passage of air into the lungs, particularly wheezing increased by whatever hurries the respiration, a peculiar rough sound towards the close of a long inspiration, accompanied with shortness of breath after muscular action, or occasional asthmatic paroxysms, should lead us to examine the throat with attention; for these symptoms may all depend upon the pressure of bronchocele, or some other tumour upon the wind-pipe. This may be the case without there being, from the causes before stated, any distinct circumscribed tumour discoverable, but only a lateral bulging, or general fulness of the neck. With this appearance there may co-exist a deep-seated bronchocele, so enlarged, yet so compressed, as to be the sole cause of the symptoms. In these cases, the slightest pressure made upon the two sides of the full neck at the same time, will bring on, or increase, if it be present, wheezing; and it will sometimes instantaneously cause a most distressing sense of suffocation.

Foderé speaks of the occasional impediment to respiration resulting from bronchocele, but considers it as produced by the pressure of the enlarged gland upon the recurrent nerve, muscles of the hyoid bone, and thyroid cartilage.† No doubt but pressure on these parts must sometimes occur in large bronchoceles to a considerable extent; but the strength of the cartilages of the larynx is such as to enable them to resist a degree of pressure to which the weaker rings of the trachea readily yield; and it will consequently be seen in the following cases, that the greatest impediment to the passage of air into the lungs was produced by the pressure of the tumour below the larynx.

It is worthy of remark, that large, deep-seated bronchoceles force the carotid arteries backwards; that these vessels may be felt on the stretch, and generally pulsating with great force at the hinder part of the neck; and that their strong action, which is often communicated to the whole tumour, must greatly augment its injurious pressure upon the trachea.

Case I.—Mary Ann Tilsley, aged eighteen, came under my

* 'Some have,' says Foderé, 'an internal bronchocele, and in these little or no swelling is perceptible.'—See Annals of Med. 1796, p. 20.

† Essai sur le Goître et le Crétinage, &c., at the beginning.

care as a patient at the Worcester Infirmary on the 19th of June, 1819. She complained of difficulty of breathing, which had existed constantly, in some degree, for more than a year; but of late it had become much worse, and was occasionally so severe, that she had long struggles for her breath, during which the face became turgid with venous blood. Any sudden exertion brought on these paroxysms. She had constant wheezing, and occasional slight cough. She sometimes, after her severe paroxysms, expectorated a little mucus. The pulse was small, and generally quick. She had great fulness of the throat, extending on the left side of the trachea and larynx as high as the angle of the lower jaw, and descending as low as the sternum. The tumour on this side, although it was deep-seated, had an irregular firm and knotty feel upon minute examination with the fingers. On the right side the surface of the swelling felt even, and the fulness was not so great as on the left side. The left carotid artery was on the stretch at the back of the tumour, to which on that side it communicated a strong pulsation. If the tumour were compressed with the finger in front, it did not perceptibly increase her dyspnœa; but very slight pressure on the sides of the tumour greatly augmented her distress. She had some mitigation of her symptoms at first, by applying leeches repeatedly to the tumour. It was subsequently blistered; and, lastly, a seton was introduced through the integuments covering the left side of the tumour, from which she experienced no benefit.

In October, her paroxysms of dyspnœa became more violent and frequent; and she began, for the first time, to complain of severe headaches.

In December following she died, after lying for several hours in a state of insensibility, which succeeded a paroxysm of dyspnœa, attended with acute pain in the head.

Sectio cadaveris.—The thyroid gland was much enlarged, passing down on both sides of the trachea to the sternum. The left lobe extended also upwards, and laterally under the muscles of the neck, which were much on the stretch over it. The right lobe appeared merely enlarged; but the left lobe was firmer than natural, and connected by adhesion with a chain of white steatomatous tumours, of the size of hazel-nuts, which passed down under the sternum, and terminated below the bifurcation of the trachea. *The trachea, for the space of half an inch, was so compressed between the enlarged lobes of the thyroid gland, as to have its cavity nearly obliterated.*

One of the steatomatous tumours passed behind the trachea at the point of its bifurcation, where it also caused considerable pressure. The trachea and bronchi were filled with a colourless frothy fluid. The mucous membrane was not inflamed; the lungs were healthy.

In the head, the veins of the pia mater were full of blood, as were the sinuses and internal jugular veins. There was half an

ounce of fluid in the ventricles: the pons varolii was much softened, and was of a dirty yellow colour.

Remarks.—In this case, although the bronchocele was complicated with steatoma, the greatest impediment to the respiration was produced by the pressure of the enlarged lobes of the thyroid gland.

The gorged state of the venous system of the encephalon indicated great obstruction to the return of blood from the head, produced, probably, in part by the difficult respiration; and in part, by the injurious pressure of the tumours on the internal jugular veins.

Case II.—On the 7th December, 1821, Eliza J., aged thirty-two, applied to me for my advice. She was in the last month of her third pregnancy: she had a large bronchocele, which she said she had had for several years, and that it had increased during both her former pregnancies, and very fast lately. The tumour occupied all the space between the sternum and the lower jaw, and spread very widely on both sides of the neck. The sterno-cleido-mastoidei muscles were greatly on the stretch: the carotid arteries were so forced back by the tumour as to be distinctly felt pulsating behind it on a line with the transverse processes of the cervical vertebræ: the superior thyroideal arteries were very large, and pulsated violently with a peculiar thrill: the dyspnœa was frightful: the inspirations were stridulous, and she elevated her chin, with a sort of convulsive effort, at each inspiration. The countenance was turgid with blood, and its expression very anxious.

She died on the 10th of December, with the distressing symptoms of slow suffocation; and her mental faculties entire nearly to the last moment of her existence.

Sectio cadaveris.—The thyroid gland was enormously enlarged. It lay very deep on each side of the trachea, and passed backwards beneath the muscles of the neck, which were much expanded, and stretched particularly the sterno-thyroidei and the sterno-cleido-mastoidei muscles. These latter bound down and compressed the tumour most forcibly against the sides of the trachea. The tumour was not very firm, was throughout of a pink colour, and contained a thick gelatinous matter in innumerable small cells. *The trachea was so compressed, for the space of an inch and a half, as to be quite flattened on the sides, and to present in front a sharp edge.* The mucous membrane of the trachea was slightly inflamed, and it was filled with a muco-purulent fluid.

Remarks.—Bronchocele often occurs in women for the first time during a pregnancy, and the growth of the tumour under these circumstances is sometimes unusually rapid. If they have a bronchocele before they become pregnant, then upon pregnancy taking place, its growth is often much accelerated; and, as far as my observation goes, although it greatly subsides after delivery, it never without medical aid resumes the size it had before the pregnancy of

the patient, so that each succeeding pregnancy adds a permanent increase to the enlargement.

In young females, in whom the catamenia have not yet appeared, I have seen a bronchocele suddenly grow very fast, and subside as fast upon the establishment of the above-mentioned secretion.

The death of the young woman Eliza J. was, under all the circumstances, a very distressing event; for there was nothing in the appearance of the tumour, upon dissection, to lead us to conclude, that at an earlier period of its growth it would not have been curable under the usual treatment for bronchocele: and soft bronchoceles always afford to our remedial plans a better chance of success than those which are very firm or hard. In this case a soft bronchocele produced death by its mere *muscular imprisonment*, if I may be allowed the expression.

Case III.—On the 10th of August, 1825, I was requested to see Mr. ———, of this city, a short, and rather stout man, of the age of fifty. For many years he had had a wheezing respiration, with a violent, dry, sonorous cough, coming on by fits. Often it seized him when walking, particularly up any acclivity, and often at his meals. He was considered by himself and friends as asthmatical. Eight or nine years ago, he first observed, whilst he was shaving himself, a greater fulness than natural in his throat, particularly on the left side of the wind-pipe. This appearance gradually increased; but still he had not considered it as having any relation to the dyspnœa and cough, with which he was then afflicted, and which slowly became worse.

Upon my arrival, I found him sitting in an arm-chair, with his elbows resting on the arms of it, his shoulders elevated, his head bent backwards, but more to the right than to the left. His respiration was laborious, and attended with loud wheezing. He told me that for many weeks he had not breathed better than that; and that he had at times paroxysms approaching suffocation, in which he laboured grievously for his breath, and in which his sufferings were such that he had felt all the agonies of approaching dissolution again and again. In these attacks the countenance became livid, and he had much pain in the left side of his neck and head.

Upon examining the throat, there was perceived upon the left side of the larynx and trachea, a tumour, firm and elastic at its upper part, and rather softer below, reaching from the angle of the lower jaw to the clavicle and sternum, and extending laterally to the back part of the neck. A smaller tumour, with part of it moveable and loose, under the integuments, occupied the other side of the trachea. The larynx was forced from its middle line over to the right side of the neck, so that the central notch of the thyroid cartilage deviated from its natural situation three quarters of an inch or more. Both the carotids were distinctly traceable behind the tumours at the back of the neck. They pulsated with unusual violence, and communicated such strong vibrations to the

tumours, particularly to the largest, that a medical gentleman, who had seen the case before I was called in, considered the disease as aneurism of the carotids.

He died on the 29th of August, after an afflicting struggle of many hours for his breath. He had occasional delirium towards the last.

Sectio cadaveris.—The tumours proved to be the lobes of the thyroid gland greatly enlarged. The left lobe, when removed, was found to consist of several large cysts, containing a gelatinous substance of various degrees of consistence. This lobe passed into the chest as low as the arch of the aorta; and its lowest cyst, which contained an ounce and a half of a glairy fluid, was lodged between the arteria innominata and the left carotid artery. The two carotids, the internal jugular veins, and the par vagum, were much displaced backwards by the tumours. *The trachea, just below the cricoid cartilage, was so compressed between the tumours as to render it nearly impervious for the space of three quarters of an inch.* All the muscles which lay over the tumours, particularly on the left side, were greatly on the stretch; and the cellular membrane, beneath the platysma, was unusually strong and dense. The mucous membrane of the trachea and bronchi was slightly inflamed: the lungs, heart, and abdominal viscera were sound.

Case IV.—The son of Mr. ———, of Kempsey, near this city, aged seventeen, had been liable for four years to attacks resembling asthma, which were mild at first, but had gradually become more and more severe. They were generally brought on by muscular exertion.

From the peculiar sound attending a long inspiration, I suspected in this case pressure upon the trachea, and examined the throat. There was a general preternatural fulness on both sides of the neck. By pressing the trachea in front, I gave him no uneasiness; but the slightest pressure, made at the same time on the two sides of the neck, brought on wheezing, dyspnœa, and general distress.

A few days before I saw him, he had exerted himself greatly in sustaining an arduous character at a masquerade: this was followed by one of his asthmatic paroxyms, which was of unusual length; and the heart had ever since pulsated with great force and frequency. The pulse at the wrist was bounding full and strong.

In compliance with my wishes, he lost blood from the arm, had leeches repeatedly applied to the throat, and took every four hours small doses of the magnesia sulphas, and ten drops of tinctura digitalis. After a short time, the symptoms of excitement subsided, and he was ordered ten drops of the tincture of iodine three times a day. Under this treatment the neck gradually regained its natural size; and he has since continued free from dyspnœa, and has had no return of his distressing paroxysms.

Remarks.—From the style of dress of the male sex in this country, enlargements about the throat are more liable to escape detection than in females whose throats are bare. The shirt collar

and cravat too acting as ligatures, are apt by their pressure upon a bronchocele to cause it to produce distress to the respiration earlier in men.

Several cases similar to the last I have narrated have occurred to me in my hospital and dispensary practice, in which the subsidence of the enlargement of the neck (in some of the cases hardly considerable enough to attract the attention of a casual observer) has been followed by the cessation of all the pulmonary symptoms.

III. *College of Surgeons.*

The duties of a public journalist are not always of pleasant nor of easy performance; for, if he regard them as real duties, as obligations, which, having voluntarily undertaken, he has no moral right to neglect, he must not only often feel compelled to notice subjects which he would rather avoid, but he must endeavour to lead the public mind in a right path, where he may well fear that himself may receive injury only as the recompense of his labour. Nothing indeed but a sense of duty—a feeling that our readers have some claim upon us for our opinions, and that we ought not to forego the consideration of any question in which the interests of the profession are involved, would lead us to notice the schism that has at length become public among the members of the College of Surgeons. It was truly with the most unfeigned regret, that we learnt that any harsh or exasperating language had been employed against the governing members of the Royal College; and our regret was heightened, because we considered that this was not the best, even were it an efficient mode, of procuring the removal of the grievances against which it was directed. But we cannot hide from ourselves, that the regulations lately imposed by the college are of the most injurious tendency, and that, if it were possible thoroughly to enforce them, they would effect a monopoly ten times more injurious than any of those from which the present enlightened legislature are hastening to liberate our country.

The grievances of which the profession complain, for such is in fact the case, if we except those who are official members of the college, may be divided into mere distinctions of rank, and of regulations evidently detrimental to the interest of the science itself. The former, though we are not prepared to assert that some alteration might not with propriety be made, particularly as respects the mode of electing the governors of the College, yet we cannot consent to make them the subject of discussion. Distinction of some kind must always exist, and even if that now complained of were removed, some other must be substituted in its place. The latter, however, are too important to be as lightly passed over; and we shall endeavour to give our opinions upon them in such language as may neither subject us to the charge of base subserviency to those in power, nor of joining in what we must be permitted to call the vulgar cry against them. Feeling, as we do, that we ourselves have no sinister object in impugning their measures, we are willing

to concede to them none but conscientious motives in concerting them, though we cannot at the same time allow them the possession of a correct judgment.

The first, though certainly not the most important evil attendant upon the present management of the college, which we shall notice, is the difficulty of obtaining entrance to, and the consequent inutility of the museum to the greater part of the members, and to the profession generally, for the benefit of which it was entrusted to the college by the legislature. This is no imaginary evil; for though, if an individual have an acquaintance with some of the council, he can obtain admittance tolerably easily, this is but the lot of few; and when practitioners arrive from the country, they have seldom time to make the requisite interest for procuring admission, and at the same time for deriving any information from the contents of the museum. Hence, therefore, to such members, it is a mere shew of bottles and shelves. But even to pupils in London, who can go at the stated times, the mode of admission and the time render it perfectly profitless. A young man may have visited it twenty times, yet is he still compelled to enter the gallery first; and, however desirous he may be, cannot obtain entrance into the lower part of the museum, till the gazers have completed the circuit of the upper. In all this, however, we attach no blame to Mr. Clift. No one is more deserving the best thanks of the profession than this ingenious and industrious individual. The fault is in the system. The use of a museum like this is not to be learnt in hours nor days; and nothing but the freest access, compatible with the preservation of the preparations, can enable the profession to derive that advantage from it which it is well capable of affording, and which the legislature intended it to afford. We do not think it difficult to devise a plan by which both these objects might be accomplished, both the security of the museum, and the freest possible access to the members; and if money be wanted, which appears to us scarcely possible, it would be easy to raise it from the profession at large, if a pledge could be given that it should be properly applied. In this instance, therefore, we do think that the governors of the college stand convicted of mismanagement, and of a dereliction of their duty to the members over whose interests they are supposed to preside, and of the science, the progress of which they are bound to advance by every means in their power. They have hitherto permitted the museum to be utterly useless to the profession in general; and we would feign hope, that now the subject has been brought before them, they will endeavour to remedy an evil of the existence of which they cannot but be sensible. We will not think so meanly of them as to suppose that any irritating language that may have been employed, will prevent their effecting a reformation when they feel it to be required; and they may be assured, that nothing will so effectually disarm their oppugners, as becoming the temperate but real reformers themselves. The managers of the college cannot be ignorant, that the reform now called for with respect to the museum, has not sprung from the cabal of a few disappointed individuals, but that it is demanded by

the whole profession, and that there is scarcely a single member capable of forming an opinion on the subject, who does not deplore the difficulty at present attendant upon admission.

The regulations, however, respecting lecturers' certificates appear to us more important even than the neglect of the museum; they form, indeed, an encroachment upon the rights of the members of the college as impolitic as it is unjust. Unjust we must consider them, because whoever has paid for placing his name on the list of members, has done so upon the supposition, not only that he was announced as capable of practising his profession, but that he was also admitted to all the privileges at that time conceded by the college to its members. If, therefore, the college have a right within itself, to alter so fundamentally the laws affecting the whole body as it has done, it seems most particularly unfair to make them operate upon those who were members before the new enactments. Legally speaking, it is true, they may have a right to do this; morally considering it, it is impossible to exercise such right. Yet this the college have not hesitated to do. But farther, even supposing the earlier members aware of the power of the college to deprive them of those privileges which the court professed at their admission to grant them, can any thing be more unjust than to abridge such privileges, without even the pretence that they have been abused? Amidst all the numerous lecturers that have established themselves within the last few years, we have never yet heard a single charge of dishonourable conduct; and even had an individual disgraced himself, would it be fair, would it be just, or would it be honourable, to visit his sins upon the whole body of the profession? There does appear indeed in this country no excuse for this wholesale system of legislature, because we have ever before our eyes the proceedings of parliament, in whose measures every rule and order is made, and for the most part successfully, to prevent precipitation. In no case either will the government permit a whole body to be thus oppressed; and the late measures of the college do seem to us far more like the hasty propositions of those radical reformers, whom they would be little proud to have it supposed that they imitate, than the calm and deliberate proceedings of a council of able and discreet legislators.

But while we thus must regard the restrictions of the college as unjust, we look upon them as, if possible, ten times more impolitic. It is truly strange, that while commercial men are becoming more liberal, while the country at large is becoming more enlightened, while government is refusing to grant any more of those odious monopolies that disgraced the earlier periods of our history, a scientific body should be found endeavouring to enforce the restrictions of a barbarous age. It is still stranger that they should not, in regarding the history of their own corporate establishment, have learned more wisdom, and more veneration for that liberty under which they have grown up. The college well knows, that it has *no power* to enforce country practitioners to become members, and to pay a large sum for their diplomas; and what therefore has rendered

it impossible for a respectable man to practise without such a diploma, but the influence of public opinion, far more binding than any legal enactments? Yet is it in the face of all these circumstances, that the College of Surgeons have decided upon laying those restrictions which are so justly complained of, though some of their own body, certainly some of the greatest ornaments of surgery, *have made for themselves a school, being attached at first to neither an hospital nor a previously-established school.* These are the terms of this impolitic enactment:

'And that certificates of attendance at lectures on anatomy, physiology, the theory and practice of surgery, and of the performance of dissections, be not received by the court, except from the appointed professors of anatomy and surgery in the Universities of Dublin, Edinburgh, Glasgow, and Aberdeen; or from persons teaching in a school acknowledged by the medical establishment of one of the recognised hospitals; or from persons being physicians or surgeons to any of these hospitals.'

This, with some other regulations, is stated to be made 'in pursuance of the duty of the Court of Examiners, to promote the cultivation of sound chirurgical knowledge, and to discountenance practices which have a contrary tendency.' We think that there will be little difficulty in convincing every unprejudiced person, that the court, however desirous of performing this duty, have greatly mistaken the proper method.

It is an invidious thing in a question of this kind to cite particular instances in proof of an assertion; and, for ourselves, we are extremely indisposed to wound the feelings of any individual, because he has unfortunately been placed in a situation for which nature had not conferred upon him abilities adequate. But at the same time, we feel certain that there are none of the objections which we are about to make to this regulation, on the score of impolicy, which the well-informed reader could not confirm by twenty instances.

It is quite certain, that, in order to form a school of anatomy and surgery, great industry and very considerable abilities are requisite. It is equally certain, that, when it has once been established, abilities below mediocrity are sufficient to support it. We could very readily prove these two propositions. Now we know no profession in which what has been stigmatised under the name of nepotism has been more extensively practised than in medicine and surgery. When a hospital has been erected, or a school has been formed, the original promoters have been anxious, too frequently, to hand it down as an heir-loom to their families; and, hardly, perhaps, aware of the extent of their own talents, by which they have been enabled to make their own road, and sometimes, we are afraid, careless of all but the emoluments that might be derivable, have laboured, and successfully, to make lectureships and hospitals entirely hereditary. We surely need not cite any illustrations. Now the effect of the college regulation is to make this custom completely efficient, and to render it impossible for any one, unconnected with an establishment already in existence, to found

a new school, although he should be the most highly-gifted individual in the profession. When Hunter arrived in London, he had no connexions of importance, and, entirely by his own merit, he founded the Windmill Street School, a school that has, even to the present time, at least competed with the hospital establishments. But the college has said — 'Henceforth, we will have no competitors!' Competition is excluded, and unless students shall attend the lecturers of the established schools, however incompetent these may be, their labours will count for nothing; and as such students are seldom over-provided with money, it is clear that they must generally be content with the allowance of the college. Now we happen to know an instance where the whole evil is felt. A professor of anatomy has been appointed, equally ignorant and unprincipled; yet does this man receive a large income, while his lecture-room is almost empty. None attend but those who cannot afford to pay another lecturer. But the worst part of this monopoly is, not only that meritorious individuals are prevented from making the utmost of their abilities, but that it has a tendency to keep even the acknowledged schools at a very low ebb. Great exertion will never be made where there is no stimulus, and none can there be when a lecturer feels secure that he must have an income, be his lectures worth little or much. Under a free system, even moderate talent becomes efficient, because emulation produces industry, and industry increases ability; but under a system of restriction, such as that which has now been imposed upon the profession, it is little probable that even great talents would be improved, should some lucky chance place them in an established school. And, farther than this — not only is the emulation of established lecturers provoked by the excitement of competitors, but from lecturers unconnected with hospitals these themselves might be most advantageously supplied. The system has hitherto been to hand down the theatre to a son or a nephew, or some person not always the most able, who may have been hanging for years about the hospital; and so completely has this been the case in London, that it would be thought little less than madness for an individual otherwise circumstanced, however estimable for his attainments, to stand for any situation connected with the institution; and certainly such a state of things the present regulations are well calculated to confirm. We would respectfully put it to the Court of Examiners, if they would not, on this account alone, be best consulting the interests of the profession, by leaving it unrestrained.

Nor can we, on looking back, find any ground for interfering with what has certainly worked well. That schools should really be established to entitle lecturers to give certificates acceptable at the college, should doubtlessly be enforced;* but with this proviso,

* We speak this in reference to a very laudable practice which is daily becoming more general, of young surgeons, on first settling in the country, delivering a course of anatomical lectures. It is plain that certificates could not properly be received from such individuals. The time may, indeed, be not far distant when anatomical schools may be established in the country.

it is certain that science would be best promoted by encouraging lecturers. Daily experience shews that students are very accurate judges of the abilities of their teachers, and to them very safely might be left the choice. But as persons who intend to become lecturers must necessarily pay more attention to their professional studies than they would otherwise be inclined to do, the profession would contain a greater number of well-educated individuals, even should they not succeed in establishing new schools. In every way, in short, in which we can revolve this regulation, it is impolitic, so far, at least, as 'the cultivation of sound chirurgical knowledge' is concerned. In only one way can we consider it politic; it is one, however, which we should be sorry to suppose that any individual among the Court of Examiners could for an instant have had in view. We have felt some doubt how far the college ought to admit certificates from foreign countries, nor do we yet feel that it is a question unincumbered with difficulty. While British surgery retains its present character, we cannot think it right to permit an entirely foreign education; though, while anatomy can be so much more readily taught on the continent than at home, and bodies so much more readily procured, the honest course appears to us, to receive foreign certificates in this part, at least, of surgical education.

Throughout these observations, we have endeavoured to hold only respectful language to the governing members of the college, and we could have much wished that no other language had been employed elsewhere. Removed from the immediate field of contention, and personally unconcerned in whatever may be the result, our opinions have been formed, so far as we are ourselves aware, without any hostile or any friendly feelings to particular individuals. The interests of science, and, necessarily with these, the interests of the profession, have alone formed the subject of our consideration, and every additional reflection has only served to confirm us that the college has much mistaken the true method of performing its duty; that in enforcing the late restriction it is only exercising a pernicious control, odious at once to the greater part of its members, unjust in its principles, injurious in its tendency, and powerfully obstructive of the progress of the art.—EDITORS.

SECTION II.—ABSTRACTS OF PRACTICAL FACTS, BRITISH AND FOREIGN, WITH REMARKS.

I. *On the Use of* CAMPHOR *and* HYOSCYAMUS *in* GONORRHŒA.

AN elaborate article, under the above title, is given in the first Number (January 1826) of the Edinburgh Journal of Medical Science, from the pen of Mr. Benjamin Bell of that city.

Of the five pages and a half, however, which this article occupies,

nearly five are devoted to a systematic, common-place essay on gonorrhœa, without one word being said with respect to the camphor or hyoscyamus, which, after all, it appears, have not been employed by Mr. Bell as remedies for gonorrhœa (which means a puriform *discharge* from the urethra, &c.), but for CHORDÉE, an accident or symptom which sometimes only occurs in this disease, and can only occur in males. So much for the title and pretensions of this article, and now for the little matter of fact it contains.

Mr. Bell being anxious, as he tells us himself, to *discover* a remedy 'which might tend to alleviate the agonies of chordée,* without disordering the digestive organs, as opium generally does,' it occurred to him, 'that as camphor is sometimes used with great benefit in irritable affections of the bladder,' it might also be of service in irritable affections of the penis; and therefore he determined to give it, what he calls, 'a fair trial' in chordée.†

Mr. Bell, however, appears to have thought, or to have soon found, that camphor could not conveniently be exhibited alone in sufficient quantity for his purpose (it being very apt, he says, when given in that state, to produce nausea); and therefore he was induced, for some reason not assigned, to employ it in union with hyoscyamus—a combination which has never, he says, according to his experience, given rise to any gastric uneasiness.‡

On the contrary, these powerful medicines may, he alleges, be thus exhibited with safety and advantage in considerable quantities, he himself having on more than one occasion 'prescribed' so much as one drachm of camphor, and two scruples of hyoscyamus (for the same patient?) in the course of twenty-four hours. In general, however, he adds, half these quantities will be found sufficient.

The *form* employed by Mr. Bell for the exhibition of these remedies appears to have been that of *pills;* but no intimation whatsoever is given with respect to the particular preparation, or part of the hyoscyamus made use of.§ This, together with the very vague and indefinite manner in which every thing relating to the subject is stated, prevents us from attaching much value to Mr. Bell's testimony on the present occasion; and we have noticed

* These agonies are sometimes so dreadful, that Mr. B. states he once knew a gentleman, who, while labouring under them, nearly committed suicide with his own hand, '*by taking an over-dose of opium and digitalis!!*'

† It is rather ludicrous to find Mr. Bell talking in this manner of the employment of camphor in the treatment of chordée, when every student of any standing knows that no other article in the Materia Medica is so generally exhibited for the relief of this affection.

‡ It is to this combination of camphor and hyoscyamus, in the treatment of chordée, we wish particularly to direct the attention of the reader. Belladonna, so nearly allied in some respects to hyoscyamus, has, it is well known, been frequently employed with advantage in this complaint. Mr. Bell, however, it is proper to add, seems not to have been aware of this.

§ Our readers are aware, that both the *seeds* and the *leaves* of the hyoscyamus are officinal; and that the latter may furnish for pills either a *powder* or an *extract*.

his communication, therefore, rather for the purpose of provoking inquiry on the part of others, than in the hope of producing conviction in the mind of any one.

II. *Crusta Serpiginosa Infantum*—(*Scabies*).

A SPECIES of *itch* (scabies), termed by German authors *crusta serpiginosa*, is frequently in children improperly considered as a syphilitic affection.

When of long standing, the child affected with this complaint becomes miserably emaciated, from constant irritation and want of sleep, while the whole surface of the body, together with the scalp and *face*, is covered over with an angry papular eruption, so that the skin, when the papulæ are very numerous, assumes a red or copper colour. Sometimes also extensive desquamations take place, and superficial ulcerations, particularly about the arms, folds of the thigh, &c.

As the eruption in this disease appears on the *face* as well as elsewhere, it may be alleged, perhaps, that it is improper to call it a species of *itch;* some persons being of opinion, that no eruption of that nature ever, under any circumstances, affects that part.

The accuracy of this opinion, however, is denied by the writer to whom we are principally indebted for the preceding description, who, in support of the contrary opinion, observes :—

'1st. We have seen two cases of true *pustular* itch, affecting the ears and *face* in adults.

'2dly. We believe the face in adults is so rarely affected with psora (*scabies?*) only because constant exposure to the air tends to harden it, so that it is less liable to suffer from the contact of infectious matter.

'3dly. The hands are, it is true, equally exposed (*not equally perhaps?*) but they only suffer in those parts which, by their situation, are less (*least?*) exposed, and consequently covered with a more tender cuticle, viz. between the fingers, the wrists, &c.

'4thly. The face in infants does not enjoy this immunity from psora, because in them its cuticle is scarcely less tender than that on other parts.

'And, 5thly. When a nurse and child, both free from itch, are exposed to its infection, the disease always appears first upon the child, as being the more susceptible of the two.'—Vide *Edin. Med. Journ., January*, p. 239.

III. *Hydatids, &c., between the Laminæ of the Peritoneum.*—*Case, &c.*

CASE.—A female, aged thirty, was attacked with sickness, headach, and pain in the lower part of the abdomen, on the left side; which, however, by the aid of fomentations, purgatives, and saline medicines, were removed in a few days. This was in December 1822, and no further complaint appears to have been made, on her part, until the March following.

At this time she had lost her former plump and healthy aspect,

and had become much emaciated. The pulse also was very quick; the skin dry and shrivelled; and the abdomen much distended. But there was no particular complaint made, except of a sense of weight in the abdomen, wherein a sense of fluctuation was perceptible.

As the swelling of the abdomen was uniform; as there was no tenderness on pressure; as the fluctuation soon became very distinct; and the urine at the same time scanty (though always clear and pale), the medical gentlemen in attendance soon satisfied themselves that the disease was 'a common ascites,' and treated the patient accordingly.

Mercury, therefore, squills, digitalis, and all the other medicines usually exhibited in that complaint, were had recourse to, and were employed for some months, but without any beneficial effect. On the contrary, the swelling of the abdomen continued to increase, so that on the 29th August it was deemed advisable to puncture it. Accordingly, on that day, a trocar was introduced on the left side, but nothing came away except about two quarts of fluid, in consistence and colour like thick water-gruel. A few days afterwards, therefore, another attempt was made, by introducing a large trocar into the linea alba, a little below the navel, when about a gallon of the same sort of fluid was discharged.

The relief, however, obtained from these operations was so trifling, that no further attempt of the kind was made; and her situation soon became so hopeless, that from this period until her death, which took place on the 3d October, little was done beyond the necessary exhibition of laxatives and anodynes.

Examination of the body.—Twelve hours after death the body was examined. Before laying open the abdomen, a trocar was plunged into it in several places, and about half a gallon of a very thick opaque fluid was discharged. The integuments and muscles, we are told, were then thrown back, and the *peritoneum* laid bare.—To describe the appearances, says our author, which presented themselves on dissevering the laminæ of this part, is no easy matter: to prevent mistakes, therefore, on our part, WE shall use his own words:—

'Its parietes (*that is, the parietes of the peritoneum!*) were, in different parts, from one to two inches and a half thick, and white throughout, consisting of condensed cellular membrane. An heterogeneous mass presented itself, containing cysts of various forms and sizes; some round, some oval, some transparent, some opaque; some capable of containing two quarts, others not half an ounce. The transparent cysts contained a thick, transparent, syrupy, gelatinous fluid; the white (*opaque*) cysts contained a white fluid, of the consistence of thick cream. The coats of some of the larger cysts were very thick and opaque. There likewise existed a quantity of empty cysts, and flakes of coagulated lymph.' *In fine,* 'the whole had the appearance of an immense quantity of purulent matter, FLOATING amidst the hydatid cysts between the laminæ of the peritoneum, and amounted to betwixt six and seven gallons.'

There was no fluid found, we are told, in the cavity of the abdomen: nor any adhesions between the diseased peritoneum and the viscera: nor any other deviation from the natural condition of the parts except this, 'that the small intestines were darker coloured than usual, and the omentum very thin, and shrivelled.'—*Extracted from a Communication by Dr.* CALEB CROWTHER, *of Wakefield; given in the Edin. Med. Journ. for Jan.* P. 49.

Observations.—In this case the diseased changes of structure, and new formations, seem to have been strictly limited to that portion of the peritoneum which lines the abdominal muscles. Whether the whole of this portion, however, was implicated or not, is more than we can conjecture; nor is it very easy, from the language of Dr. Crowther, to form a satisfactory opinion with respect to the exact nature or situation even of the appearances observed. From the preceding extract, and indeed, we may say, from the entire article, it is manifest that this gentleman has not the art of expressing himself very clearly, or even always grammatically. Whether he always *thinks* soundly will also, we fear, be a matter of doubt with those who have perused our observations on a former communication of his, relative to a case of 'Purulent discharge from the bladder' (*Med. Rep. for Jan. last*, p. 154); and with those who peruse the following *quære*, with which he concludes the article now under consideration.

'Can this disease (the formation of hydatids) be produced by the exhalents pouring out a fluid more tenacious than usual, in a globular form, SOMEWHAT LIKE SOAP-BUBBLES; which increase in size, and receive nutriment from the surrounding parts after their detachment?'

IV.—*RHUS TOXICODENDRON, or POISON-OAK—its Juice highly acrid.—Cases, &c.*

CASE I.—A man, employed in gathering the leaves of the *Rhus Toxicodendron* for the purposes of pharmacy, received some of the juice of the plant upon his face. Immediate severe pain, followed quickly by great redness and swelling, with inflammation of the erysipelatous kind over the face, were the consequences. For these the patient was drenched with draughts and lotions, and 'with great advantage,' as it would appear; for, at the end of a week, the inflammation seems to have been subdued, or to have subsided, although the swelling did not entirely disappear for nearly a fortnight.

CASE II.—A medical man, who happened to be present at the gathering of the leaves of this plant, in the month of June, took up some of them for the purpose of examining their botanical characters, having previously taken the precaution of putting on his gloves. Not adverting to this circumstance, he, after the lapse of a few minutes, took off his hat, and wiped the perspiration from his forehead with one of the gloves, which had, as it appeared, received and retained some of the acrid juice of the plant. The consequence was an inflammatory attack, exactly similar, it is stated, to that

mentioned in the preceding case, for which the same plan of treatment was adopted, and with the same result.

Observations.—These cases are extracted from an article by Mr. Frost, in the London Med. Journal for February (p. 116), and are stated to have fallen under his own observation. They serve to prove that the common opinion entertained with respect to the acrid nature of the milky juice which exudes from the poison-oak is well founded, although the accuracy of that opinion has, it appears, been denied by a modern writer in this country.

Mr. Frost states that the truth of his report can be testified to by living witnesses;—this is satisfactory: but it would have been still more so, we may add, if Mr. F. had mentioned the *time* and the *place*, when and where, these occurrences took place.

The *leaves* of the Rhus toxicodendron are, as our readers know, still retained in the British materia medica. They are stated to be inodorous, and to have a mawkish, sub-acrid taste. On the continent, and in this country, they have been employed, and it is alleged advantageously, in certain paralytic affections, and also in some cutaneous diseases. In this country, however, they are now seldom, if at all, prescribed by physicians; it may be useful, therefore, to mention, that the *Bulletin des Sciences Médicales* for September last, contains a very favourable report of their recent employment on the continent, in some cases of paralysis, by a Dr. Givesins.

The dose of the dried *leaves* in powder, is from one to four grains in the day. Would it not be worth while to try the effects of the milky juice of the stem, exhibited internally?

V. *Sloughing of the Colon (in Dysentery?)—Case, &c.*

'Livid spots (*on the organ*) in acute inflammation of the stomach, have been supposed to be gangrenous. They are sometimes seen after the inflaming mineral poisons, as arsenic, corrosive sublimate, &c. *But* I have never seen sphacelus,' says Mr. Travers, 'that is, separation from a process of mortification, of the coats of the stomach, but often (*have seen sphacelus*) in other parts of the canal.'—*Ex. gr.*

'About a month since (*that is, about November* 1825), I was called to a female of middle age, who, after a succession of bloody stools, with great pain in the lower belly, and tenesmus (*that is, while labouring under an attack of dysentery, we presume*), had just passed a portion of the entire cylinder of the Colon, six inches in length, including the sigmoid flexure, in a state of putrefaction.

'On inspecting the abdomen after death, which happened two days subsequently, no trace of a preparing or repairing process appeared; nor was there any evidence of effusion of the contents of the bowels'—(*having taken place?*).—Mr. Travers, *in Edin. Journ. of Med. Science, January*, p. 86.

Observations.—Mr. Travers seems here to have confounded together, or to have considered as identical, the process of putrefac-

tion and that of mortification. This is a common mistake, and yet no two things can well be more different,—one taking place only in dead, the other only in living matter.

What is meant, in the last paragraph, by the *preparing* process which the author seems to have expected, is more than we can pretend to explain; but we may add, that some intimation should have been given of the part of the gut (with reference to its thickness) which had been thrown off; that is to say, we should have been told whether the 'cylinder' ejected consisted of the *mucous* coat of the intestine simply, or included more than that part. It possibly may have been only an albuminous secretion thrown out upon the inflamed mucous surface, and moulded in the shape of the part which secreted it.

As to the fact itself of a portion of the colon being discharged by stool in dysentery, such an occurrence, we may observe, is not very rare; but opportunities of examining the parts affected very soon after such an event, are not often to be met with, and should therefore be taken proper advantage of when they do occur.

VI. *Tumour of Great Size, successfully extirpated from the Neck.—Case.*

Case.*—In the month of October, 1813, the reporter of this case (Mr. Bell) was consulted by an eminent surgeon in the north of England respecting his lady, who had got, just over the angle of the jaw on the right side, a glandular tumour, moveable, free from pain, and about the size of a large field bean.

This tumour or enlarged gland, as it is called, had been present for many years, and existed at the same time, when another gland, enlarged to the size of a plover's egg, had been removed from the edge of the sterno-mastoid muscle; and when two others, at different periods afterwards, had been extirpated from parts in the neighbourhood by a judicious and careful surgeon.

At these times, however, this gland had been allowed to remain, as well on account of its small size, as because it occasioned no uneasiness; but now (Oct. 1813) it began to increase in size, and it was proposed, therefore, to remove it. On inquiry, however, it was discovered that the lady was pregnant; and therefore it was determined to defer the operation for some time, as there seemed to be no immediate necessity for it, and as it was feared it might be attended with some inconvenience to one in her situation.

Towards the beginning of 1814, the tumour increased in size, gradually, as it would appear, and continued so to do until the confinement of the lady, in the fourth week in May, when its growth became so rapid, that she was taken to Edinburgh, a distance of one hundred and forty miles, as soon as she was able to travel—that is to say, in the early part of July.

* Extracted from a communication by Mr. George Bell, of Edinburgh, inserted in the Edin. Journ. of Med. Science for January, p. 61.

At this time the mass extended from one inch behind the mastoid process to the angle of the mouth, passing in its progress below the ear (the ala of which was much displaced or raised up by it) over the angle of the jaw, over the parotid gland to within an inch and a half of the external canthus of the eye, and over the edge of the os malæ. From the angle of the mouth it proceeded downwards to the top of the sternum, whence it ascended with a sweep to behind the mastoid process, crossing and covering the sterno-mastoid muscle in its progress.

The circumference of the tumour, at its measurable base, was now twenty-nine inches. There was no pain in it, and it was inconvenient from its weight and deformity alone. It was moveable; and the whole mass moved together when it was taken hold of, and the head kept steady. The skin on the surface *below* the level of the lower jaw was almost universally inflamed, and in most places even ulcerated. The ulcerations, however, did not seem unhealthy, and the skin *above* the level of the jaw was sound and uninflamed.

The motions of the head were perfect, as were the actions also of breathing and deglutition. The pulsations also of the temporal artery were distinguishable, and those of the common carotid were to be felt at the anterior edge of the sterno-mastoid muscle.

The great size of the tumour—the enlargement of the veins upon its surface, which rendered the loss of much blood probable—the apparent impossibility of avoiding many large arterial branches—and the probability of the parotid gland being engaged in the diseased mass, taken together, furnished strong reasons against any attempt being now made to remove it by an operation. Nevertheless the hopeless condition of the patient, if abandoned to nature (arising from the increasing size of the tumour, and her decreasing strength), rendered such an attempt pardonable and proper; and therefore, with her own concurrence, it was determined on in consultation, a few days after her arrival in Edinburgh.

Accordingly, on the 11th July, the tumour was removed by Mr. Bell, with the greater part, or perhaps we should say, the whole of the diseased skin attached to it, the sound skin on the face being suffered to remain. In the course of the operation, the parotid gland, to which the tumour adhered firmly, was laid bare, and was found healthy. The common carotid artery also, and the internal jugular vein, were exposed, and the omo-hyoideus muscle was divided. But no important arterial branch was divided, except the inferior thyroid, and the entire quantity of blood lost did not exceed a pint; and this, we are told, came chiefly from the cutaneous veins at the commencement of the operation.

The patient bore the operation well, although it was necessarily very tedious; and the wound, though large, and only partially covered with skin, healed so kindly and so rapidly, that she was enabled to return to England quite well, as it would appear, within the seventh week after the performance of the operation.

On examination, it was found that the entire mass removed

weighed four pounds and a half (*avoird.?*) Externally, it seemed as if lobulated; but on cutting into it, the lobules were seen to lose themselves in the main body of the tumour. The texture internally was pretty uniform, like that of a compact, indurated, lymphatic gland; but in some few places *striæ* were to be seen, indicating an approach to something like the commencement of true *scirrhus*.

It is painful to add, that the sufferings of this unfortunate lady did not terminate here; for it appears that in the course of a few months afterwards indurations and ulcerations began to take place in other parts; under which, with varying success, she continued to struggle, until the scene finally closed upon her in March 1816.

VII. *Wound of the Abdomen, with Protrusion of the Stomach, &c.—Case, &c.*

Case.*—A woman, aged fifty-three, of a delicate habit of body, and the mother of nineteen children, inflicted on herself with a razor, in a fit of despondency, a transverse wound, which divided the parietes of the abdomen a little below the umbilicus to the extent of three inches. This was at noon on the 18th October, 1819, and she was received into St. Thomas's hospital about half-past six o'clock on the same day.

At this time she was exceedingly faint and exhausted,† the pulse upward of one hundred, and irregular; the countenance pale and dejected; and the diaphragm irritable. But the surface of the body was moderately warm; there was but little pain in the abdomen; there was no vomiting, nor any actual hiccup; and it did not appear that much blood had been lost.

On examination, it appeared that the greater part of the large curvature of the stomach, the arch of the colon, and the whole of the large omentum, were protruded and strangulated at the wound. The omentum, also, it was found, was detached to a considerable extent from the stomach; and in this latter viscus two wounds were discovered,—one superficial, about half an inch in length—the other penetrating, and capable of admitting a large probe.

A small portion of the coats of the stomach, including the penetrating wound, was now nipped up, and tied with a silk ligature.‡ The external wound was then dilated in a vertical direction, and the protruded viscera returned into the cavity of the abdomen. After this, the opening was closed by means of the quill-suture, warm fomentations were applied to the parts, and the patient was ordered to be kept without food or drink.

* Extracted from an interesting communication by Mr. Travers, on wounds and apertures of the stomach, given in the Edin. Journ. of Med. Science for January, p. 81.

† She had been, it appears, concealed after inflicting the wound, until discovered by her family a short time before being brought to the hospital.

‡ The ends of the ligature were cut off close to the knot, and nothing more was ever heard of it. It passed doubtless, as usual, into the stomach, and was discharged unnoticed through the bowels.

It is proper to observe, that the patient suffered exceedingly from pain during the time employed in returning the viscera into the abdomen, and that this operation was not accomplished without much difficulty, in consequence, as it would appear, of the violent resistance offered by the diaphragm, notwithstanding the entire relaxation of the abdominal muscles.

After some febrile reaction of no great severity or endurance, the condition of the patient improved so much, that on the seventh day she took food with an appetite, and retained it without inconvenience. The action of the bowels also was regular—the discharges healthy—the pulse moderate—the tongue clean—and the wound in the abdomen nearly healed.

On the following day, however, a slight exacerbation took place, which, however, did not continue long. After this her recovery was progressive until the 3d November (seventeenth day), when she was suddenly attacked with rigours, and other symptoms of peritoneal inflammation. For these, leeches to the abdomen and laxatives were employed, and with speedy relief. In a few days more, the abdominal wound was perfectly healed; and on the 23d Dec. the patient, who had for some weeks been permitted to walk about the ward every day, was discharged from the hospital 'quite well.'

Observations.—To this case, as it appears in the original, Mr. Travers has added a kind of essay on wounds and apertures of the stomach, under the different forms in which they occur. From this part of his communication, however, we can draw but little for the entertainment of our readers, as the observations contained in it are chiefly founded upon, or illustrated by, references to cases already known to the profession.*

Towards the close of the article, also, he takes an opportunity of offering a short vindication of an opinion delivered by him in his work on 'Wounds of the Intestines,' relative to the superiority of the *continued* over the *intercepted* suture in such cases. The soundness of this opinion has, it appears, been questioned by Mr. Sam. Cooper, in the *last* edition of his valuable Dictionary (*art.* Wounds, p. 1258); and the reply of Mr. Travers will not, we fear, induce him to make much alteration (on this point) in the *next*. We may add, however, that the entire article by Mr. Travers is well worth perusal, and trust he may be induced to continue his researches on a subject so interesting and important.

VIII. *French Clinical Surgery.—Fistula cured by the Chlorate of Lime.—Rev. Méd., Janvier* 1826.

Jean Christien Lemann, aged 16, of a lymphatic temperament, after much fatigue, on the 9th February, began to feel considerable pain in the calf of the left leg. Three months afterwards, the pain having continued to be felt, a phlyctæna appeared about the third

* One original case is referred to, which we have noticed in another place, (p. 368), under the head of 'Sloughing of the Colon,' q.v.

of the way down the leg, behind the upper edge of the fibula; and opening itself, discharged a mixture of blackish serum and pus, the suppuration continuing for some time; the opening, however, being repeatedly closed and re-opened. On the 4th November the patient came into the hospital of La Pitié. The external orifice of the fistula was found to be of small extent, and its depth about three inches, almost transversely as to the axis of the leg. The bones were not diseased; nothing was felt by the probe but the soft parts; and a considerable quantity of sanious pus was discharged daily: for the space of about two inches all round it, there was a little swelling, redness, and tenderness to the touch. The treatment was commenced by emollient poultices; after which a compressing and 'expulsive' bandage was resorted to; but no benefit was obtained; the suppuration increased, and continued very unhealthy. M. Lisfranc then prescribed injections of chlorate of lime, to be made by means of a small syringe. This application did not at first excite any pain, and it was continued for four days, during which time the suppuration became more abundant, but improved in quality: a little increase of pain was now caused, as well as of swelling and redness, and even symptoms of inflammatory fever; and the use of the chlorate of lime was suspended, it having produced the desired effect, that of changing the mode of vitality in the fistulous tract. Emollient poultices were again applied, and the inflammation decreased, the suppuration now at the same time diminishing: and when almost every symptom of irritation had disappeared, a compressing bandage, which was employed for the four last days, completed the cure on the 25th November; the disease having for nine months previously resisted the ordinary measures.

IX. *Employment of Extract of* BELLADONNA *in Cases of extreme Sensibility of the Eyes.*

MARCHE, aged 49, of sanguine temperament, had suffered twelve days from ophthalmia of the right eye, which he could not trace to any particular cause. The ocular mucous membrane was red, and the pupil, which was contracted, became obliterated when the eye was exposed to a feeble light; the pain, which had been so great as to prevent sleep, being at the same time greatly augmented. Recourse was twice had to general bleeding; twenty-five leeches were applied to the temples, and stimulating pediluvia were employed, by which means the inflammatory symptoms were for the most part subdued; but the pain and contraction continued, and did not allow the patient the least rest. Frictions were then employed at the base of the orbit, with extract of belladonna, diluted with water. Two hours after the first application the pain was less severe, the pupil began to dilate, and the patient was able to sleep. The next day the benefit was more marked, and the pain decreased, and the pupil dilated daily, the patient being enabled to bear increasing degrees of light: and on the eighth day of the employment of the belladonna, the cure was so complete, that no difference could be seen between the eye that had been affected and the other.

Caroline Henry, aged 18, of a lymphatic temperament, had for some time had diseased eyes, partly attributable to her trade as a mantua-maker; and her menstruation had always been irregular. Being attacked with simple acute ophthalmia, she had recourse to cold lotions, which, after some days' continuance, checked the lachrymation, redness of the conjunctiva, and tumefaction of the eyelids; but considerable pain remained, and, above all, a sensibility to light, which prevented the patient from opening her eyes in the daytime. On this account she became a patient of La Pitié. As very little inflammation was found to remain, frictions with the belladonna were immediately employed, and in six days all the symptoms were completely dispersed.

Joseph Festori, aged 20, *fumiste* (curer of smoky chimnies), of a lymphatic temperament, and subject to ophthalmia, had a severe return of one attack, and came into the hospital. His eyes were red, painful, dry, burning; the lids œdematous; and he had headach. These symptoms were successfully combated by antiphlogistics, by two bleedings from the arm, of twelve ounces each, and by the application of fifty leeches to the temples. Revulsives directed to the intestinal canal produced a good effect. Nevertheless, although the inflammatory symptoms yielded for the most part, much pain of the eyes remained, with troublesome lachrymation, and marked contraction of the pupil; and the least light or brightness was insupportable. M. Lisfranc ordered frictions with the belladonna, and an immediate amendment took place; so that at the end of five days the pupil was no longer contracted, and there was no lachrymation or pain.

X. *Vaccination.*

M. Dutrouilh, of Bourdeaux, in a letter to the French Academy of Medicine, says, that among more than 6000 individuals whom he has vaccinated in the course of twenty years, not one has been attacked with small-pox, although that disease has been frequently epidemic at Bourdeaux during that period. M. Devilliers reports, that of 215 deaths in private houses, in the *twelfth arrondissement* of Paris, during October last, ninety-one were from small-pox, and none of these individuals had been vaccinated. Those who had been vaccinated resorted with impunity among those affected with small-pox; and in those establishments where no persons are admitted who have not been vaccinated, the small-pox did not appear. M. Salmades reports, that in all the experiments of a second vaccination made by a committee appointed for that purpose, no second effect has been produced; and he observes, that practitioners do not always distinguish the true cicatrix from those which are imperfect, and from which it differs in being more figured, or honeycombed (gaufrée), and radiated from the centre to the circumference. One or two instances have lately come to our knowledge, in which there is some reason to believe that the second vaccination took effect, although the first, performed some years before, was not in any respect imperfect. As regards the appearance of the cicatrix,

many vaccinators doubtless pay too little attention to it. The description of it given by Dr. George Gregory, in the Medico-Chirurgical Transactions, appears to us to be very correct, and worthy of insertion in this place; for, although it has been presented to the public before, we find many practitioners much in doubt concerning the proper criterion of security.

'When the scar on the arm is perfect, that is, distinct, circular, radiated, cellulated; but, above all, when it is small, so that it may be covered by a pea, the secondary affection (if from peculiarity of habit, or any other less ascertained cause it does occur,) will be slight, and hardly deserve the name of a disease. On the other hand, whenever the scar is large, and bears the marks of having been formed by high local inflammation, and wants the other distinctive characters just enumerated, the chance of small-pox occurring in after-life will be greater, and, *cæteris paribus*, there will be a stronger likelihood of its proving severe.'

It is very probable, that, in the instances above mentioned, in which the specific effects of the vaccine virus were supposed to have been twice manifested in the same person, the evidence was not complete in this particular. Not many weeks ago we saw an instance in point. A young lady, of a scrofulous habit, was much alarmed by the fear of small-pox, which disease was prevailing near her residence, although she had a very strong certificate from a respectable surgeon, residing at a distance, of her having twenty years ago had the cow-pox in the most satisfactory manner. But on examining the cicatrix it was found to be large, spreading, and irregularly oval, besides being much deeper and more distinct than the usual vaccine cicatrix even of more recent date. A second vaccination was recommended, and the vesicles went through all their stages with great regularity.—EDITORS.

XI. *PULMONARY ABSORPTION.*

THE important relations of this subject lead us to notice the researches made by M. Piollet, a French military surgeon, a report of which has been made to the Parisian Academy. *(Arch. Gén.)* This gentleman has, it appears, made a series of experiments to elucidate the subject, of a date more recent than those made by M. Mayer, which were noticed in our number for May 1825. His first attention was to the question of the penetration of water into the air-passages in cases of submersion, on which there has so long been a difference of opinion. The fluid selected for the experiments by M. Piollet was oil, as he considered that although the use of coloured fluids enabled the experimenter to ascertain the fact of their penetration into the lungs, it did not give him any power of appreciating the quantity so admitted. When animals were drowned in oil,—dogs, cats, or rabbits being the subjects of the experiment,—he always found from two to four ounces of that fluid in the air-passages; and there was a constant relation between this quantity and the capacity of the respiratory apparatus. The reporters on these trials of M. Piollet think, that the disagreement subsisting on

this subject depends on the circumstance of water being found or not found in the lungs of drowned persons, according as such unfortunate individuals have or have not made attempts to breathe after falling into the water. With respect to the obstacle created by this penetration of fluid towards the recovery of drowned persons, M. Piollet has satisfied himself by some further experiments: for instance, he strangled six dogs in the same manner, having previously injected into the lungs of three of them four ounces of water; and found that the dogs, into the lungs of which such injection was made, ceased to move sooner than the others, and could not afterwards be brought to life, whilst all those of which the lungs were not injected were revived. Directing his inquiries to the manner in which the water which has penetrated into the lungs of drowned persons is removed when they are resuscitated, M. Piollet thinks he has proved it to be by absorption. Having submersed several animals in a solution of prussiate of potash, he was able to ascertain the presence of that salt in the pulmonary veins, in the left cavities of the heart, and in the whole arterial system; and for the purpose of discovering the time required for conveying the fluid employed into the arterial and venous blood, he laid bare the crural artery and jugular vein of a dog, into the lungs of which he had injected four ounces of a solution of prussiate of potash; and withdrawing a little blood every minute from the artery and from the vein, he found traces of the salt to appear at the fourth minute in the arterial, and at the seventh minute in the venous blood. Having killed and opened the animal ten minutes after making the injection, he found traces of the salt in the right cavities of the heart, but less than in the left, and also in the bronchial glands, in the kidneys, and even in the urine. In the last place, M. Piollet made some experiments tending to prove that pulmonary absorption applies to gases, vapours, and miasmata, as well as to liquids: he confined his head in air charged with turpentine, alcohol,* and putrid miasmata, the rest of his body being in a healthy atmosphere, and found, after some minutes, that in the first case his urine had acquired the odour of violets; in the second he experienced all the phenomena of intoxication; and in the third, the intestinal gases and fæces exhaled a decidedly cadaverous odour.

Section III. — Intelligence relating to the Medical Sciences.

I. *Farming the Sick Poor.*

We are gratified to learn, that the attempt made in our last to place this subject in a proper light has been favourably received; not that when we do what we know to be right we are over-anxious

* As respects turpentine and alcohol, we can vouch for the accuracy of the author's conclusions.—Editors.

for general approbation, but because we doubt not that a most salutary reform will follow a due consideration of the abuses inseparable from the present mode of farming medical attendance on paupers. Independent of some further proceedings in Warwickshire, we learn with sincere pleasure that, in the neighbouring county of Leicester, the subject is exciting some attention. A meeting was, it appears, held at Leicester on the 17th March, according to circular invitations from Mr. Smith, and attended by fourteen of the principal surgeons of the place, and at which Dr. Arnold took the chair. Among other resolutions, we observe the following to have been unanimously agreed to:—

'That it appears to the meeting that the practice of farming the parish poor in sickness is productive of numerous disadvantages to the public, to the sick poor, and to medical practitioners.

'That the persons present at this meeting consider it to be incumbent on them, after attending to the statement made to them by Mr. Smith of Southam, in addition to the information that has been laid before them by some of the gentlemen present, to endeavour by their influence and by their example to discourage such practice.

'That without coming to any hasty decision concerning the best plan of effecting so desirable an object, they consider that proposed by Mr. Smith as deserving the fullest consideration, and that he has the permission of this meeting to publish the foregoing resolutions in any way he may think proper.'

We highly approve of the spirit and tone of these proceedings, and consider them as an earnest of the zeal and judgment with which the necessary inquiry will be entered into and conducted.

II. *Varicose Veins.—Peculiarities in their Structure, &c.*

'In *varix* of the lower extremities we have never, when the disease has been of long standing, been able to find *valves* in the diseased veins.

'When a portion of the saphena vein in such cases is excised, it immediately contracts, so as scarcely to admit the passage of a probe. The inner coat of the vein is then found corrugated into longitudinal folds; while the external is considerably thickened, and possesses much elasticity and strength. This species of varix we would call *active varix*, to distinguish it from a much rarer species, in which great varicose distension of the veins takes place, without any increase of thickness in their coats. This latter we would call *passive varix;* it occurs in all parts of the surface of the body.

'We have been favoured with a drawing of a woman at present in the Meath Hospital, Dublin, in whom the face, body, upper and lower extremities, are disfigured with the latter species of varix. The disease commenced about her twentieth year.'—*Anon. in Edin. Med. Journ. for Jan. last*, p. 238.

For the fact stated in the first paragraph, the writer, it is proper

to add, acknowledges himself to have been originally indebted to Mr. Hewson, of Dublin.

III. *Administering Medicine by Steam.*

It has been usual, for a few years past, when speaking of the *ne plus ultra* of perfection in things even not strictly connected with the arts, to say, 'it will, by and bye, be done by steam.' We have to congratulate the medical profession on the prospect of an incalculable improvement in *our* art, which we apprehend will save both practitioners and nurses endless trouble. In a list of new patents lying before us we read the following:—

'To Charles Whitlaw, of Bayswater Terrace, Paddington (one of the most notorious and impudent quacks by whom the gullibility of John Bull is imposed on), for his improvement in *administering medicines* by the agency of steam. 18th Feb. Six months.'—(Allowed for enrolment of specification).

We trust that this *worthy* will find that John has lately swallowed more than he can well digest, and that steam has already furnished more than its share of the provision.

IV. *Italian Physicians and Apothecaries.*

'Here I cannot help adverting to another custom, prevalent not only in Florence, but in other Italian cities, where the apothecary's shop is the physician's rendezvous; for his messages are left, not at his own house, but at the shop of the apothecary whom he patronises, or who patronises him.

'The first thing the Italian practitioner does in the morning, is to hurry to his apothecary's shop, for the purpose of learning what orders have been left for him. Meetings are held by physicians, and appointments are made at the shop of the apothecary; and there the young physician who is looking out for practice must loiter away his days;—I say must, for if he does not do so, he will not succeed. Every stranger who is in want of a physician, sends for one to the apothecary; and every one who has no family physician does the same.' From *Hamburgh Magazine of Foreign Literature*, in *Edin. Med. Journ. Jan.* P. 240.

V. *Croton Oil Soap.*

A soap has been prepared from the combination of the best croton oil with soda, by Mr. Morson, the scientific chemist of Southampton-row, Russell-square, to whom the profession is indebted for the introduction of the sulphate of quinine, and some other foreign remedies, into British practice. The croton oil soap is very admirably adapted for exhibition in the form of pills, or for combination with pill masses. From the trials we have made of it, it seems to act mildly, and equally efficaciously as the uncombined oil; its combination with the soda diminishing its irritating and griping properties, without lessening its cathartic operation. The dose of

the soap is from one to three grains, two grains being generally a medium dose for the adult subject.

VI. *On the Poison of the Toad.*

THE vulgar have long and very generally believed, that the common TOAD is furnished with a peculiar poison; and there is now, it appears, reason to conclude, that this opinion, though treated by modern naturalists as an idle prejudice, is really founded in truth.

This we state on the authority of a paper, lately read before the Royal Society of London, from Dr. John Davy, who alleges, that the poisonous matter is contained in follicles, lodged chiefly in the *cutis vera*, and about the head and shoulders; but distributed also generally over the whole body, and even on the extremities.

On the application of pressure, this poisonous matter, as we are told, exudes in a fluid state, or is squirted out; and sometimes even to a considerable distance, and may thus be collected in quantities sufficient for examination.

From the *report* to which we are indebted for these details, it would appear as if Dr. Davy had examined this fluid rather as a chemist than as a physician; for that *report*, though sufficiently copious with respect to its relations to dead matter (that is, its *chemical* properties), contains nothing relative to its action on the living system, or its *poisonous* qualities, except that it is extremely acrid when applied to the tongue, that it acts even upon the hands, that it produces no ill effects when introduced into the circulation through a wound, and that the author *conjectures* it may serve to defend the toad from the attacks of carnivorous animals.

In this respect, however, the reporter may have done injustice to Dr. Davy—a thing not unlikely, considering the very unsatisfactory manner in which the article alluded to is drawn up.—Vide *Ann. of Phil.*, Feb. p. 137.

VII. *State of Medicine in Spain.*

WE are glad to find, by what we believe is the last number of the Journal of the Cadiz Medico-Chirurgical Society (Periodico de la Sociedad Medico-Quirurgica de Cadiz), that amidst the general prostration of intellect in that noble but misgoverned country, the physicians and surgeons are not altogether inactive or quite unacquainted with the progress of their art in other countries. The third volume contains notices of the preparation and mode of action of quinine and cinchonine, as well as of some of the Spanish mineral waters; observations on the use of acetic acid in various diseases, and of the *aleonorque divino*, an astringent and tonic medicine, of the genus *quercus*, which was at first considered particularly useful in tubercular phthisis, but, as might have been expected, has not proved so on further trial. The number contains also some remarks on the effects of moxa; cases of scirrhous mammæ cured by the repeated application of leeches; and a collection of dissections of cases of yellow fever. It is also some proof that the practitioners of the

south of Spain are zealous in the prosecution of pathological knowledge, that they now make frequent use of the stethoscope.

VIII. *Regulations respecting the Medical Studies required for Admission into the Medical Service of the Navy.*

Victualling Office, 23rd February, 1826.

THE right honourable the lords commissioners of the admiralty having been pleased to direct, 'that no person be admitted to be a candidate for the situation of assistant surgeon in the royal navy, who shall not produce a certificate from one of the royal colleges of surgeons of London, Edinburgh, and Dublin, of his fitness for that office; nor for that of surgeon, unless he shall produce a diploma, or certificate, from one of the said royal colleges, founded on an examination to be passed subsequently to his appointment of assistant surgeon, as to the candidate's fitness for the situation of surgeon in the navy; and that in every case the candidate producing such certificate, or diploma, shall also undergo a further examination before the medical commissioners of the victualling board, touching his qualifications in all the necessary branches and points of medicine and surgery for each of the steps in the naval medical service;' the commissioners for victualling his majesty's navy, &c., do hereby signify, for the information of those persons to whom it may relate, that these regulations and directions will be strictly adhered to in future; and further, that previously to the admission of assistant surgeons into the navy, it will be required that they should have received a classical education, and possess in particular a competent knowledge of Latin; also,

That they should have served an apprenticeship, or have been employed in an apothecary's shop for not less than two years.

That their age should not be less than 20 years, nor more than 26 years.

That they should have attended an hospital in London, Edinburgh, Dublin, or Glasgow, for 12 months; and

That they should have attended lectures, &c. on the following subjects, for periods not less than hereunder stated, viz.

Anatomy - - - -	18 months.
Surgery - - - -	18 ditto.
Theory of medicine - -	12 ditto.
Practice of ditto - - -	12 ditto.
Chemistry - - - -	6 ditto.
Materia medica - - -	6 ditto.
Midwifery - - - -	6 ditto.
Actual dissections of the human body	6 ditto.

Although the above are the only qualifications which are absolutely required in candidates for the appointment of assistant surgeon, a preference will be given to those who, by possessing a knowledge of diseases of the eye, and of any branch of science connected

with the profession, such as botany, medical jurisprudence, natural philosophy, &c. appear to be more peculiarly eligible for admission into the service.

It is also to be observed, that, by the rules of the service, no assistant surgeon can be promoted to the rank of surgeon until he shall have served full three years in the former capacity; and the board have resolved that not any diploma or certificate of examination from either of the aforesaid royal colleges, shall be admitted towards the qualification for surgeon, unless the diploma or certificate shall be obtained on an examination passed after a period of not less than three years' service as assistant surgeon.

By command of the board, &c.

From the above regulations it will be seen, that the very meritorious physicians at the head of the navy and army medical boards are vying with each other in promoting the respectability of the departments over which they so very ably preside. We consider that the profession is much indebted to Dr. Burnett, the medical commissioner of the navy, for the high qualifications he exacts from those who present themselves before him for medical appointments. In no way can the respectability of any class of professional men be better promoted than by requiring of them full, comprehensive, and complete courses of initiatory and professional study. In this commendable desire to keep pace with the spirit and public opinion of the age, with the present advanced state of general and professional science, and even with the wants which grow out of this state, are the corporate bodies, to whom the encouragement of our science has been committed, to be the last to better themselves? What will the College of Surgeons say, when they find that a much more comprehensive and full period of professional study is now required of an assistant surgeon in the navy, than of a member of their own body? And when will the highest corporation in the profession awake to their interests, and assert, on the only sound basis, namely, medical learning and science, their own superiority, by requiring from all, that a due period of professional study shall have been observed before appearing before them? Edinburgh and Aberdeen have already commenced that reform which the state of science and of society requires: let it not be said that the metropolitan colleges were the last to imbibe that spirit of improvement which is now so generally diffused around them. We do not speak of rash innovations, but of those salutary regulations and changes which the progress of science, the established order of things, and the wants and feelings of society require. We know that it is the common efforts of those, whose interest it is to have abuses perpetuated, and monopolies prolonged and even extended, to decry those* who desire to see no particular class of men favoured by statutes and charters but those who possess learning and science, and who consider that, in this age of advanced knowledge, and in this land of liberty, all who are equally learned, equally instructed,

* Quis tumidum guttur miratur in Alpibus?—*Juv.* S. 13. v. 162.

equally correct in their conduct, and hence equally qualified, ought to possess equal rights and immunities in the exercise of a liberal profession. That this consummation will one day be attained, we cannot have the least doubt, unless we conceive that misrepresentation shall so far tend to blind those in power, as to confound their ideas of right and wrong, and lead them to suppose, that, although medicine is the practical application of learning and the sciences to the highest purposes of our nature, yet that the perfection of medical knowledge consists in the abandonment of all science and of all learning to Jesuitical practices and manœuvres, and to the petty and mean intrigues, which corporations and monopolies engender. Whatever may have been the consequences to ourselves, we shall always recollect with satisfaction, that, in our capacity of journalists, we were the first in the nineteenth century to assert the propriety of a more equitable and liberal policy as respects the class of the profession to which we belong; and that whilst we entertained good will to all our brethren, we espoused the propriety of doing away with all distinctions but those which are founded in learning and science. These opinions we shall not compromise. They have been formed from no very limited view of the state of our profession. And we shall continue to estimate a school or college in proportion as it requires of its members, and unsparingly exacts, the requisites now stated: and "as a tree is known by its fruit," we shall respect those whom it sends forth from its bosom according as they may be thus endowed. It may yet fall to our province to use our weak endeavours in behalf of those whom monopolies injure and corporations oppress,* and we may urge our endeavours in other channels than through a single professional journal: for public opinion is not without its influence, even in medicine; and, although it is not aroused or influenced by motives altogether the same with those which awaken the members of a profession to the recognition of their immunities, yet it is not lulled into apathy, soothed into acquiescence, scared into submission, or even led on to hope, in the manner of those who are more immediately concerned, —who feel the degradation, and yet are afraid to act; who think of its consequences, and yet dread giving utterance to their thoughts,† and who, whether from apathy, fear, or hope, avoid appearing where numbers may not hide their individuality, and prefer therefore the known consequences of degradation to the contingent evil of asserting their rights.

Clinical Report of the most prevalent Diseases during the preceding Month.

March till the thirteenth was warm and showery. From this time till the twentieth the days were fine and dry, with frosty nights. The latter part of the month has been very cold, and in the country

* Quæ venit indignè pœna, dolenda venit.—*Ovid.* E. 4. v. 8.

† 'Tu es venu au monde pour endurer: endure, souffre, et tais toy.'—*Montaigne.*

there has been a slight fall of snow, which did not, however, lie for more than a few hours. The wind has been almost constantly blowing from the east.

Affections of the lungs have been very prevalent during this month, though in very different degrees. In some individuals there has been merely a cough, attended with copious expectoration, but without soreness of the chest or difficulty of breathing. In others, dyspnœa has been more oppressive, though still without confining the patient to his house, and disappearing after a few days, without any marked source of relief. In a few the disease has been very acute; but in by far the greater number it has endured for two or three weeks, affecting the voice, giving rise to occasional severe paroxysms of coughing, but without fever or any very great derangement of the general health.

Several cases of typhus fever have presented themselves, some of which were evidently attended with inflammation of the mucous membrane of the bowels: In one woman, to whom leeches were applied with decided relief, the abdomen was tense and painful, the diarrhœa very severe, and there was delirium, with a low and scarcely-perceptible pulse. The eyes were glassy and bloodshot. We did not see her till she had relapsed, five weeks from the original attack. Under all circumstances, however, we determined upon depletion, and the woman is now again convalescent. The husband of this individual, who was also attacked with pain in the bowels, diarrhœa, quick pulse, burning skin, and all the symptoms of incipient severe fever, the application of twenty leeches to the abdomen restored to health in a few days. We have mentioned these cases as examples of fever attended with inflammation of the mucous membrane, which was perhaps in these instances the efficient cause of the febrile symptoms. They are specimens also of that kind of fever upon which Broussais has so imprudently founded his exclusive doctrines. The practice has in it nothing novel.

Having some time since examined the body of a child, who died after suffering for several months from that assemblance of symptoms to which the generic term of marasmus has been applied, and having found the bowels matted together with coagulable lymph, though she had scarcely ever complained of pain, we have latterly been induced to apply leeches in such cases, whenever we have discovered the slightest pain on pressure, or that the child has at intervals complained of the bowels. The practice has certainly in very many instances afforded great relief, where every previous measure had been useless.

The muriate of lime has very frequently been recommended in bronchocele, and several instances of its efficacy have been given in a late number of Hufeland's Journal. It has succeeded with us, where iodine had failed, and the tumour has diminished much more rapidly than with the employment of the latter medicine, even where it has been useful. We are now using it in several cases of glandular disease.

Rheumatism has been frequent, and we have met with many instances of rheumatic gout.

THE METEOROLOGICAL JOURNAL,

From the 19th of FEBRUARY, 1825, to the 20th of MARCH, 1826.

By Messrs. HARRIS and Co.

Mathematical Instrument Makers, 50 High Holborn.

February.	Moon.	Rain Gauge.	Therm. 9 A. M.	Therm. Max.	Therm. Min.	Barom. 9 A. M.	Barom. 10 P. M.	De Luc's Hygrom. 9 A. M.	De Luc's Hygrom. 10 P. M.	Winds. 9 A. M.	Winds. 10 P. M.	Atmo. Variation. 9 A. M.	Atmo. Variation. 2 P. M.	Atmo. Variation. 10 P. M.
20		16,	46	47	38	29 72	29 93	66	74	WSW	W	Fine	Fine	Rain
21		7,	39	47	47	30 06	30 06	80	85	W	SSW	——	——	——
22	○		49	51	47	29 85	29 89	84	84	WSW	SW	Clo.	Clo.	Fine
23		33,	49	49	33	29 76	29 79	85	75	WSW	WNW	S.Rn.	——	——
24			36	46	41	30 03	30 03	76	68	WNW	WSW	Fine	——	Rain
25		27,	50	52	35	29 87	30 03	87	75	W	W	——	——	Fine
26			41	47	41	30 26	30 28	75	67	W	SW	——	Fine	——
27			45	51	43	30 16	29 96	76	84	WSW	SW	——	——	Clo.
28			47	54	42	30 08	30 06	82	76	WSW	W	——	——	Fine
1	☾		46	51	46	29 92	29 77	76	77	SW v	SW	——	——	——
2		18,	50	57	47	29 65	29 62	80	86	SSW	SW	——	——	Rain
3		29,	49	49	41	29 56	29 72	89	87	W	SW	Rain	Rain	Fine
4		10,	47	49	40	29 52	29 62	86	80	SW	WNW	——	Fair	——
5			41	49	35	29 69	30 03	75	73	SW	SW	Fine	Rain	——
6		10,	39	46	41	30 04	29 73	75	88	S	SW	——	——	Fair
7			51	54	48	29 71	29 81	89	88	SW	SW	Fair	Fine	Fine
8	●		50	56	47	29 93	29 92	88	80	S	S	S.Rn.	——	——
9			55	62	48	30 02	30 15	75	72	S	E	Fine	——	——
10			57	66	51	30 20	30 20	70	68	E	E	——	——	——
11			47	51	42	30 18	30 24	61	72	SE	ESE	——	——	——
12			49	49	35	30 31	30 32	62	68	E	ENE	——	——	——
13		7,	41	47	38	30 32	30 12	75	78	ENE	ENE	——	——	——
14			45	50	41	29 85	29 83	78	73	SSW	SW	Rain	——	——
15		10,	45	50	35	29 73	29 84	85	68	W	NW	——	——	——
16	☽		40	45	32	30 04	30 19	75	62	NE	ENE	Fine	——	——
17			37	44	32	30 26	30 22	67	68	ENE	SSW	Fair	——	——
18		4,	36	47	39	30 12	29 85	73	73	WSW	WSW	Fine	——	Rain
19			42	45	37	29 75	29 87	74	77	W	NW	——	Rain	Fine

The quantity of rain fallen in the month of February was 1·34.

NOTICES TO CORRESPONDENTS.

The Readers of the Medical Repository may perceive, from this Number, that it is our intention to extend our monthly limits to at least six whole sheets, or 96 pages, and to print the greater part of the work in a closer and more uniform type than formerly, which will be equal to a still farther extension of the limits of the work.

Several Communications are received, and are under consideration.

Literary Notices, &c. cannot be inserted in the body of the work, unless with a very few exceptions, which will rest with the Editors.

Correspondents, and authors of works, or of papers in other Journals, who may wish to have their productions noticed, may send them under cover (post paid) to the Editors, 1 Bulstrode Street, Cavendish Square, or to the Publishers', Fleet Street.

The Index to the preceding Volume will be delivered with the next Number.

Errata in the last Month's Repository.

Page 263, line 28, *for* opposition, *read* apposition.
— 268, — 30, *for* Dec. 1822, *read* Dec. 22.
— 269, — 36, *for* 1·8 inch *read* 1½ inch.
— 270, — 22, *for* penis, *read* fumis.
— 282, — 4, *for* approaching session, *read* present session.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the Editors, to the care of Messrs. T. and G. Underwood, 32 Fleet Street.

THE LONDON MEDICAL

REPOSITORY AND REVIEW.

No. 149. MAY 1, 1826. Vol. XXV.

No. XI.——NEW SERIES.——Vol. II.

PART I.

REVIEW.

I.

PATHOLOGY AND TREATMENT OF DROPSIES.

Researches into the Nature and Treatment of Dropsy in the Brain, Chest, Abdomen, Ovarium, and Skin; in which a more correct and consistent Pathology of these Diseases is attempted to be established, and a new and more successful Method of treating them recommended and explained. By Joseph Ayre, M.D. Longman. 1825. Pp. ix.—242.

Few circumstances are perhaps to be more regretted than that those who publish works on medical subjects should deem it unnecessary to make themselves acquainted with the labours of their earlier predecessors. We make this limitation, because it is certainly true that in every modern work we have references to the compositions of contemporaries, or of authors who have not long passed from among the living; but it is equally true, that there is a most lamentable ignorance of all writings more than half a century old. We are, indeed, compelled to this inference as the most charitable in our power; for if ignorance be not allowed, we can only account for some circumstances by supposing dishonesty. Within the last ten years several works have been published upon dropsy, advocating as altogether a new doctrine its inflammatory origin, and inculcating as a necessary consequence an antiphlogistic treatment. At the same time the medical journals have been absolutely deluged with cases of dropsy cured by bleeding, with polite references to Dr. Blackall, Dr. Abercrombie, Dr. Parry, or some other sup-

posed author of the new practice, as whim or caprice might dictate. Yet it is most true, that in all this nothing is really novel; that from the time of Hippocrates to the present period an antiphlogistic plan has been affirmed as sometimes necessary, and that bleeding has been deemed imperative if the patient was plethoric. There is, indeed, scarcely a single author who has written upon this subject who has not mentioned bleeding among its remedies. Sydenham is, however, an exception. Dr. Wilkes, who most industriously collected every thing upon the subject, says, that 'bleeding is necessary in those dropsies which come from a suppression of some usual evacuation, from falls, violent motions, and the like.' Mead quotes a case from Sponius, 'of a man who was bled twenty times for a dropsy, and by this means was cured.' Dr. Donald Monro says, 'If, therefore, the momentum of the circulating fluids is too great, which is often the case with young people, the patient must be blooded, *although the symptoms of the dropsy manifestly appear.*' In justice, however, to those late authors whose names we have mentioned, we ought to state, that *they* have not claimed for themselves any farther originality than recalling the attention of the profession to facts which had for some years been disregarded. That medical science is greatly indebted to them on this account, is evident; but it has most unfortunately happened, that a tendency to run into extremes has too frequently brought the most valuable remedies into disrepute. This appears to us likely to happen in the present case; and Dr. Ayre, in the volume before us, claims an inflammatory action as in all cases the source of dropsy. This universal extension of the doctrine is the only thing really new in the book; the practice is new precisely to the same extent with the doctrine, viz. in being universally applied. We shall now proceed to lay before our readers the doctrine and its foundations, remarking upon it as we pass forwards.

The first process in theorising is naturally to sweep away every impediment that may proceed from commonly-received opinions. Dr. Ayre, therefore, first attempts to confute the doctrines which attribute the occurrence of dropsy to diminished absorption, or a want of tone in the exhalent system. In neither of these points, however, does he appear to us to have laboured very successfully.

While the veins were believed to be the only absorbing vessels, the experiment of Lower, who produced ascites by tying the inferior cava, so that when the animal died a few hours after, a considerable quantity of fluid was found in the abdomen, seemed to have proved conclusively, that

diminished absorption was really the source of effusion.* Dr. Ayre must excuse us when we give it as our opinion, that, judging from the manner in which he speaks of these experiments, his knowledge of them is all at second-hand. He says, for instance, that that experimenter had overlooked 'the agency of effects incidental to the operation.' He has not, however, at all entered into an explanation of this statement, and has entirely omitted the notice of a former experiment of Lower's, equally conclusive, that obstruction of a large vein will produce dropsy. For he not only tied the ascending cava, after which effusion ensued, but he had previously in another dog tied the jugular veins; and after a few hours all the parts above the ligature swelled, and the animal died in two afterwards, apparently from suffocation: through the whole time not only was there a more than usual flow of tears, but there was an excessive salivation, 'non aliter quam si mercurio assumpto, fluxus ille comitaretur.' On examination after death, all the glands and muscles were distended with limpid fluid, and were somewhat pellucid.†

To us it seems clear that Lower had by no means neglected the concomitant circumstances; because we have two different experiments, in one of which the injury to the surrounding parts must certainly have been slight, and yet effusion had

* A weakness and laxity of the fibres is a frequent cause; for when the vessels do not act with sufficient force, the fluids become of a watery consistence, and the orifices of the exhaling arteries being weaker, allow a greater quantity of liquors to pass through them, *while the veins being weakened in at least an equal proportion, do not absorb so much as they were wont to do.*'—Monro *on Dropsy.*

† We give the whole passage in the original, that our readers may judge for themselves.

'Perforato itaque dextro latere thoracis infra septimam et octavam costam, paulò infra regionem cordis, et immisso digito venæ cavæ situs palpandus est, deinde pectoris latus illud ad venam quam prope compellendum est, quo filum ei facilius obducatur, atque in isto pectoris situ arctè stringendum est vinculum: peracto autem experimento canis mox oblanguet valdè et intra paucas horas expirat. In dissecti autem abdomine magna seri quantitas innatare conspicietur, non aliter quam si ascite diù laborâsset. Quòd ab impedito sanguinis ab arteriis in venas circuitu secerni prius expertus fueram; haud pridem enim venas jugulares subducto iis filo in cane arcto ligaveram, et *post aliquot horas, partes omnes supra ligaturam mirè intumescebant,* et intra duos dies, canis quasi anginâ suffocatus interiit. Toto hoc tempore non solum lacrymæ copiosius fluebant, sed et plurima saliva ex ore profluxit, non aliter quam si mercurio assumpto, fluxus ille comitaretur; post obitum ejus à partibus tumefactis separavi atque expectavi ut partes tumefactæ sanguine extravasato turgerent; sed aliter omnino evenit; utpote nullum vestigium aut colorem ferè sanguinis observare potui; sed musculi omnes et glandulæ sero limpido maximè distentæ et admodum pellucidæ apparebant.'—Lower *De Corde.*

place. But Dr. Ayre reasons as though the abdomen had been opened, and observes, 'that in the human subject coagulable lymph or pus would be poured out upon the surface of the peritoneum.' Now the fact is, that not the abdomen but the thorax was opened; and, therefore, if the effusion was not owing to the obstruction of the vein, neither could it have been attributed to inflammation excited in the peritoneum by the operation;—nor can it be properly attributed to the injury of the chest, or any sympathetic irritation of the peritoneum with the contents of that cavity, for then effusion should have had place only in this instance, and not in a similar experiment upon another vein, when the contents of the chest were not disturbed. But in such an experiment effusion did ensue, and therefore no other deduction is left to us than that it was really the consequence of the ligature of the vein. Nor does the circumstance of entire obliteration of the vena cava by disease negative this deduction, unless at the same time it could be proved that there was neither a correspondent increase of subsidiary veins by which the circulating fluid could be conveyed to the heart, nor that this blood itself had undergone a diminution in quantity, so that the diminished capacity of the vessels was not sufficient for the perfection of the circulation; and as it is impossible with our present means to prove either of these points, we ought not from mere theory to deny fact, nor to oppose supposition to decided experiment. After, however, it is allowed that Lower's experiment is conclusive, that obstruction in the venous circulation gives rise to dropsy, the manner in which it does this still may remain a question; and we are willing to concede to Dr. Ayre, that this is not by diminishing absorption. But farther, this author says, that Lower 'has committed the too common error of reasoning from the lower animals to man.' This remark has struck us with great surprise, because we know no circumstances that can interfere with the analogy between man and quadrupeds in this instance; and we must, therefore, believe, till Dr. Ayre will accurately point out the circumstances that do so interfere, that Lower was correct, and that consequently a similar result would have had place in man. It must, we think, therefore, be manifest, that Dr. Ayre has not overcome the obstacle which this experiment presents to the establishment of his theory.

Neither does it appear to us that he is more successful in proving that effusion cannot be a mechanical process arising from the relaxation of the mouths of the exhalent arteries. His objections on this head are rather specious than solid, and will scarcely bear a near examination.

'The opinion,' he says, 'of a want of tone or energy in the exhalents involves in it one of the two following conditions; viz. either, first, that the fluid of dropsy may escape mechanically from them, and that the fluid thus *mechanically* separated may be *identified* in its sensible and chemical qualities with another fluid which is confessedly secreted; or, secondly, that if the fluid of dropsy be secreted, then that an increase in the quantity of a secretion may continue an indefinite period, under a *decrease* in the energy of its secreting vessels; conclusions to which experience and analogy are alike opposed.'—P. 3.

Before Dr. Ayre had so positively pronounced upon this point, he certainly ought to have informed us what he meant by secretion, in what manner it is performed, by what instruments it is effected, and how the secerning powers act upon the fluids. Physiologists would tell him that the vessels are only the carriers of the fluids, and that the nerves operate those changes which are understood by secretion. Whether this be so or not, however, we cannot see any absurdity in the supposition that the exhalents have, from weakness, permitted an increased separation of the thinner parts of the blood; nor is it necessary to prove that an identical fluid may be mechanically separated, or subjected to the more complicated process of secretion. For all the dropsical fluids that have been examined by Berzelius and Dr. Marcet consisted of serum, having, however, very different proportions of albumen; in none, however, was any product found which does not exist already formed in the blood. The analyses of Dr. Bostock are equally conclusive on this point with those of Marcet and Berzelius. The latter has even supposed some changes to ensue in the fluids after they have been effused; and is Dr. Ayre prepared to maintain that the difference between dropsical fluids and the serum of the blood may not be effected after effusion?

Again, in the latter alternative, that the effused fluid is really a secretion, it is plainly an assumption, that there is a decrease in the energy of the secerning vessels; or, supposing that there is a decrease of their energy, is it utterly absurd to believe that secretion may be imperfectly performed, although at the very same time a greater quantity of fluid is separated? May not these two circumstances go on together, viz. an imperfection as regards those changes which constitute healthy secretion, and a superabundant supply of fluids to be submitted to the instruments of secretion?* Where are the

* In this view of the subject, we have to a certain extent the support of Dr. Wilson Philip. Having laid down as a fact that the nerves are alone concerned in secretion, he accounts for death in apoplexy from the circumstance 'that when a considerable portion of the nervous influence is with-

experience and analogy opposed to any of these suppositions? As respects experience, we certainly know not whence on this point it can properly be derived; and as regards analogy, is not Dr. Ayre aware, that when in health the urine is more abundant than usual, the excess consists not of the peculiar contents of urine, but of the watery part only. Hence Dr. Prout observes, that a deepening of the natural colour of the urine is a necessary consequence of its diminished quantity. The whole force of the author's reasoning amounts to the following truism: the secreting vessels are weakened, they cannot therefore secrete urine. We say true—they cannot operate the complete changes of secretion, but they may separate more fluid which has imperfectly undergone those changes. Dr. Ayre has certainly not satisfied us that there is nothing mechanical in the effusion of dropsy.

Having, as he imagines, entirely set aside these preliminary obstacles, he proceeds to the announcement of his own views, which amounts to this, *that in every case* ' the dropsical effusion proceeds from a morbid action in the cellular or serous tissues, and that this action .... is allied in its nature to inflammation.' This mode of expression leaves us in doubt as to what is exactly meant; but in the course of the essay he explains that it is the lowest degree of inflammation, the higher degree of which produces coagulable lymph, and the highest, pus. Such is Dr. Ayre's plus and minus mode of considering inflammation. It is imposing, not because it is true, (for even if true, it unquestionably has never been proved, and is quite at variance with the observations of John Hunter, to whom we are particularly indebted for our first knowledge of the different inflammations,) but because it appears readily intelligible. Examine it closely, however, and it is impossible to conceive that from a higher or lower degree of the same diseased action, two such different products as pus and serum should result. Now the question between Dr. Ayre and ourselves, is not whether dropsy never arises from a state of the system or of the part decidedly of an inflammatory nature, and benefited by antiphlogistic treatment, but whether it does so in every case. Dr. Ayre concludes in the affirmative, and we are convinced that he is utterly incorrect.

In order to disembarrass the question of the obscurity in which it is involved by this generalising system, we must lay aside the different analogies, from blisters, from pemphigus,

drawn from the lungs, the fluids destined to form their secretion accumulate in them till the air-cells and bronchial tubes are so clogged that their function is at length wholly destroyed.'

from the varying 'tenuity of the fluid in acknowledged inflammation,' from the metastasis of dropsical effusions, &c. because all these may be applicable to the view that some dropsies are inflammatory, but can by no means be regarded as establishing that all are so. There is one paragraph in this enunciation of the perpetual inflammatory nature of dropsy so curious, and so demonstrative of the determination of the author to carry his system, and to reject as futile every objection which he cannot overcome, that we shall notice it somewhat more particularly. We give the passage at full length.

'It may be also objected that the suddenly increased effusion of tears in weeping, or of the saliva in certain states of the stomach, or of the matter of sweat when profuse, &c. are severally the result of an action which is unallied to inflammation; and that a sudden effusion, therefore, may take place from a serous membrane, from a condition of its vessels equally remote from that state. But there is, in reality, no analogy between the cases: for it must not be forgotten, that the suddenly-increased discharge of tears, &c. occurring on these several occasions, results from a law which pertains to the economy secreting them, and whose final cause (and which is alone the rule by which every law of the system is framed) is the *benefit* of the human frame; whereas, no such law can belong to the economy of the serous membrane, causing an undue effusion from it, any more than of the tissue lining the cavities of the joints, or the bursæ mucosæ, &c., since the final cause of such a law would not be the benefit as in the other cases, but the injury and often the destruction of the body.'—P. 19.

Now, how stands the fact? The serous as well as the mucous membrane is a secreting surface. The peculiar fluid of the latter may be suddenly and superabundantly increased, independently of inflammation. It is argued from analogy, that we may conclude the former membrane to be liable to similar phenomena. But Dr. Ayre denies the analogy, because in the latter case there is a *manifestly* beneficial law influencing them; and because in the former case the benefit is not *so manifest*. In doing this he has brought forward no new fact; but argues in that most perilous of all modes of arguing, from final causes. Without, however, considering the question of final cause, though it does not appear difficult to imagine that much benefit might occasionally be derived to the constitution from a somewhat more copious secretion than has commonly place, we must contend against inferring, *for the mere end* of supporting a theory, the existence of inflammation where none of the symptoms are present; and we do know that a more abundant secretion frequently occurs in the bursa over the cap of the knee, not only without any symptom of inflamma-

tion, but without even a tendency to it. Neither are we to be convinced that there was inflammation, because it might have been a very easy way certainly of escaping from facts, but not with us a very effectual one. Here, then, we have an effusion without inflammation, frequently taking place very suddenly—we have known it the product of a single night, and we pay no attention, therefore, to the mere impossibilities adduced in the arguments of the author.

It must surely strike an unprofessional reader with something like surprise, if not contempt for the science of medicine, to observe the total neglect of former opinions by which some physicians are characterised, and the readiness with which what had been deemed experience by the writers of a former age is entirely rejected. Certainly for many years authors inclined very greatly to consider dropsy as a disease of debility; and though we believe that within the last thirty years this has been carried much farther than it ought to have been, we do not, and cannot believe, that it was entirely unfounded in fact. We will, however, now lay before our readers some of those circumstances which induce our opinion that dropsical effusion is occasionally a consequence of mere debility of the exhalent arteries, though this may be, in the somewhat affected language of Dr. Ayre, ' one only of a series of effects.'

The first point to be determined is, whether or not the exhalents are capable of undergoing relaxation, so as to permit a more than usual effusion of their contents.

That they are so capable as regards the skin, and that under circumstances which Dr. Ayre will perhaps allow is owing to no manifest beneficial law, is certain. Not only are the exhalents of the surface occasionally so open as to permit even torrents of perspirable matter to issue forth, but occasionally even blood itself. ' Je voyais,' says Bichat, ' habituellement avec Desault, une femme affectée de cancer de matrice, et qui à certaines époques déterminés avait des sueurs qui tachaient les draps, à peu près commes les règles le font sur les linges qui les reçoivent.'* Should it be objected to this fact, that it is of the nature of a secretion, and not of mere exhalation, we have still the phenomena of purpura hæmorrhagica to appeal to; for in this disease the bleeding from the gums takes place from the whole surface, and not from any single point; and he must be a bold reasoner who

* Our friend Dr. Hutchinson, an able physiologist and pathologist, lately informed us, that, during his residence in the Ukraine, he had a horse, the perspiration of which always consisted of a florid and sanguineous fluid. The animal was healthy.

would maintain, that in this case the vessels are not dilated but ruptured. We may, however, be told, that in these circumstances the blood has undergone a change, and that the hæmorrhage is the consequence of the depravity of the fluids, and not the result of a relaxation in the extreme arteries. That this may be, and is occasionally the case, we will not deny; but in many instances which we have seen, there has been certainly no manifest alteration of the blood. The coagulum has been apparently in the usual proportion, and quite as firm as usual, neither has there been any thing peculiar in the appearance of the serum. Take again another instance, the epistaxis. The bleeding in this case is from the whole surface of the schneiderian membrane; and in the discharge of blood from the bladder or kidney, which has place frequently in purpura, there is no manifest lesion of the organ. The same observation holds good also of the hæmorrhage from the intestines. How often has this taken place from the apparently natural and healthy membrane; and is there a law in these cases making the discharge of blood an usual and beneficial phenomenon of the economy? Certainly there is no such law, although perhaps in these instances the hæmorrhage is the effort of the vis naturæ tending to the cure of disease. Now, we have here as plain proof as we could well wish that the exhalent arteries are capable of relaxation in the organs we have mentioned; and is there any circumstance in the constitution of the serous membranes to render the occurrence of relaxation in their exhalents less probable? Certainly we are not aware of any such circumstance, though we can see that in case they are enfeebled, why the discharge should consist rather of the thinner part of the blood than of the fibrine, because in their general constitution they contain very little red blood. Having shewn that the exhalent arteries may be relaxed, we proceed to give our reasons for believing that in dropsy a relaxation frequently occurs. Let us first consider the circumstances under which dropsy occurs.

It is unquestionably the sequel of great evacuations and general debility, from whatever cause. We have at this very time an instance under our care. A woman for the last year and a half, from uterine disease, has been subject to severe hæmorrhage. When this had continued some time, anasarca followed. The hæmorrhage has ceased for a month or two, and the anasarca has disappeared as she recovered her strength. But not to rest upon our experience only, Dr. Donald Monro quotes many instances of dropsy occurring after great evacuations, and which seem to us to

have ensued in consequence of them, as 'they did also to him.'*

Are we, then, in these cases to believe that inflammation was present, and that the great loss of blood had given rise to it (truly a very unusual cause of inflammation); or may we not, on the contrary, much more rationally infer, that there is only a debility of the extreme vessels? If we examine the former hypothesis, we find it supported by certain theoretical opinions, facts assumed as true, but which cannot be proved to be so, certain reasonings from the nature of the effusion, &c. On the other hand, we see the whole system thoroughly weakened, the muscular system utterly incapable of action, every organ debilitated; and this which we see in the whole we conclude may occur in a particular part; and reasoning from what is manifest to what is obscure, we infer that the effusion has place because the exhalents are weak, *i. e.* that they participate in the general exhaustion of the system. Let us take only one instance, the debility in consumption. The exhalents of the skin pour forth perspiration more and more profusely as the system becomes weaker and weaker. Dropsy takes place at the same time. Are we then to say, that in the former case the exhalents are weakened, in the latter that inflammation is the source of the effusion? There is certainly no necessity for adopting different explanations under precisely the same circumstances. We have always an objection to reasoning from the effects of remedies; yet if we may do so, we have still farther grounds for concluding, that dropsy may be a consequence of mere debility, without the intervention of any inflammatory affection. It has more than once occurred to ourselves to see anasarcous swellings removed by tonic remedies; and we have the farther testimony of Dr. Blackall, no mean authority, for the same fact. Speaking of tonics, he says, 'they have been given with various success, whilst the dropsy has still subsisted.' He advocates their employment, however, only after the effusion has been removed; but yet qualifying his opinion by observing, that 'in the earlier stages they are generally injurious.' Iron has, indeed, obtained considerable reputation in the cure of dropsies; and we do think that the candid consideration of the attachment of old medical writers to tonic remedies can only lead to the conviction that they

* Take the whole passage from Dr. Munro's essay. 'A subcutaneous dropsy, occasioned by the menstrual discharge continuing too long—*Forest.* lib. xix. ob. 35. Two histories of the like disease from frequent long bleeding at the nose—one from a flooding after an abortion in the third month—*Hoffmann.* An ascites after vomiting eighteen pounds of blood—*Riverius.* Ditto from a spitting of blood—*Lister.*

did really find them serviceable. We premised these observations with stating, that we did not deny the frequently inflammatory origin of dropsy; neither, we may now add, are we ignorant that it is oftener the consequence of some organic visceral disease than itself idiopathic, and consequently for the most part incurable without first removing its cause. The consideration of this question, however, would lead us farther than either our time or space would admit; and having already dilated so much upon the theoretical, we must proceed now to the consideration of the practical part of the book.

The practical part of this book, if practical it ought to be called, consists of observations upon what are termed 'the principal forms of the disease, and which are hydrocephalus internus, hydrothorax, ascites, ovarian dropsy, and anasarca.'

It can hardly be expected, that Dr. Ayre could make any great additions to the history of hydrocephalus, considering the very many valuable publications upon the subject that the profession already possess. As, however, he had announced, 'a new and more successful method of treatment recommended and explained,' we sought with some anxiety for this part of the volume, but in vain. The explanation of the manner in which the disease forms may be readily conceived from the theoretical opinions he has commenced with; but the necessity of maintaining that there is serous inflammation, being an inflammation of precisely the same character, but lower in degree, with that which produces pus, has led him into very curious modes of expression and reasoning; for surely we might believe, that the serous inflammation being lower in degree than purulent inflammation, would be insusceptible of exhibiting an acute form, since, if it should degenerate into this state, it ought to be no longer a source of serum but of pus. Neither again is he very consistent in the language he employs on the occasion; for certainly a lower degree of the same inflammation is not an inflammation of a different nature; yet after having laid down 'that the lowest degree of *common inflammation* occasions an increase in the proper fluids of the part .... a higher degree yields for its product coagulable lymph—a still higher one produces pus;' he says, 'the true hydrocephalus internus stands distinguished from these (viz. phrenitis, &c.) in *the nature* of the inflammation of which it consists.' Here, therefore, the *difference in degree* is modified to *a difference in nature;* and relatively to this nature 'the disease is of a chronic form, and consists of that lowest degree of inflammation to which serous membranes are

subject;' but then it is acute also. 'In many cases, on the other hand, the disease is merely chronic in regard to the form of its approach; so that upon the development of the serous inflammation, it displays all the characters of what is termed the acute kind, and runs its course as rapidly.' We will not be certain that we understand Dr. Ayre correctly. Our readers will perceive, that he is somewhat addicted to the obscure; but so far as we can make out the chapter we are considering, the inflammation of hydrocephalus is the same, and yet not the same with phlegmonous inflammation; and it is chronic and yet acute, one and all at the same time. Dr. Ayre may be able to explain all this; we confess that we are not. We have said that we have looked in vain for 'the new and more successful method of treating' these diseases. We will enable our readers, so far as space will allow us, to judge on this subject for themselves. The indications are—

'1st. To remove the visceral or such other disease or state, whether local or general, which, when present, proves a remote cause of effusion; 2dly, to remove the morbidly-increased action in the serous membrane or tissue, which is its proximate cause; 3dly, to promote the absorption of the effused fluid.'

These are applicable to every form of dropsy, and in every cavity; and excepting the term 'increased action,' implying thereby that there is *always* such a phenomenon, we see no objection to them. It is only from the universality that any ground of dissent can arise. But where is the novelty in this part? But to proceed to the particular remedies in hydrocephalus; the following is a long passage, but it will prevent us the necessity of much comment.

'The general causes tending to produce that congestive state of the brain precursory of its inflammation, are of three kinds—1st, those acting through the general system, and consisting of an irritation from some obstructed and required evacuation; 2dly, a local disease seated in the head, or local injury inflicted on it; 3dly, chylopoietic disturbance, acting sympathetically upon the brain.

'The causes acting through the general system may be either from some of the emunctories of the body becoming obstructed and their secretion diminished, as of the skin denoted by its harsh dry feel, or of the kidneys, as indicated by the scantiness of their secretion, &c.; or from a failure of the natural efforts of the system to produce some one of those obscure, but critical and sanative actions, which follow upon certain fevers; or from some artificial, but long-established drain by issue or other source being suddenly dried up. To obviate the two first of these causes, means must be employed to correct and increase the defective and excretory action. For this purpose we must employ diuretics and the milder kind of diaphore-

tics and aperients, conjoined with the occasional use of the warm-bath, of leeches to the temples, and mild mustard cataplasms to the feet, together with a plain unirritating diet, warm clothing, with all those other general means which are useful in counteracting the tendency to the scrophulous diathesis.

'By these means we may obviate the two first of these causes. For the third, in addition to these, an issue should be made somewhere in the neighbourhood of the part where the former discharge was seated, or a blister, which is to be kept open, may be substituted for it.'

Dr. Ayre has subjoined to this somewhat diffuse direction an account of an epileptic patient, in whom the attacks had occurred after the healing of an extensive sore, and who was cured by placing a seton in his neck. It seems as though he thought such a case necessary to prove the propriety of the practice.

The long extract we have given sufficiently proves the correctness of Dr. Ayre's practice; but does it equally prove its novelty? That ninety-nine times out of a hundred hydrocephalus is an inflammatory disease; that it may be excited by, or is generally accompanied with, the suppression of some natural or artificial excretion; that disorder of the digestive organs peculiarly predispose to it; and that issues, setons, and blisters in every disease of the brain, chronic and acute, are serviceable, are surely no new doctrines nor new practice. It would be an insult to our readers were we to spend any labour in proving to them all these facts; let them only refer to Dr. Cooke's work on nervous diseases, and particularly the chapter on hydrocephalus, and they will find it already done to their hands.

The principles, Dr. Ayre has truly said, that apply to one species of dropsy apply to all, modified, however, by the cavities in which they occur. It is not, then, necessary that we should follow him throughout the remaining sections. There is in them absolutely nothing new. Dr. Blackall had already said that dropsy of the same cavity is not always the same disease, and Dr. Ayre has but dilated upon this valuable remark. He has advocated local bleeding rather than general, and he will perhaps be able to see inflammation when others can see nothing but extreme debility. His practice, we believe, however, to be correct in inflammatory dropsy; its errors consist, we again state, in believing that it always is inflammatory.

The cases subjoined are drawn from the collections of authors, and even if proving the theories for the illustration of which they are introduced, which, in all instances, they do not appear to us to effect, can only do so universally, upon

the ground that there are no examples of a different kind. When Dr. Blackall wrote his work, he commenced with two cases in which tonics were successfully employed, and it appears strange that the author of the present essay should not have thought it necessary to enter a little into this form of dropsy. Such, however, is the case. Possessed by the present prevalent mania of attributing every thing to inflammation, he has passed over all the obstacles to his theory, as though they had no existence. These 'researches' are, indeed, a most complete failure, and we have seldom risen from any work with so much disappointment. They add nothing whatever to our knowledge upon the subject; and while any other work of authority upon dropsy remains, will not, we suspect, be very frequently referred to.

II.

ON THE REVIVAL OF THE USE OF MUSTARD-SEED.

Observations on the Efficacy of White Mustard-seed, in Affections of the Liver, Internal Organs, and Nervous System; and on the General Management of Health and Life. By Charles Turner Cooke, Consulting and Operating Surgeon at Cheltenham. Second edition. Gloucester. 1826. 8vo. Pp. 113.

The book before us consists of two not very homogeneous parts; one free from very material error, but somewhat common-place; the other somewhat rhapsodical, and, as we are inclined to believe, not remarkably correct.

Perhaps there ought always to be an extraordinary degree of lenity shewn by critics to works which proceed from such an artificial place as Cheltenham. There seems to be something in the air of that celebrated spa which the waters cannot cure; something peculiarly unfavourable to medical observation and literary composition. Not very long ago we were surprised to find that a gentleman, practising in that place, whose contributions to this journal have been very indicative of talent and industry, had put forth a work almost wholly appertaining to what Mr. Cooke calls that 'luxurious and health-*seeking* place,' which presented the most curious specimen of farraginous observations we ever met with; and we have to-day received from our bookseller a pamphlet which informs us that the first place in which the white mustard-seed has been regularly adopted in our day by professional authority is still the same Cheltenham. The latter author has, however, disappointed the expectations with which we ordered his book. We had been in the way of hearing so much from various unprofessional quarters of

the benefits of mustard-seed, that we were truly desirous of seeing what its real merits had proved to be in the hands of a gentleman described as a 'consulting and operating surgeon,' and impatiently availed ourselves of the first opportunity of perusing, what we hoped would prove, a brief and well-arranged report from regular authority. We were not ignorant that mustard-seeds, both black and white, had been repeatedly in and out of credit in past ages, and had been thrown aside with a thousand other articles of the materia medica a little more than fifty years ago, though still retained out of a kind of courtesy in the dispensatories. This neglect might, we knew, have been the consequence of the medicine being less powerful than other agents, or of that casual forgetfulness by which even good medicines have sometimes been laid aside for a time, and we wished to know whether it was worth reviving. It need hardly be said, that we were consequently greatly disheartened at finding the 'liver, *internal* organs, and nervous system,' in the title-page; and even the 'general management of health and life,' with a quotation from the *Rambler*, relating neither to mustard-seed, nor to the liver, nor to the internal organs, but to the subject of *exercise;* a subject on which Mr. Cooke has said very little, and that little, inasmuch as it recommends *passive* exercise as the best, not very wisely.

Such a title-page is, we dare say, very interesting to those who lounge in listless ignorance in the wretched reading-rooms of a watering-place, where every thing that can foster hypochondriacism, and encourage selfishness, and enfeeble and degrade the mind, is brought together for the gratification and destruction of those whom it is the interest of some persons to call 'interesting invalids.'* If we turn over the leaves of this publication as carelessly as those unhappy destroyers of time may be supposed to do, the passing merits of the publication become evident at a glance. Thus we see in this way—females of intelligence—Cheltenham waters—heartburn, sickness, wind, and spasms—magnitude of the importance of the food and regimen of children—play of the passions—physical and moral education—tropical colonies—genius a disease—flatulencies, eructations, acidities—genial

* We have no doubt that Mr. Cooke copies his description of the nervous and hypochondriacal from the originals here spoken of. 'It is, indeed, a miserable sight,' he says, 'to remark the melancholy, the irritability, the despondency, the languor, in short, the almost total incapability of dragging on existence, which is frequently observed in such patients, although to a spectator they scarcely appear deficient in health, or to want any of the ordinary sources of enjoyment.'—P. 45.

skies—mental anxiety—Anglo-East or West Indian—religion —revelation—superstition—few people who understand what constitutes a sufficient evacuation—Cabanis—Pliny—Pythagoras—Ulysses—Lord Chesterfield—flannel—beautiful and melancholy—preventive of phthisis—words of a very attractive and imposing nature doubtless, and calculated to excite the sympathies of the old and the young, the learned and the foolish, the dyspeptic and the serious, but which only give the medical reader the unwelcome information that he has to go through 'two bushels' of writing about the liver and internal organs, and every thing physical, and every thing moral, to come at the single grain of mustard-seed which he wants to hear about. However we must take the book as we find it, and we will not condemn it without a perusal.

About a year ago we had put into our hands by a lady in our neighbourhood a paper relating to the properties of the mustard-seed, in which so many, and such contradictory virtues were attributed to it, that we were satisfied with a very cursory perusal of it. This paper was evidently from the mustard-shop, and was quite as fair as any thing we ever read about Burgess's fish-sauce, or Henry's calcined magnesia. More recently another sort of paper was put into our hands, resembling in colour, shape, and type, those which are so insidiously presented at the corners of the streets of London, and generally regarded by sensitive persons with something like apprehension. This last paper was signed J. T., and we at first very naturally supposed that he was some gentleman in the mustard-line also; but we stood corrected when we were told it was the production of a gentleman from Lincolnshire, whose greatest pleasure was to wander about the country like a second Howard, distributing mustard-seeds and health as he went. Mr. Cooke's affectionate dedication to John Turnor, Esq., of Stoke Rochford, near Grantham, has disclosed the secret, and rescued his distinguished friend from the oblivion of initials: the reader is also favoured with a copy of the identical paper above mentioned, than which we must candidly say we have seldom read any thing for the most part more abundantly ridiculous. We do not wish to quarrel with this gentleman, who is evidently in earnest; and if he chooses to dabble in physic, and help to diminish the overflowing population of the Fens, it is nothing to us; he is probably an idle man, and finds relief in it, and is certainly not, like Mr. Cooke, accountable to the profession for his writings or his practice. He has run through all the regions of nosology, and put down, in what

his admiring friend calls an ' artless enumeration,' almost every disease that can be named, as curable by white mustard-seed : the list alone really occupies two pages. With this single means, he seems to have cured all his friends of all manner of diseases; and he thinks it no less valuable as a preventive than as a cure—no less efficacious in the very old than in the very young, and no less efficacious in either than in all intervening ages; and he verily believes, that ' if persons of consumptive and delicate habits, or otherwise constitutionally susceptible of cold; and if all persons indiscriminately on the first attack of disease, unaccompanied by any decidedly inflammatory symptoms, would have recourse to the mustard-seed for a few weeks, the extent to which human suffering might be thus prevented would, it may reasonably be presumed, exceed all calculation.' Enviable happiness of ignorance! But we must not devote more space to a gentleman who seems endowed with a most vigorous credulity, but to whose judgment we could not pay any compliment without insincerity.

With every desire to read Mr. Cooke's work steadily through, our attention is perpetually distracted by his numerous and very lengthy notes: thus at page 26, after informing those who have the misfortune to know nothing of physiology, that ' it is by means of the *internal surface of the alimentary canal* that the human fabric is *first* built up'—(a strange assertion!)—he dances off in a note to the care of children, and ends with a sentence, at the close of which we are left to digest this pithy piece of information: ' To the formation of a vigorous frame, a certain quantity of support is necessary; and if this is not supplied, its powers sooner or later fail. It signifies nothing to the general economy whether the fault is in the stomach, or in the intestines, *or any where else.*' And, apropos to the same subject, we have a note spreading its close type over the 34th and three following pages, in which we are plunged into such a flood of metaphysics as must, we fear, be far beyond the depth of those for whose edification it is apparently prepared. At the same time, the note is well written, and contains a great deal of truth; so that the kind of notice here taken of it must be laid to the splenetic humour in which our anxiety to reach the subject of mustard-seed contributes to keep us.

Of 113 pages, 25 are taken up by the Lincolnshire philanthropist, 47 with a description of the manner in which bilious and nervous disorders are produced, and 15 with their general treatment, leaving scarcely more than 20 to the principal subject. Although we read in these pages little or nothing that we have not read before, and find in them much that is

rather taken for granted than proved; as, for instance, the accumulation of mucus in the bowels from a defective secretion of bile, the closing of the bile-duct by the said mucus so produced, and the *consequent* vomiting, and apparent redundancy of a defective secretion; the doctrine of cholera morbus being a functional derangement of the biliary organ; the habitual absorption of bile producing sallowness; and some other points; yet there are many wholesome truths contained in them, conveyed in a form calculated to render them useful to the public, if not instructive to the profession; and these are interspersed with observations indicative of a great share of just and conscientious feeling on the part of the author: so that but for the attraction of the mustard-seed, with which all this doubtless seems to have very little connexion, we should have laid down the book, after a slight inspection, as one which, being scarcely addressed to the profession, required no notice in a review of this description. The general tenour of the medical remarks is in accordance with opinions entertained by a great number of practitioners, though we should ourselves say that an undue importance is here, as in so many former instances, attached to the liver; an organ which we suspect is much less frequently the primary subject of disease in deranged states of the digestive functions than Mr. Cooke, and those he professes to follow, seem to suppose.

We pass over, therefore, 72 pages of the work, as containing little to our purpose, excepting a note at the 49th page, appended to some remarks on destroying the 'epileptic and hysterical aptitude.' The note is as follows:—

'Of this an instance has been brought before me since the first edition of these observations was published, and it is one which evidences in no slight degree the value of the medicine, the use of which I am advocating. A lad of twelve years of age, who had been long subject to a regular epileptic seisure once a week, and who had had the advantage of medical advice in London for about two years to no purpose, took the mustard-seed with so much advantage as to cause the fits to cease for six weeks: they have now returned; but I am well satisfied that a perseverance in the use of a remedy, by which they have been so much interfered with, will effect an ultimate cure.'

Now, to admit the efficacy of the mustard-seed in this case, we must not only put aside the fact of the boy having gone into the country after two years' confinement to town, but must forget that epilepsy is a disease of a very capricious character, making its attacks at very uncertain periods, and not unfrequently suspending them so long as to encourage hopes which are destroyed by the violence with which the

malady returns. In this case the attacks, after a temporary suspension, *have* returned; but Mr. Cooke says, he is *well satisfied* the mustard-seed *will* effect a cure. We see very slight grounds for this satisfaction, which the author rests on what he calls the *principle*, that 'the habits of disorder, like the habits of *the man*, being once materially broken in upon, are not easily re-established;' a principle which is assuredly very far from being established.

At last, the long-expected subject of mustard-seed breaks upon us in the most unexpected manner; and justice to the author demands that the reader should not be deprived of any of the charm of surprise. The subject of the part of the work in which the following passages occur is 'the method of increasing and meliorating the biliary fluid.'

'As internal medicines, there are none which so steadily increase and ameliorate the hepatic secretion as some of the mild preparations of mercury. Whether this mineral acts on the liver as on other glands, by increasing its action, or whether it acts in a specific manner, as on the salivary glands for instance, I need not stop to inquire; but that it does augment and improve the biliary fluid in a very remarkable degree, both when it salivates and purges, is a fact which requires no support from argument.

'A gentle and gradual introduction of mercury into the system is, however, all that in most cases is necessary; and as soon as the stools become yellow and more copious, the patient in general experiences an exhilaration of spirits, and food is relished and digested better. The eye and complexion soon after that clear; and animation is restored to the countenance. After keeping things in this state for a longer or shorter time, according to the stage of the disease, a course of opening medicines, or of the Cheltenham waters, combined with bitters and tonics, ought to be entered on, and continued for a considerable period. For the above purpose, the blue pill, in two, three, or four grain doses, every night, combined or alternated with a purgative, generally answers best without ruffling the constitution, or producing much uneasiness of the bowels.

'Where it is not judged prudent to bring the system under the influence of mercury, and in most cases it would be at least unnecessary, in many detrimental, the object should be to adopt a course of medicine which will at once improve the biliary secretion, clear the bowels, and improve the digestion.'—P. 70.

Thus far all goes on very much in the old way. It may be all very true; but we have heard it, and read it at least a thousand times before: not so what follows.

'*Such* a medicine, and generally speaking, such a course, I firmly believe to be that *which Mr. Turnor has so strongly recommended*, and has laboured with so much philanthropy, and with such signal success, to bring into use. That it is one of no common influence over the manifold uneasy sensations attendant upon a

certain condition of frame, is with me no matter of doubt—nay, I am thoroughly persuaded, that neither its powers nor its worth are as yet otherwise than imperfectly understood, much as its virtues have been thought to be *overrated*, and the statement of what it has accomplished *overdrawn*.'—P. 72.

The virtues, then, of the white mustard-seed, are 'to improve the biliary secretion, clear the bowels, and improve the digestion.' But the author has already advanced, that 'there is *no case* of disorder in which the stomach, and other parts of the digestive system, are *not* affected;' and hence, as a natural consequence, it follows that the mustard-seed, which acts on all these parts specifically, cures all the manifold disorders arising from their morbid affections. We cannot wonder, therefore, that Mr. Cooke speaks of it in terms approaching to rapture.

'As far as my experience of its effects has gone, I feel bound to say that it deserves to be hailed as one of the most decided discoveries of general usefulness and applicability which has ever been made known—one of the greatest blessings that has ever been dispensed for *suffering* man;—yet more, (to speak the language of one not less benefited by its agency than myself,) 'I fully expect that it will considerably lengthen human life in this kingdom, and finally be adopted throughout the world.' Unlike almost all other means of relief, to the major part of those who stand in need of habitual medical attention, it may be taken without a single sensation of disgust, under any circumstances (in which its use is proper), and for any length of time. It accomplishes the purpose of its administration without occasioning any disturbance to, or exciting any unnatural action in the system, (which is almost invariably the case when ordinary medicines are given); in other words, without in any wise interfering with nature's own operation—seldom, if ever, disagrees, (never, as far as I have been able to learn, but from the idiosyncracy or the caprice of the patient,) and as seldom fails to be a source of transcendent benefit to him. The dose must be regulated by the effects produced, and should be taken in equal proportions three times in the four-and-twenty hours. One or two stools should be procured each day by it, and no more. It should be persevered in for *a sufficient length of time*, and such will be the alleviation of uncomfortable feeling, that the invalid will be at length anxious to continue its use. In many of the more harassing and afflictive complaints of females, I am anticipating the most beneficial results; nor am I less confident in my expectations as to the unequivocal good which will be reaped from it as an auxiliary to the waters of this place, in almost all the disordered states in which *they* are to be recommended, particularly in those where, from *delicacy* of health, or any other cause, they induce such a degree of exhaustion as to lead to sensations of faintness, anxiety, and lassitude. As a remedy for the common diseases of children, particu-

larly in cases which require *perpetuated* attention, as worms, abdominal tumour, and marasmus, it will be found such a medicine as has hitherto been a desideratum; and I have little doubt of its being *acknowledged to be* equally serviceable in most of the more inveterate ailments of after-life—as gout, rheumatism, asthma, dropsy, paralysis, paraplegia, tic douloureux, cramp, and many affections of the lower intestines and kidneys. As a medical *preventive* of phthisis, too, I will venture to predict its usefulness; I have already *ascertained* its advantages over the usual remedies for those *irregularities of system in young females*, which so often lead to *greater* evils, and not unfrequently to this their consummation; and I can well conceive its certain applicability to the *management* of that change which takes place in more advanced female life. To mothers or nurses who are suckling *sickly* infants, it is in an especial manner helpful, rendering them, as it does at once, the receivers and the bestowers of remedial aid; and it will not be found without value as a *substitute* for more objectionable means of recovery after fever, measles, small-pox, and other debilitating diseases: indeed, wherever we want an efficient and safe stimulus, that will act upon the whole system, and more especially upon the nervous and chylopoietic systems, I know of none preferable to the mustard-seed. It is at once a *tonic*, in the best sense of the term; an *aperient*, of unrivalled superiority; and a *sedative*, of the most soothing and salutary kind. And in this way it is that it produces its three-fold kindly office: 1st, by yielding a considerable quantity of a mild assimilating mucilage most friendly to an irritable state of stomach and bowels; 2ndly, by its gradually and gratefully stimulating effects upon the whole interior surface of both; and, 3dly, by its slightly mechanical action, assisting in the propulsion of their contents. Hence it at the same time strengthens and invigorates in a very remarkable degree the *whole line* of the alimentary canal, and consequently improves the digestion and assimilation of food; and with these the appetite, sleep, and general health. To the poor it is invaluable in every point of view; to them it is both food and medicine, and is on this account peculiarly calculated to meet the numerous and formidable physical evils with which they have to contend, and to which they are peculiarly exposed. It is a remedy adapted at once to infancy and old age. It enables the young to struggle against the morbid debility frequently attaching to their tender years, and it supports the aged under the pressure of those infirmities generally annexed to declining life—whilst in every stage of existence, and in every scale of being, it would seem to impart the power of resisting the effects of sudden changes of atmosphere, and thus to obviate that host of evils which flow from our variable and uncertain climate. What might be the effect of its regular administration to children from the period at which they are weaned, until their arrival at incipient manhood, I am not prepared to determine; but I am disposed to believe, that by thus *insuring* the regular performance of the visceral functions during the whole period of the body's growth, both the individual and national character would be

materially altered and improved; that we should again become a hardy, instead of what we now are—an enfeebled race.'

Can these things be?—Are these the legitimate deductions of cool, disinterested, patient observation?—We shall not take upon us to pronounce. The last sentence, however, we *shall* pronounce to be absolute nonsense and lunacy. Even Mr. Turnor, of Stoke Rochford, is thrown far into the shade by this desperate flight of Mr. Cooke. As to the rest, we leave the matter to the trial of those who do not reside in watering-places: and we shall unfeignedly rejoice, as friends of the human race, if mustard-seed should prove less delusive than other 'universal' medicines. It is absurd to charge practitioners in general with being averse to try new medicines: we all feel how many things there are which we cannot accomplish, and are all sufficiently eager to increase our powers. But notwithstanding that we hear so much of the advancement of science and the perfection of art, the progressive acquirement of practical knowledge is infinitely difficult, and the advantages accruing to society from the most laborious application of human intellect are very slowly produced. Chemistry presents us with new medicines; botany offers new plants or new species of such as have been formerly used; pharmacy discovers improved formulæ; but yet in no department of medicine does so much remain to be done as in that which relates to the precise and actual effect of medicines; nor is there any kind of knowledge of which the attainment is attended with more difficulty, or any branch of observation in which so many circumstances conspire to deceive. But as relates to the medical agent at present under consideration, we cannot close our eyes to certain parts of the evidence adduced in favour of it, which seem faulty, and of a nature to be suspected. The broad and unqualified assertion that it seldom, if ever, fails to be a source of *transcendent* benefit; the recommendation to persevere in its use for a *sufficient* length of time, which length of time seems generally to extend to months, and often to years; the recommendation of the medicine in 'the more harassing and afflictive complaints of females,' which complaints are not specified, and in which the good effects are, it seems, not proved, but merely *anticipated;* the confident *expectation* of Mr. Cooke, who resides at Cheltenham, of the efficacy of the mustard-seed 'as an auxiliary to the waters of this place,'—this *auxiliary* being moreover, it would appear, a sort of *counteraction* to the sensations of faintness which arise, we doubt not, from the indiscriminate use of those waters, when 'from delicacy of health,' (that unmeaning phrase, so common in the

mouths of fine lady mothers at Cheltenham), or 'any other cause,' the waters ought not to be given at all;—the same *prospective* benefit in gout, rheumatism, asthma, and many other unwelcome diseases beginning with capitals;—the *prediction* that it will be found to prevent phthisis; together with the immeasurable range of disease said to be relieved by this single agent, including all which attack infancy, or bear down upon manhood, or way-lay decrepit old age; or, to use Mr. Cooke's more lofty language, 'in every stage of existence, and in every *scale of being*;'—the assertion that it is at once tonic, aperient, and sedative, and not only this, but stimulant and mechanical in its operation:—all these circumstances confound all the notions of medicine hitherto prevalent in the world, and, to say the very least of them, excite our strongest doubts. To 'damn with faint praise' has long been numbered among the arts of the malicious; but Mr. Turnor and Mr. Cooke's inflated eulogium is as fatal as the injudicious flattery of a foolish and loquacious friend; and as we are above all disguise, we must say, without reserve, that we no more believe in all these virtues being possessed by the white mustard-seed, than that Democritus cured all diseases by the music of the pipes, or than that Thales of Crete banished the pestilence from among the Lacedemonians (all which things we have read somewhere) by the same kind of melody.

That there is some virtue in mustard-seed we are by no means inclined to deny; we doubt, however, if there be more than what arises from it as a stimulating aperient, the effects of which are occasionally communicated to the bladder and uterus. Ancient authorities on a subject of this kind are by no means satisfactory references; as it is evident that they frequently class together medicines of very unequal or even of dissimilar properties, from some accidental qualities of smell, taste, or colour. It is by no means clear that Celsus alludes in any part of his writings to the unbruised seed of the mustard; he speaks of the external application of mustard repeatedly, as a remedy in tooth-ach, as a poultice, as a gargle, &c.; and also mentions it as a diuretic, but classed perhaps rather indiscriminately among the quæcunque in horto nascentia boni odoris sunt.' (*Lib.* ii. c. 31.) By Aretæus mustard-seed is praised as useful to those recovering from lethargy or stupor, and also as a remedy for head-ach; its effects being ascribed to its promoting the flow of pituita, and emptying the stomach and the bowels: but we do not know that the white mustard is meant by this author, nor in what form the medicine was administered. Hoffmann enumerates the *sinapi* among herbs which 'valde acidi sunt saporis et exspirant fortem odorem volatilem,' and of which the virtues

are 'fortiter commovent sanguinem, pellunt menses,' &c.; in the same class, however, and probably on account of their having similar sensible properties, we find the cochlearia, allium, cepæ, &c. &c. Very little notice seems to have been taken of mustard-seed except by writers on the materia medica and compilers of dispensatories, who mention every thing. Motherby, however, makes no mention of the *seeds*. 'The black mustard-seed,' says James, 'heats and dries, incides, attenuates, and attracts. Its principal uses are to excite an appetite, promote chylification, and purge the head.' —(*Dict.* vol. iii.) We observe also almost all the merits enumerated by Mr. Turnor ascribed not to the unbruised seeds, but to the bruised seeds, which were often taken in wine. Lewis speaks of the mustard-seed as one of the strongest of the pungent, stimulating, diuretic medicines, that operate without exciting much heat; and speaks of its use in the dose of a spoonful, in paralytic, cachectic, and serous disorders; but in the Edinburgh New Dispensatory, in 1786, professing to be an improvement on Lewis, the white mustard-seed is distinguished from the black as being somewhat less pungent; the *seeds*, however, being only spoken of as an external application. Bergius gave mustard-seed in *vernal* intermittent. More than once we have seen Dr. Mead referred to as prescribing mustard-seed in dropsies; and it may therefore be proper to give the passage on which this assertion is probably founded, though by which it is evidently not justified; the administration of the remedy in the case related being caused by an old woman, and the effect, which was very great, considered worthy of record by the physician.

'Insignis autem est ad hanc rem, et memoratu dignissimus, nobilis fœminæ mihi notissimæ casus. Illa annos plus minus quinquaginta nata sensit in altero abdominis latere durum tumorem, qui sine dubio erat ipsum ovarium in immensam molem auctum; hinc disruptis partem illam perreptantibus canaliculis, qui lympham vehunt, sensim fiebat hydrops ascites. Frustra erant medicamenta quæcunque, sive purgantia, sive diuretica. Ter emissus est ferramento acuto ex ventre humor, qui brevi semper iterum in cavum influebat. Accidit tandem, ut eam inviseret anicula quædam rustica, quæ abdomen conspiciens non sine summo cruciatu distentum, facile persuasit, ut singulis diebus, mane et vesperi, cochleare plenum *seminum sinapis* non contusorum devoraret, decoctique *summitatum viridium genistæ* semilibram insuper biberet. Postquam triduum hoc modo amarum laticem perpotâsset, maximum sensit levamen; quin et sitis, quæ molestissima fuerat, omnino sedata est. Alvum interdum duobus aut tribus continuis diebus movebat id medicamentum, et urina quotidie ad libras minimum quinque aut sex profluxit. Perstitit in hisce per annum, neque rediit morbus. Sapienter itaque medicos monuit Hippocrates, ut *etiam à plebeiis*

sciscitarentur, si quid ad curationem utile esset.'—Monita et Precepta Medica, p. 137.—*De Hydrope.*

Dr. Cullen says, the seeds of the white and of the black mustard hardly differ in their sensible qualities, and may be indifferently used. The following passage is not without interest at this time.

'A practice, so far as I can learn, first begun in this city about fifty years ago, has been since very frequent. It consists in giving the mustard-seed entire and unbruised, to the quantity of half an ounce, or as much as an ordinary table-spoon will contain. This does not prove heating in the stomach, but stimulates the intestinal canal, and commonly proves laxative, or at least supports the usual daily excretion. It commonly also increases the secretion of urine; but in this I have found it frequently to fail. In giving it twice a day, as our common practice is, I have not found it to stimulate the system or heat the body; but it must certainly have that effect if it answers in the Swedish practice, by giving it four or five times a day to prevent the recurrence of internal fevers.'—*Materia Medica.*

The testimony of Professor Murray is also quoted by Cullen, who says, 'ita adjuvat cibi concoctionem, ventriculo sensum gratum impertit, mentique certe in memet hilaritatem haud mediocrem, forsitan ex aëre fixo quod extricatur, conciliat.' In the London Medical Dictionary, Dr. Parr speaks of the unbruised white mustard-seed as a mere eccoprotic, acting without any stimulus. But Dr. Murray, in his Materia Medica, says, 'the unbruised seeds are sometimes swallowed in the dose of half an ounce or an ounce, as affording a *stimulant* in chronic rheumatism and amenorrhœa;' and again noticing it, under the head of emmenagogues, adds,

'The seeds of this plant (the sinapis alba) have a considerable degree of pungency, and when taken unbruised to the extent of half an ounce or an ounce, have a purgative effect. This is a popular remedy, not unfrequently used in amenorrhœa and chlorosis, and may have some effect by its stimulant action on the intestinal canal.' —Vol. i. p. 365.

By Dr. Paris, in his work entitled Pharmacologia, the *bruised* seeds only are mentioned as a beneficial stimulant in dyspepsia, chlorosis, and paralysis, in the dose of a teaspoonful.

From the sober testimony of these respectable authors, it will, we imagine, be easier to acquire a tolerably correct idea of the actual virtues of the mustard-seed, than from the unmeasured praise with which both Mr. Turnor and Mr. Cooke have overwhelmed it. We have ourselves seen and heard a little of the irregular use of this medicine in our own prac-

tice. In some cases we have known it taken by persons apparently in good health, in the prime and vigour of life, enjoying every advantage of fortune, living in the country, and partaking freely of rural sports; and we will not conceal that these persons have said they never felt themselves so well in their lives as whilst taking this medicine. We believe they spoke as they felt, and we should expect the same good report after the trial of any other gently-stimulating aperient in which they had equal confidence. There is reason to think that not a few of the uncomfortable sensations which afflict the idle and luxurious arise from a disordered state of the stomach, admitting of great alleviation from whatever acts on the mind: nor can it be questioned, indeed, that the effects of mental impressions have a much wider range; for illustrations of which it is only necessary to allude to the history of animal magnetism, and of the metallic tractors, or to the more recent *miracles* of that sincere but enthusiastic and visionary man, Prince Hohenlohe. In a few cases in which we were informed the white mustard-seed had been taken without medical advice, it is but candid to add that we have suspected it of being not quite so innocent; we acknowledge, at the same time, that we may have been too prone to think so. We certainly, however, fancied, that in one of these cases it helped to bring on serious disease of the digestive mucous membrane; and in the other, (an elderly lady), a very disordered state of the bowels, with a temporary mental affection. A third case, which proved only its inefficacy in one of the thousand modes in which its benefit is asserted, was mentioned to us very lately; in which a young lady, subject to very severe catarrhal affections, took the white mustard-seed as a preventive, and for a while it seemed to act 'like a charm;' but all faith in it vanished at last before the severest cold the patient ever had in her life. In a case of torpid function with congestion of the liver, another patient took the mustard seed, and, as might have been dreaded, a dangerous attack of acute hepatitis was produced by it. Our own experience in this remedy is not mentioned as any thing on which great stress is to be laid; in Mr. Turnor's evidence we see our opinion of its stimulant effects supported: he says the following dialogue takes place when he is visiting poor persons who have taken mustard-seed for two or three weeks.

'How are you going on?

'I am a great deal better—I feel quite a different man.

'Now tell me the truth; I don't want a flattering answer.

'Why, sir, I must be better, (and placing both hands on the stomach and abdomen) *I feel so much stronger within*—I had rather miss my dinner than the mustard-seed.'—P. 80, *note*.

It requires but slight acquaintance with poor patients to be aware how little dependence is to be placed on this kind of testimony, particularly when the person requiring it *gives* the medicine to the respondent. We have, in fact, heard the Irish say exactly the same thing of tobacco, and the poor of all northern countries would say the same of spirits or other cordials. Again, the patient mentioned in the Appendix, p. 111, who writes in the following strain, stands quite revealed in his whole length of hypochondriasis and fancifulness.

'It is now a month since I commenced the mustard-seed, and though I feel myself unable to describe, with any degree of precision, the specific effects that have been produced upon my system by it, I am *quite sensible* that both my bodily and mental sensations are *improved*—that the *whole character* of my state is amended; so much so, that I feel an involuntary encouragement to persevere in its use, and always anxious for the arrival of the time of taking each dose, such is the agreeable effect which it afterwards produces upon me.'

The question is, what was the matter with this gentleman before? In the detail of wonderful cures, we are seldom favoured with an accurate history of the symptoms: and in the present case we have no account of them at all: the patient talks of his 'bodily and moral sensations' indeed, but surely this is not such evidence as deserves the attention of a regular practitioner. As to the romantic letter from the mother of a young lady whom Mr. Cooke thinks the mustard-seed 'snatched from the arms of the fell destroyer,' meaning, in prose, from phthisis pulmonalis, it has a most unfortunate resemblance to a long advertisement. Certainly one or two of the correspondents appear to have derived benefit from the medicine; but they are mixed with such suspicious company, as to incur all the penalties attending carelessness as to one's companions. It would be very unfair, at the same time, as well as uncourteous, to pass over Mr. Cooke's *personal* evidence, than which nothing could be more strongly expressed:—

'I stand up in its behalf,' he says, 'solely because I have myself had experience not only of its astonishing efficacy in the case of others, but in my own long-standing and, as I feared, irremediable one. Of those cases it is not necessary now to give the details, and of my own it would be quite out of place here to speak at length. Suffice it to say, that they were as diversified as they have been numerous, and that I can declare with truth, that I never knew what it was to enjoy a feeling of comfortable health unbroken for twenty-four hours together, until I became acquainted with at a 'efficacy of' and 'took whole,' 'white mustard-seed.'—P. 82, n prac-

This passage comes to us a little qualified by a sup[illegible]e end of kind of hint which occurs in the preceding page,

that ' there are *many* cases, apparently *suitable* ones for its use, in which it must be given with *caution ;*' and also *many* ' in which it will require for a time the aid of *other* medicines of *greater activity* and power, and not a few in which medicine of *no kind* will be of service.' We believe there is not any thing truer in the book than this; but assuredly we were little prepared for it by what went before. As for the imposing quotation from Pliny at page 83, we cannot think it of any consequence; we cannot believe even Pliny that mustard is ' stomacho utilissimum contra *omnia* vitia, *pulmonibusque,*' any more than that ' calculos quoque discutit potum ex aceto;' and we would beg leave particularly to observe, that it is the *bruised* seed of which Pliny speaks: ' tritum cum aceto'—' tenetur in ore, donec *liquescat*'—' *manditur*'—' semen ac radix *conternutur,*' &c. &c., are the terms in which it is spoken of throughout, so that we must say the putting this into English in the second edition, after being ' repeatedly called for a translation,' was more obliging than judicious.

We may seem to have said more than enough on this ungracious subject; but as most practitioners may occasionally be applied to concerning the credit to be given to the accounts of the mustard-seed, it may be as well to shew what kind of documents its best friends can shew in its favour. Unprofessional persons are pleased with an appearance of candour in medical men, and like to think themselves capable of understanding a subject in which every man feels an interest; and we have done our duty even to them by exposing a work which, under the pretext of laying the principles of medicine open to ' men of science and abilities,' has a tendency to encourage the most dangerous trifling with human health. Of Mr. Cooke we know nothing; and we hope we shall be believed when we say that personal motives could not influence us. If we have treated his book very little to his satisfaction, he has to attribute it to the mode in which he has chosen to present himself to the public. If, instead of a wild and flighty recommendation of a single medicine, which he must have known was not by the medical world supposed to have any very valuable powers, he had given us a plain statement of its effects, and the precise description of cases in which they might be looked for, we should have read his work with interest, and have expressed ourselves towards him in proper terms of gratitude. Mr. Cooke will say he wrote for the unprofessional reader; and stoma[illegible], we can only say we are very sorry for it, and trust he miss not in future waste the talents which he evidently pos- in attempting to impart that knowledge to the public [illegible]an never be comprehended without such previous

studies as few unprofessional persons can prudently have devoted much time to: and if professional fame be within the scope of Mr. Cooke's ambition, let him look deliberately round on the most successful practitioners in this kingdom, and he will find that the surest way for a medical man to attain the permanent confidence of the public, is to acquire that of his own profession.

We shall probably not be long without a more composed and rational account of the powers and qualities of an agent which, notwithstanding the general neglect to which it has been for so many years consigned, may very possibly possess virtues that entitle it to revival.

III.

OF CERTAIN AFFECTIONS PROCEEDING FROM INTESTINAL IRRITATION.

Medical Essays. Essay First, On the Effects of Intestinal Irritation. Essay Second, On some Effects of Loss of Blood. Essay Third, On Exhaustion and Sinking from various Causes. By MARSHALL HALL, M.D., F.R.S.E., Physician to the General Hospital near Nottingham, &c. &c. LONGMAN and Co. 1825. 8vo. Pp. 96.

IN the first of these essays the attention of practitioners is directed to certain appearances of disease which are not only highly fallacious, but of a nature to lead to very unsafe practice; yet to distinguish which from the real affections of which they are but the resemblances, would appear to be a task of considerable difficulty; so much so indeed, as to make it questionable whether the reader can avail himself to any good purpose of the diagnostic experience of the author. All observant practitioners will recollect cases in which the appearances of inflammatory action were very nicely simulated; and although the deception may in many cases be detected by all but the very precipitate, some of the most serious inflammations which can attack the body, and particularly phrenitis, are occasionally imitated with such accuracy that it seems generally admitted that the most cautious may be deceived by them. On the common error of bleeding delicate women for pains in the side, and on the occasional imposition of an alarming name to a set of symptoms which that name does not express, it is unnecessary to dwell; for although errors of this kind are not uncommon, and are very unfortunate for the patients of those committing them, the cause has generally existed too long, and is too intimately connected with some inattention or want of system at a remote period of study, to admit of removal; and such practitioners must go bleeding and blundering on to the end of

their lives. The instances of error pointed out by Dr. Hall are of a different character, and such as might probably be furnished by practitioners of much greater talent than those of whom we have spoken. In Dr. Hall's opinion, the appearances of inflammation which form the subject of his first essay depend on intestinal irritation; their seat is in many cases the head, when they put on the form of phrenitis; whilst in some it is the chest or abdomen, and the symptoms have the semblance of pleuritis, peritonitis, or enteritis; and whilst the frequent interchange of the symptoms denoting these separate affections are on some occasions erroneously regarded as merely examples of metastasis. The intestinal irritation giving rise to these symptoms is produced by a loaded state of the bowels, or a disordered condition of their contents; but Dr. Hall has always remarked some superadded and accidental cause, as fatigue, alarm, or anxiety, a fall, exposure to cold, or 'any cause of weakness, and especially of exhaustion, and particularly the combination of some of these circumstances always attendant on parturition.' Seven cases are given to illustrate this affection, from which we select the following, because, without being very long, they are sufficient to give the reader an idea of the state treated of as can well be conveyed in words.

'Case II.—Amongst the earlier cases of the effects of intestinal irritation which excited my attention, was that of Mrs. Hawkins, a rather delicate married woman, aged 35. When I was first called to this patient, she appeared to labour under *inflammation of the peritonæum*, the symptoms of which were so severe as apparently to demand the repeated employment of the lancet and application of leeches, so that the patient lost about thirty-five or forty ounces of blood; the bowels were freely purged—the stools were very fetid.'

'All the symptoms were removed on the third day; I only visited my patient once, and, like the author of the case already given, I had every hope of a speedy and secure convalescence. I was, however, equally doomed to be disappointed. Early on the succeeding day I received an *urgent* request to see her. She had been seized with severe pain of the head, especially over the eyebrows, attended by beating and throbbing, and by the most urgent intolerance of light, so that the eyes could not be opened for a moment for examination; the pain was increased on attempting to sit up erect; the countenance was palish and sallow; the pulse full and frequent; there was no faintness or sighing.

'As this case occurred early in my investigation of the effects of intestinal irritation, I hesitated in determining whether the symptoms were such as I had already witnessed in one or two cases as arising from that cause, or were indicative of inflammation within the head. I prescribed a draught with thirty drops of the tinctura

opii and of the spiritus ammoniæ aromaticus, and called again in an hour and a half—not without much anxiety. I was greatly relieved to find my patient better in every respect: able to bear the light, suffering much less pain, and having enjoyed a comfortable sleep after a night of wakefulness and distress. Aperient medicine was administered; and after the full evacuation of the bowels, light nourishment, and a repetition of the draught, with tinctura opii and spiritus ammoniæ aromaticus, whilst a cold lotion was applied to the head. On the succeeding day Mrs. Hawkins was better in every respect, but complained of any noise. On the next day she was comparatively well, only suffering from vertigo on raising the head. From this time the recovery was progressive and uninterrupted, the utmost care being taken to regulate the bowels and the diet.

'This case appears to me perfectly similar to the one first given, and under similar management, or under the plan of treatment first adopted from the idea of its being inflammatory, would probably have been equally protracted, and the attacks equally repeated in their various forms. It was, I now think, at first *mistaken* for *enteritis*: the symptoms were, in the second attack, those usually deemed indicative of phrenitis in its most marked form; yet these symptoms were removed without the lancet by an ammoniacal (ammoniated) anodyne draught! and the patient had a speedy, safe, and uninterrupted recovery.'—P. 9.

The case just given is very candidly related; and as there is every reason to justify Dr. Hall's conclusion, the patient was much to be congratulated on not having been subjected to measures which would either have failed to relieve her at all, or would have brought relief at a very extravagant expenditure of strength. The subject of the following case was not quite so fortunate.

'Case IV.—The next case is that of Mrs. Darley, a young married lady, in the fourth month of pregnancy, habitually costive. The present attack came on after much fatigue in travelling; and she is stated to have experienced a similar one formerly.

'On the 7th of October, she complained of pain of the head, and leeches were applied to the temples.

'On the 8th, the pain of the head was more violent, and attended with much throbbing of the temples; and to these symptoms pain of the right side under the breast, a sense of tightness across the chest, and hurry in breathing, were superadded. Twelve ounces of blood were drawn, and an efficient aperient medicine was given; and on the 9th and 10th, she was much better, and a saline medicine was prescribed.

'On the 11th, she was again taken worse, after imprudently sitting up; the beating of the temples, tightness across the chest, and difficulty in breathing, returned, unattended by cough. Sixteen ounces of blood were taken from the arm with great relief, and the aperient medicine was repeated; the patient was relieved, and continued better on the 12th.

'In the night of the 13th, the medical attendant received an urgent message to visit his patient, and found her with severe pain and beating of the head, great tightness and pain across the chest, and now with violent palpitation of the heart. Twelve ounces of blood were taken, and calomel and other aperient medicines given, with considerable relief.

'On the 14th, a physician was consulted, who prescribed the pil. hydrarg., with an aperient draught. In the night, the apothecary was again sent for, all the symptoms having returned; and now, for the first time, with the addition of a slight cough. Eight ounces of blood being drawn, great relief was obtained.

'On the 15th, the physician was again sent for; ten ounces of blood were taken with great relief; an aperient, and a mixture for the cough prescribed, with eight drops of the tinctura digitalis purpureæ, every four hours.

'In the night of the 16th, the medical attendant was again sent for; all the symptoms had returned in a still more aggravated form; the pain of the head, tightness across the chest, palpitation, and cough, being extremely severe. Eight ounces of blood were drawn without relief: the head was shaved—a cold lotion applied, and a blister ordered for the back of the neck.

'On the 17th, I saw the patient for the first time: there were much pain and throbbing of the *head*, which felt benumbed and heavy as if she could not raise it from the pillow; there had been no sleep; the pupils were extremely small, with intolerance of noise and disturbance of any kind; there were palpitation of the *heart*, and sometimes faintness, and a feeling of sinking or dying; there were a sense of tightness across the *chest*, oppression in the breathing, and a peculiar tracheal or laryngal cough; some pain in the region of the *uterus*, increased by pressure, but no vaginal discharge; the countenance was usually pale, but sometimes flushed; the tongue extremely loaded, and even black at the back part; the alvine evacuations, on giving purgative medicine, were still at first dark-coloured, offensive, and scybalous; and afterwards offensive, and like yeast: the pulse was 120. I was forcibly struck by a general but marked resemblance of this case to those already given, and to others of the same nature which I had witnessed: the depleting plan already fully adopted and repeated, had proved ineffectual in affording relief; the purgatives hitherto given were, I believed, inefficient. The plan I proposed was to give efficient purgatives; to restrain their operation by draughts, with tinctura opii and spiritus ammoniæ aromaticus; to support the strength by means of nourishment, given every hour or oftener; to procure sleep by anodyne enemata; to guard against exertion or fatigue, noise or disturbance. The recovery was uniformly progressive; there was not even one recurrence of the painful attacks; the symptoms gradually disappeared, the pulse becoming natural, the pupils of the natural size, the head and chest being relieved, and the bowels daily but fully moved; quiet sleep and a good appetite returned; in six days the patient was convalescent; shortly afterwards she bore a long journey home without any ill consequence; and at the proper time had a safe delivery.'—P. 15.

After perusing this case the question very naturally presents itself, whether the patient would have been relieved, at the commencement of her complaint, by the plan recommended by Dr. Hall? or whether the previous depletion had been of service? We are certainly inclined to think the depletion was too considerable, if not wholly and from the very first useless, or even hurtful. The temporary nature of the relief afforded by venesection is, in these examples of disease, always a suspicious circumstance; and it would have been doubtless better to try some change of treatment before this lady had been deprived of about seventy ounces of blood. We shall give insertion to one case more, because it is short, and of a very decisive description.

'CASE V.—Mr. T. H., aged nineteen, complained on Sunday evening, September the 29th, of pain shooting through the region of the stomach to the back, recurring at intervals; he took some ginger tea, was relieved, went to bed, rose in the morning looking pale, but expressing himself better, went into the counting-house, and ate his dinner of cold roast-beef as usual.—About five o'clock in the afternoon he became affected with coldness of the hands and feet, slight flushing of the face, violent and constant pain of the crown, or, as he said, of the 'bones' of his head, numbness of the right hand and contraction of the right side of the lip, an incoherence of manner, answering hastily and sharply to any questions, restlessness and tossing about, and extreme intolerance of light or the least noise—desiring that the shutters might be accurately closed, and that the room-door should not be moved. About two hours after this attack sickness came on, a great load was vomited, and he became more collected, but still complained of pain of the bones of his head, and of the slightest light or noise. In an hour he fell into an uneasy slumber, breathed hard through the nostrils, awoke in half an hour a little easier, his hands and feet becoming warmer. He took a cup of bohea tea, and a dose of calomel and jalap; at ten o'clock P.M. he lay more composed, then dozed at intervals, but always complained on awaking of pain of the head; at two o'clock he slept more quietly, his medicine acted three times; he rose in the morning much refreshed, but looking dull and sallow. He continued to recover during the day, rode out, ate his dinner, but still looked ill.'—P. 19.

If instances of this kind are occasionally to be met with, how is the practitioner to discern them from others in which inflammation actually exists? How is he to avoid timidity and irresolution on the one hand, or mistakes which may be fatal on the other? We lament to say that Dr. Hall's remarks on the diagnosis of these affections proves little more than the difficulty of recognising them with certainty. Their distinguishing features are, he thinks, chiefly the suddenness of the attack, which is also preceded by an unusually

distinct rigor followed by greater heat than usual; more organs than one being generally affected at once; more than common appearances of disorder in the tongue and the alvine evacuations; complete but *temporary* relief if the lancet is employed; the absence of cough when the chest is affected, and not much increase of pain when successive full inspirations are made. On these marks, taken singly, no physician can safely depend; and in these, as in so many other cases, the life of the individual depends on the judgment of his attendant.

The first point in the treatment of this affection is, it may easily be supposed, the full evacuation of the bowels; after which, anodynes and attention to diet are sufficient to complete the cure. Nor should the lancet, in Dr. Hall's opinion, be wholly forbidden; since, to say nothing more of the difficulty of diagnosis, what is in the first instance irritation, may pass on to inflammation. He also recommends cold lotions to be applied to the head, or a liniment to the chest, or liniments or fomentations to the abdomen, according to circumstances.

Although in the two essays which accompany the one above commented on, we observe many marks of that minute observation by which Dr. Hall is distinguished, we do not see any thing which, by its novelty, demands particular notice from us. His remarks on some effects of the loss of blood are, in their practical and more important pathological relations, altogether the same as those to which we turned particular attention in the pages of this journal—(see particularly vol. xx. p. 16.) They have, therefore, no title to the air of originality which he throws around them. We notice this chiefly as affording us an opportunity of stating, that the professed authors in our profession are but too prone to appropriate the ideas which have been first promulgated in medical journals; and that Dr. Hall is neither the first nor the only author who has done us this unacknowledged honour.

There is one practical reflection of a very serious nature which must present itself to the mind of the reader more than once during the perusal of Dr. Hall's essays. It appears that those effects of irritability and of exhaustion which have a resemblance to inflammation, are not unfrequently manifested in the puerperal state, or are even somewhat common to it; and as in this state indiscriminate venesection must generally be hurtful, and often dangerous, it cannot be recollected without astonishment and regret with what strong assertions, with what confident *dicta*, with what almost threatening directions some writers have, within the last few years, assailed and confounded all their juniors in practice regarding

this very subject. The language employed in some of these instances has been so unguarded, that it can only be supposed to have been dictated by feelings which those at a distance from the authors cannot understand, to a zeal in opposing some rival authority, and an ambition to be thought infallible in cases calculated to excite considerable public sympathy, and concerning which the greatest uncertainty prevails among medical writers. Whatever may be the opinion of the majority of practitioners as to the treatment proper in cases of unquestionable puerperal fever, it is only necessary to look into what has been said upon it to be convinced that there are affections which simulate this dangerous disease very closely. By some writers the delusion is ascribed to irritability and exhaustion; by some, to what has been called bilious disorder; and all, excepting those who talk of judicial measures if we hesitate to bleed, will perhaps acknowledge that symptoms so alarming as scarcely to warrant delay will yield to very free evacuation of the bowels, of which we have ourselves seen some memorable examples. The only salutary lesson to be derived from this conviction, is that of redoubled caution and attention, and of a cool determination neither to be alarmed into murderous practice, nor deterred from pursuing such measures as, on a full review of all the symptoms, we may be convinced are required. In the promised work of Dr. Hall on puerperal diseases, we shall be glad to find some light thrown upon this subject, and the diagnosis of some of the most serious of those affections more firmly established. Of his fitness for the undertaking there can be little question, nor can his powers of discrimination be more beneficially employed.

III.

OF THE DISEASES OF INDIA, AND OF CALOMEL IN THEIR CURE.

[Second Article.]

Topographical and Statistical Reports of the Diseases most prevalent in the Different Stations and Divisions of the Army under the Madras Presidency.

Practical Observations on the Effects of Calomel on the Mucous Surface and Secretions of the Alimentary Canal, and on the Use of this Remedy in Disease, more particularly in the Diseases of India. Being Parts II. and III. of Sketches of the most prevalent Diseases of India. Illustrated by Tables and Plates. By JAMES ANNESLEY, Esq. Madras Medical Establishment, lately in Charge of the General Hospital, Madras, and Garrison Surgeon of Fort St. George. 8vo. Pp. 500. London, 1825.

MR. ANNESLEY next proceeds to give a brief account of the prevailing diseases of the troops employed on Field ser-

vice from 1815 to 1820, and with which he served during that period as superintending surgeon. This is preceded by a table similar in its plan to the one already quoted—(see p. 322). Fever, of the bilious remittent form, was the most prevailing disease. Its symptoms 'were highly inflammatory, with excessive pain in, and determination of blood to, the head.'

'The *treatment* most successful in Europeans, was a copious bleeding at the commencement, which at once arrested and removed the most distressing symptom, headach. This, followed up by full doses of calomel of from ten to twenty grains, and by the subsequent exhibition of active cathartics, effected a cure in a few days, without the aid of bark.'

'The treatment amongst the Native troops was more simple, but its salutary effects depended *entirely* upon its *timely* application. Six grains of tart. emetic, dissolved in a quart of water, of which a wine-glassful given every ten or fifteen minutes, till full vomiting was produced, at once relieved headach and thirst. The same dose, repeated every three hours during the following day, acted smartly upon the bowels, and kept a constant moisture on the skin. On the third day the patient was generally free from fever, and recovered rapidly from that time; but in some cases, where the tongue continued foul, three grains of emetic tartar were dissolved in a quart of water, of which a wine-glassful was given every four or five hours. This seldom failed in two or three days to remove the fever, without further aid.' –P. 319.

The author next treats of the more remarkable peculiarities of the diseases occurring in the '*Hydrabad Subsidiary force.*' His remarks on this subject are premised by a table, and an account of the stations which this force occupied, and of the climate and seasons of each.

'Remittent fever and dysentery are particularly prevalent, especially about the end of the monsoon, during the cold weather, and are to be ascribed to great and sudden variations of temperature. This form of fever was particularly noticed amongst the European horse artillery-men, and considered to arise from their being lodged in a close, crowded, and uncomfortable barrack; but, when the fever became prevalent, the men were removed to tents. This removal was always followed by an immediate decline of the disease. It was also remarked that, in some years, the fever was attended with great determination to the head; in other years, to the chest; in others, to the liver; and, in some cases, to the head and chest alternately.

'Fever and dysentery are the most prevalent and destructive diseases throughout the whole of this force; but, as it is a well-known fact, that few cases of diseased liver have ever recovered if allowed to remain, either at Secunderabad or Jaulnah, and as, from my own observation, I have found that, in most cases of examina-

tion after deaths from fever and dysentery, the liver was either in a high state of congestion or of suppuration, I am disposed to believe, that disease of this organ generally accompanied both these disorders, and is far more prevalent than the returns would seem to indicate; and I should almost be inclined to consider it as the endemic of the country, in regard to the European constitution, while fever is exclusively the endemic of the Natives.

'*Symptoms and Treatment.*—This fever comes on with excessive pain in the head, flushed face, suffused eyes, full, quick pulse, and loaded tongue. The treatment is similar to that which is recommended in the diseases of Mysore; but as the liver is (as I have already observed) in every instance more or less diseased in this country, I would recommend particular attention to that organ. It is a singular circumstance, that this fever, like that of Mysore, frequently terminates in the most obstinate intermittents, attended with considerable enlargement and hardness of the belly, which has been called physconia. But, from what I have myself seen, I should be disposed to think that all these cases of hard and swelled abdomen are the effects of visceral obstruction, arising from previous disease, frequent relapses, or imperfectly cured cases of fever, diseased liver, spleen, or dysentery; * a view of the subject deserving the particular attention of the medical practitioner.'—P. 326.

After giving a tabular view of the diseases of the '*Nagpore Subsidiary Force,*' and describing the topography and climate of this part of the country, Mr. Annesley states fever to be the most prevalent disease.

'The fever at this station differs materially in its character at different periods of the year, and requires very different treatment. In the cold season, after the rains, although there is great pain in the head, as well as other inflammatory symptoms, it would appear that bleeding is not attended with the same advantages as it is under similar circumstances in all other parts of the country, or, indeed, in the same country during the hot season.

'In the rainy season, and for some time afterwards, the fever is characterised by complete and regular paroxysms, consisting of well-defined cold, hot, and sweating stages, with perfect intermissions. As the air becomes dry and colder, the paroxysms become less complete, till there is neither cold nor sweating stages, and the fever is almost entirely reduced to the appearance of a simple febrile excitement of the vascular system, which comes on gradually at the usual hour, and advances slowly to its maximum, rarely very high, and then declines.

'*Treatment.*—The success of treatment in this fever during the

* 'I have been led to suppose that these obstructions are the result of the inappropriate use of bark, thrown in with the intention of checking fever, without a due attention to the removal of the visceral derangements accompanying it.'

rainy season, and for some time afterwards, appears to depend entirely upon bark being given in considerable quantity. I shall use the words of a highly respectable medical officer, Dr. John Wyllie, who served with the brigade at Nagpore the whole time they were there, from 1816 to 1821.

'He says, 'Bark is the grand remedy, not throughout the cold season, but throughout the rainy season, and for some time afterwards; without it there is no means of curing the fever from July and August till the end of October. After the rains have ceased for some time, or towards the beginning of November, when the air has become dry and cold, and with the progress of the dry weather, I have invariably found the bark become less and less beneficial, and have experienced it to be more and more necessary to purge and give calomel. By the end of January, or even before that time, I have found that the bark was of scarcely any use; and that the cure was only to be effected by repeated purgatives, and the administration of calomel and antimonial powder; and that the same remedies were efficient throughout the hot season; but that they again lost their power soon after the commencement of the rains.'—P. 334.

Having given a succinct account of the diseases more generally prevailing in the different districts and stations belonging to the Madras Presidency, Mr. Annesley next takes a view of the whole medical returns of the Madras army, and for this purpose he selects those for the year 1821, as the reports 'have been made out with more precision' for that year. From these reports we here insert three tables, showing the rate of mortality from some of the most destructive diseases occurring in India. In his remarks on the reports, Mr. Annesley points out, with great force and with undoubted propriety, the injurious consequences of discharging men from hospital before they have completely recovered—a practice, it would appear, but too often followed in the Honourable Company's service. We most implicitly agree with our author, 'that to discharge men from hospital treatment and discipline before disease has been perfectly removed, or before they have sufficiently recovered their strength, must lead to frequent relapses; and that frequent relapses will as surely lead to chronic, or permanent diseases, disqualify men from the active duties of soldiers, load the non-effective establishment, and cause the discharge of men from the service!'

TABLE XIX.—Per Centage of Deaths of the most Destructive Diseases, for 1821.

Divisions of the Army.	FEVER.				LIVER.				DYSENTERY.				CHOLERA.			
	Europeans.		Natives.		Europeans.		Natives.		Europeans.		Natives.		Europeans.		Natives.	
	Rate of deaths upon the number of admissions.	Rate of deaths upon the effective strength of the division.	Rate of deaths upon the number of admissions.	Rate of deaths upon the effective strength of the division.	Rate of deaths upon the number of admissions.	Rate of deaths upon the effective strength of the division.	Rate of deaths upon the number of admissions.	Per centage of deaths upon the effective strength of the division.	Per centage of deaths upon the number of admissions,	Per centage of deaths upon the effective strength of the division.	Per centage of deaths upon the number of admissions.	Per centage of deaths upon the effective strength of the division.	Per centage of deaths upon the number of admissions.	Per centage of deaths upon the effective strength of the division.	Per centage of deaths upon the number of admissions.	Per centage of deaths upon the effective strength of the division.
	per cent	per mille	per cent	per mille	per cent	per cent	per cent	per x m.	per cent	per cent	per cent	per mille	per cent	per mille	per cent	per mille
Presidency	1	7	2	3	5	2	37	4*	6	3	14	1	9	4	36	3
Centre division	9	9	1	2	3	1	28	2	8	2	4	8	24	per cent 1	32	6
Southern division	3	9	2	4	1	3	9	1	16	3	10	2	23	per mille 8	34	9
Travancore subsidiary force	0	0	1	1	4	1	0	0	7	9	3	3	0	0	24	3
Northern division	8	7	2	3	7	4	8	1	5	2	8	5	33	per cent 1	29	2
Mysore division	1	4	2	5	4	1	21	4	7	2	9	1	2	per mille 1	56	4
Ceded districts	per mille 2	2	6	6	5	6	25	1	4	6	8	2	0	0	30	3
Hydrabad subsidiary force	per cent 1	5	2	per cent 1	9	2	28	4	6	2	12	2	7	per x m. 8	30	2
Nagpoor subsidiary force	2	1	2	1	6	4	0	0	11	3	10	2	1	per mille 9	32	2
Field force in the Dooab	2	1	8	2	5	8	0	0	8	4	10	2	0	0	40	9
Field force, Kandeish, & Shelapore	0	0	2	6	0	0	0	0	0	0	3	9	0	0	30	3

	Number of admissions of the above diseases.	
	Europeans.	Natives.
Fever	3,442	18,165
Liver	2,110	95
Dysentery	2,910	1,338

* Four in ten thousand.

It is singular to observe, that while the number of admissions of liver disease is far greater amongst the Europeans than amongst the Natives, the deaths bear a much greater proportion to the admissions

TABLE XX.—Abstract of Per Centage of Deaths of the most Destructive Diseases, for 1821.

	Total number of deaths of the most destructive diseases.		Per centage of total deaths of the most destructive diseases, calculated upon the number of admissions.		Per centage of total deaths of the most destructive diseases, calculated upon the effective strength.	
	E.	N.	E.	N.	E.	N.
Fever	66	462	19	25	7	6
Liver	103	17	5	18	11	2
Dysentery	236	119	8	9	25	2
Cholera	39	830	11	33	4	10

			Number of admissions of the above diseases.		Effective strength.	
			E.	N.	E.	N.
Fever			3,442	18,165		
Liver			2,110	95		
Dysentery			2,910	1,338	9,553	82,046
Cholera			357	2,527		

	E.	N.
Total Deaths in the Army during the year 1821, were	**604**	**1629**
And the Deaths of Fever, Liver, Dysentery, and Cholera, were	**444**	**1428**
	160	**501**

Leaving 160 Deaths amongst Europeans, and 501 Deaths amongst the Natives for all other Diseases.

TABLE XXVIII.—*General Return of Deaths, Invalids, Pensioners, Discharged, and Time-Expired Men, belonging to his Majesty's and the Honourable Company's European Service, for the Year* 1820.

CORPS.	Effective strength, 1st January, 1820.	Number received during the year.	Total strength during the year.	Dead.	Discharged.	Invalided.	Pensioned.	Time-expired.	Stations where each corps was during the year.	Annual regimental loss, calculated on the total strength.	Average Annual loss of the army, calculated on the total strength.
H. M. 13th Dragoons ...	716	8	724	46	3	9	...	...	Centre Division	8 per cent.	
22d	95	.....	95	2	5	11	...	...	Embarked for Europe.....	$14\frac{7}{16}$	
Royal Regiment...	816	243	1,059	46	48	21	1	...	Trichinopoly.....	$10\frac{6}{16}$	
30th	895	51	946	73	10	...	...	...	Hydrabad	$8\frac{7}{16}$	
34th	888	5	893	37	15	20	...	...	Bangalore and Madras	8	
46th	1,023	76	1,099	37	17	1	...	...	Madras and Bellary.....	5	
53d	934	62	996	82	11	28	...	...	Bellary and Bangalore.....	$12\frac{1}{16}$	$10\frac{3}{16}$ per cent
69th	1,055	107	1,162	61	20	5	...	...	Cannanore	$8\frac{2}{16}$	
89th	1,035	95	1,130	30	12	26	...	...	Quilon	6	
H. C. Horse Artillery ...	395	23	418	44	43	10	8	...	Field Service	$25\frac{1}{16}$	
1st Battalion	451	214	665	59	17	18	4	2	Mount	15	
2d.....	576	192	768	43	48	22	3	...	Mount	$15\frac{1}{16}$	
M. E. Regiment...	755	106	861	75	9	21	8	...	Asseer-Ghur.....	$13\frac{1}{16}$	
Total	9,634	1,182	10,816	635	258	202	24	2			

TABLE XXXI.—General Abstract of Loss in the Army of European Forces, by Deaths, Discharges, Invalided, Pensioned, and Time-expired Men, both in his Majesty's and in the Hon. Company's Services, under the PRESIDENCY of FORT ST. GEORGE, for Seven Years, from 1815 to 1821.

YEARS.	Effective strength of the army.	Annual loss in the army by deaths.	Annual loss of men by discharges.	Annual loss of men by invalided.	Annual loss of men by pensioned.	Annual loss by time-expired men.	Total loss of men by invalids, pensioned, and time-expired men in seven years.	Grand total loss by deaths, discharged, invalided, pensioned and time-expired men.	Rate of loss by death per annum.	Rate of loss by invalided, pensioned and time-expired men.	Total Rate of loss by deaths, invaliding, &c.
1815	13,641	722	162	353	13	...	528	1,250	$5\frac{3}{10}$ per cent	$3\frac{91}{10}$ per cent	$9\frac{2}{10}$ per cent.
1816	13,525	582	129	331	17	49	526	1,108	$4\frac{3}{10}$	$3\frac{9}{10}$	$8\frac{2}{10}$ .....
1817	13,131	771	292	329	8	43	572	1,443	$5\frac{9}{10}$	$5\frac{1}{10}$	11 .....
1818	13,129	1,269	55	429	6	14	504	1,773	$9\frac{7}{10}$	$3\frac{8}{10}$	$13\frac{5}{10}$ .....
1819	13,376	963	200	287	40	84	611	1,574	$7\frac{2}{10}$	$4\frac{5}{10}$	$11\frac{7}{10}$ .....
1820	10,816	635	258	202	24	2	486	1,121	$5\frac{8}{10}$	$4\frac{5}{10}$	$10\frac{3}{10}$ .....
1821	10,527	618	77	200	...	...	277	895	$5\frac{9}{10}$	$2\frac{6}{10}$	$8\frac{5}{10}$ .....
Total.....	88,145	5,560	1,173	2,131	108	192	3,604	9,164	$44\frac{1}{10}$	$28\frac{3}{10}$	$72\frac{4}{10}$ .....
Average of seven years per annum...	$12,592\frac{1}{10}$	$794\frac{3}{10}$	$167\frac{6}{10}$	$304\frac{4}{10}$	$15\frac{4}{10}$	$27\frac{4}{10}$	$514\frac{9}{10}$	$1,309\frac{1}{10}$	$6\frac{3}{10}$	4	$10\frac{3}{10}$ .....

Average strength of the army, upon 88,145 men in seven years, is ..... 12,592 per annum.
Average loss upon 5,560 men by deaths, in seven years, is ..... $794\frac{3}{10}$ ditto
Average loss upon 3,604 by discharges, invalids, pensioners, and time-expired men, in seven years, is ..... $514\frac{9}{10}$ ditto

Total average loss of men per annum ..... $1,309\frac{1}{10}$

Average loss by death per annum ..... $6\frac{3}{10}$ per Cent.
Ditto by discharges, invalids, pensioners, &c. ..... 4 ditto.

Total loss by deaths, including discharges, invalids, pensioners, and time-expired men, per annum..... $10\frac{4}{10}$ ditto.

Average loss by death of diseases taken from the medical returns, 5,191 in seven years, is 741 per annum, or $5\frac{8}{10}$ per cent per Annum.

Having given an account of the author's very interesting reports—reports which will prove most instructive to medical men proceeding to India, and abounding with tables which will prove a model to the medical officers of both the naval and military service of the country—we now proceed to give a brief account of his views respecting the modus operandi of calomel, and of his method of exhibiting this remedy in a number of diseases.

After stating that calomel was exhibited during the seventeenth century and commencement of the eighteenth in scruple and half-drachm doses as a cathartic, and quoting authors in proof of the fact, Mr. Annesley observes—

'It is singular, that after so many years' experience of the use of calomel, and after the great diversity of opinion that has been manifested regarding its salutary operation, and the doses in which it ought to be exhibited, some investigation should not have been entered upon as to its direct effects upon the coats of the stomach and bowels, and upon the secretions poured into them, whence a correct and safe practice might be deduced.'—P. 382.

'It is generally believed, and probably it may be true, that many constitutions in India are ruined by the use of calomel; but I am disposed to consider this to be the consequence of continuing its use in small doses, long after the necessity for using it ceases.

'The very reverse of this is the fact: small doses of calomel, from two, three, to four and six grains will purge, and keep up a considerable degree of irritation in the stomach and bowels, when twenty grains will not; but, on the contrary, will allay the irritation of both, when it results from inflammation of their mucous surfaces. Thus calomel, in large doses, appears to act as a sedative, and this will be proved by the experiments I am about to adduce.'—P. 387.

Mr. Annesley next details several experiments made by him on dogs, in order to ascertain the effects of calomel on the secretions, and mucous surface of the digestive canal. Our limits permit us not to give extracts of these experiments, we must refer our readers to the work itself. We can only state, that the general result of these experiments shewed that calomel in large doses, 1st, combines with, renders more fluid, and detaches the viscid mucous secretions lining the alimentary canal; 2dly, that it diminishes the vascular state of the stomach, particularly when a morbid increase of such a state exists; and, 3dly, that it increases the vascularity and capillary circulation in the mucous coat of the large intestines. The experiments are illustrated by several coloured drawings of different portions of the alimentary canal, made a few hours after the exhibition of a large dose of this medicine.

Our readers will find the substance of the next section of this part of Mr. Annesley's work in the Number of this Journal for December (p. 555). Having in this section considered the influence of calomel on the secretions of the alimentary canal, and on those of the liver and pancreas, he offers some general remarks on the use of calomel in disease. He here states :—

'It is not the intention of these observations to recommend the indiscriminate use of calomel; but I maintain, from very extensive experience of its effects, and from the experiments already stated, that in many acute diseases, and particularly in those of India, it may be given boldly, and without risk; and that injurious effects are more likely to be produced by frequently repeated small doses, which keep up a certain degree of irritation and nausea, than by a full dose given at once, and discontinued when the objects looked for are gained. These objects I conceive to be to allay irritability, diminish vascular action, and to *cleanse* the intestinal canal of the tenacious matter which often lines it, and, in many cases, almost completely obstructs the passage through it.

'In these diseases, therefore, in which we have reason to suppose, from the great irritability of the stomach, the state of the tongue, and the functions of the abdominal viscera, that increased vascularity of the digestive canal is present, with a deranged state, and accumulation of the mucous, and other abdominal secretions, as in all the types of fever, dysentery, liver complaints, &c. calomel, in doses of from ten to twenty grains, either alone or variously combined, according to the circumstances of the case, is an excellent remedy. In these diseases, I have been generally in the practice of giving at bedtime twenty grains of calomel, with one or two grains of opium, and sometimes without the opium, and a smart purgative draught the following morning. This practice I have repeated daily, until the excretions assumed a healthy hue. A tonic laxative was then exhibited, and continued till the natural functions of the bowels were completely restored. In these diseases I never wished to see the mouth in the least degree affected; whenever this happened, I considered the salutary effects of calomel interrupted, because its use must be then discontinued; and it was my object to act upon the secretions of the intestines to diminish vascular excitement in the intestinal canal, and not in the most remote degree to act upon the salivary glands.'—P. 407.

In section fifth, Mr. Annesley enters at considerable length into the consideration '*of the employment of calomel in the treatment of intermittent, remittent, and continued fevers.*'

'Calomel may be given in these different forms of fever, in order to fulfil three distinct indications. The *first* of these is to diminish the irritability of the stomach, when that state exists, and more particularly, when it evidently depends upon increased vascular action in the internal coats of this viscus. The *second* intention

with which this remedy may be exhibited, is to correct and to promote the discharge of the secretions on the internal surface of the digestive canal, and those of the large secreting organs, which are generally deranged in this class of diseases; and the *third* indication is to procure, by its means, under certain conditions which will come under consideration, increased action of the great secreting organs, and to excite the functions of the vascular system generally, without, however, inducing its specific operation on the salivary organs. This last indication is the one which ought more rarely to be resorted to, and when adopted, it should never be with the view of affecting the salivary organs; because I believe, from extensive observations of its effects, that when calomel is given in the febrile diseases of warm climates, to such an extent as to excite these glands, it is then carried too far—so much so, as to occasion injurious effects upon the system. It then generally lowers the powers of life rapidly, and the state of excitement produced by it upon the vascular system has then commenced its termination in exhaustion.'—P. 410.

This passage, in our opinion, evinces more correct ideas respecting the rationale of the operation of calomel in the treatment of fevers than have previously been given to the profession. We regret that our limits prevent us from quoting the very valuable and precise directions which the author gives respecting the mode of exhibiting this remedy, both in combination with other medicines, or alternately with them, according to the various forms which intermittent, remittent, and continued fevers assume, and according to the constitutions and habits in which these diseases are met with. The whole of this very interesting section should be studied again and again, not only by the intertropical practitioner, but also by practitioners in our own and similar climates. The following remarks respecting the mode of using calomel in intermittent fevers will shew the justice of our observation:—

'As the intermittents of India occur both as primary and secondary diseases, the treatment of them must be varied accordingly. In the primary form of ague, *i. e.* when it appears either in a quotidian, tertian, quartan, or double tertian and quartan form, and not as the sequelæ of remittents, I prescribe a scruple dose of calomel at bedtime, with a view of fulfilling the second general intention with which I resort to it, namely, to correct and to discharge the deranged secretions. I generally order it to be taken at bedtime, with a view of allowing it to operate its effects undisturbedly till the following morning, when it is desirable to procure full and copious evacuations of the morbid secretions which load the gall-bladder, and the internal surface of the stomach and intestines; and which the previous dose of calomel has rendered more copious, and more easily operated upon by means of the sub-

sequent purgative. The cathartic draught, which seems to be the best suited to procure the full discharge of the vitiated secretions, after the exhibition of the calomel on the previous night, consists of the infusion of senna, with salts and the tartarised antimony. Cases will occasionally occur, wherein it will be advisable to commence the treatment with the exhibition of an emetic; and when there is little or no affection of the head or stomach, this remedy may be given, and, if possible, in the forenoon; but even then the scruple dose of calomel ought also to be taken at bedtime, and followed up the next morning by the purgative draught.

'On the second night of the treatment, the scruple dose of calomel may be repeated, and followed by the morning purgative; or ten grains of calomel may be given, with five or six of aloës, and the morning purgative, as before, according as the state of the patient, and the appearance of the tongue and of the excretions, may guide the practitioner. As soon as the tongue begins to become clean, and the excretions assume a healthier character, the cinchona bark, combined with aromatics, may be given in decided doses shortly before the expected paroxysm; but during the exhibition of the bark, calomel with aloës must be taken at bed-time, and an aperient draught in the morning. The bark ought not to be commenced with until the secretions have assumed a healthier character, and until hepatic bile is seen in the excretions; and it ought never to be exhibited whilst pain, tenderness, fulness, and oppression are felt in the hypochondriac and epigastric regions; if these instructions are not attended to, and if the bark be exhibited before the deranged secretions are carried off, and whilst symptoms of deranged action of the liver are evident, there will be great risk of inducing chronic inflammation of the liver and spleen, which, if not immediately attended to, will terminate in obstructions and permanent disease of these viscera. As soon as the disease yields to this treatment, calomel may be given in much smaller doses, (if given at all,) and it may be combined with aloës; but in this stage of the disorder, I prefer the blue-pill, with aloës and myrrh, and tonic laxatives through the day.'—P. 413.

Now, we consider these precise and definite directions as most valuable, particularly as respects the medical officer just arrived in India; and in estimating their value, it should be considered that they come from one of the ablest morbid anatomists of the present day—from a practitioner who, during twenty-five years' service in India, has enjoyed the most extensive experience amongst the military and civil sojourners in that climate—amongst soldiers and sailors—amongst new-comers, the old residenters, and natives—and who has, during the greater part of this time, been placed at the head of most extensive medical establishments both in civil and military life.

The observations which we have applied to the foregoing

section, are equally applicable to the other sections of this part of the work. The author afterwards considers, in succession, and in a clear and intimate manner, the use of calomel ' in the acute diseases of the liver and gall-bladder'—' in chronic disorders of the biliary organs'—' in acute dysentery'—' in chronic dysentery and diarrhœa'—' in the different forms of cholera'—and, lastly, ' in some of the more prevalent diseases of children.' For the author's valuable observations on each of these subjects, we must refer our readers to the work itself, of which a review, however comprehensive, can convey no adequate idea; the work should be in the hands of every practitioner, for its usefulness will not be confined to those between the tropics. It is the production of most extensive and matured experience, and of close and enlightened observation—an experience and observation which have procured for their possessor the most honourable marks of distinction from those at the head of the Indian government, from the Lords of the Admiralty,* and from the commanders-in-chief of both the naval and military services in India,

We terminate our review of this most excellent work with the following just remarks with which this part of it concludes:—

' The experiments which I have detailed, but still more decidedly my extensive experience of the effects of large doses of the remedy, when given in the way I have described, shew its propriety; but even this mode, although the safest which can be adopted, requires judgment and tact in the practitioner for its efficacious employment. The empirical and indiscriminate use of the best medicines, and the inappropriate application of the most efficient practice, have been the frequent causes of their unmerited neglect, and of the most erroneous notions respecting them—causes, however, which can operate only for a time, and which will gradually disappear before the more general diffusion of professional science, and a more enterprising and accurate spirit of inquiry.'

* We understand that the Admiralty presented Mr. Annesley with a valuable piece of plate as an acknowledgment of the services rendered by him to the naval service of the country whilst he was in charge of the General Hospital at Madras.

PART II.

COLLECTIONS OF MEDICAL FACTS, WITH OBSERVATIONS.

SECTION I.—ORIGINAL PAPERS.

I. *Some Interesting Particulars regarding the Nature and Cure of the Cholera Morbus, in a Letter from* ANDREW MONTGOMERY, Esq. the Medical Officer in charge of the Town and District of Chanda, near Nagpore, dated the 21st of October, 1825.

ABOUT the middle of May last, a convict was sent from a village about eighty miles east of this place to be confined in the jail here. A few days previous to his departure from the village, cholera had made its appearance there, but he did not suffer in any way until two hours after his arrival at Chanda, when violent symptoms of the epidemic shewed themselves. As the civil hospital lies at some distance from the battalion lines, where my quarters are situated, about two hours had elapsed ere he could be visited; and when he was first seen, vomiting and purging of a watery fluid, severe spasms of the abdominal and gastrocnemious muscles, intense thirst, coldness of the extremities, profuse clammy perspirations, anxiety of countenance, excessive prostration of strength, and constant tossing about of his limbs, were the symptoms under which he was labouring. The treatment by laudanum, oil of mint, brandy, &c. usually adopted in this part of India, was resorted to, but without success, and in twelve hours from the first attack he was a corpse. Being a Ghond (a tribe who do not bury their dead), his body was carried out for interment by four other convicts, of whom three were attacked on that and the succeeding day with symptoms such as those enumerated, and two of them died within eighteen hours. A native who had assisted in administering medicines to those two men, was seized with cholera on his return from the jail, and very nearly lost his life. The disease now spread among the convicts, proving fatal to six of them, who died each in the same number of consecutive days; and it was remarked that those only were affected who had either been in contact, or at the funeral, or in close communication with those who laboured under it.

These incidents may be considered as proofs of the contagious nature of this epidemic; but the following more decisive evidence of this occurred a few days afterwards. Four policemen were engaged in escorting treasure from a distant village to Chanda, and had occasion to pass through a village called Mhool, where the disease was then raging with great violence, and where they halted one night. In the course of the following day two of them were taken ill on the road, and died of it after an illness of six hours.

The other two reached this place apparently in good health, but in a few hours after their arrival were both seized with symptoms of cholera and died within six hours.

No description I can give would convey a sufficiently strong idea of the sufferings of these two poor fellows: every remedy I could at that time think of, in the least degree likely to afford relief, was tried, but without any effect. But as the disease continued to prevail among the prisoners in the jail, I bethought myself of the following more energetic and successful practice. A pill consisting of two grains of opium, ten grains of calomel, and three grains of powdered capsicum, was given as soon as possible after the appearance of the disease, in conjunction with a draught composed of two ounces of aqua vitæ, fifty drops of tincture of opium, and ten drops of oil of peppermint. If the vomiting and purging continued the draught was repeated every half hour, and the pill every fourth hour; and if it was rejected, it was repeated again and again till it was retained. Bleeding seldom or never was employed by me, my practice being solely among the natives, and they do not bear depletion. Besides these remedies, I employed the warm-bath, blisters to the region of the stomach, and frictions with hot arrack on the trunk and extremities. Fifty cases out of sixty-three treated in this manner recovered under my own inspection. No case proved fatal in which bile was ejected by vomiting or otherwise. Having had such reason to place confidence in the treatment here detailed, I made up large quantities of the pills and of the mixture, which were sent in all directions over the district, with suitable directions for their administration in the Mahratta and Indostanee languages. The disease was then raging in almost every village, and the great mortality so intimidated the natives that all prejudices of caste gave way, and they were glad to accept any thing that held out even a chance of checking it. I have heart-felt pleasure in assuring you on information that may be relied on, that whenever the medicines before mentioned were promptly administered not more than one case in fifteen proved fatal; whereas before they were sent out, the deaths were at the rate of eight out of ten. The disease has now, I may say, disappeared; nor is its return apprehended before the month of May next, after the hot winds have set in, that being the season in which it has annually been felt here since its first appearance.

Remarks.—To this clear and unsophisticated narrative of Mr. Montgomery, we cannot but attach considerable importance. For in the first place, we cannot refuse our assent to the inference which he draws regarding the infectious nature of this epidemic, if inference it can be called; for when we see a malady introduced into a district where no such malady previously existed, by the contact and presence of a single individual, and then of two individuals brought from distant districts in which it prevailed, this seems more of the nature of a simple and direct *fact* than an *inference*, and must be undeniable if the evidence, as it is here, be incontestable.

And it is to be hoped that from the force of this and many similar facts, the eyes of those will be opened who contend against the existence of contagion from the circumstance of great numbers being exposed to it, without being affected. Various epidemics possess this property in various degrees. With regard to small-pox, for instance, very few of those who are susceptible escape the effect of the infection when exposed to it. But there are others, such as the plague, the typhus of Europe, the typhus icterodes of the West Indies, and dysentery, which do not spread by infection, except under particular circumstances of atmospherical temperature, defective ventilation, bad clothing, improper or scanty diet, fatigue, mental depression, crowding, also idiosyncrasy, and habits of life.—Secondly, we cannot but ascribe considerable merit to the writer of this letter, for the decision and vigour which he manifested in adopting a practice which proved so eminently successful.

II. *Case of Rupture of the Linea Alba.*—By W. C. Dendy, Esq., Surgeon to the Royal Universal Infirmary for the Diseases of Children, and M.R.C.S.

When the young physiologist is examining the soft and delicate fibre of a muscle, and reflects on the gigantic force which it is capable of exerting, he must be struck with the *apparent* disproportion between its texture and its power. It will at once be evident, that in reasoning respecting vital structures, he must not be guided by mechanical rules alone. It is that undefinable something the principle of life, which, while it has rendered the animal solid and fluid capable to a certain degree of resisting the agency of chemical decomposition, has at the same time endued the fibrous structure with a force of action almost miraculous. Experiment has proved this truth, by drawing a correct comparison between the resistance of living and of dead muscle, demonstrating to us that this effect arises from the power of contractility. On this conviction we are disposed to view, without much surprise, the *ordinary* muscular actions of the body. There are, however, certain *extraordinary* and laborious exertions, under which it might appear almost impossible that the cohesion of the part could be preserved. In the contraction of the gravid uterus, for instance, the parietes of which have become attenuated by its distension—it is wonderful that so delicate a bag can for so many hours be subject to its most laborious contraction, and force a solid body, the fœtus, through a narrow and disproportionate canal, without contusion or laceration. Yet such accidents are happily but rare, although many cases are on record where the uterus has given way, and the fœtus escaped into the cavity of the abdomen. On the tendinous attachments of muscle, however, have not been bestowed, at least to that degree, this peculiar quality and power of resistance. It is, therefore, the tendon, or in some cases even the bone itself, which is torn or broken by the violent or sudden action of the muscle. The rupture

of the tendo achillis for instance, is not an unfrequent accident. We have an example too in *direct* inguinal hernia, where a *splitting* of the tendinous fibres of the obliquus allows a visceral protrusion.

In witnessing the extraordinary contractile force of the abdominal muscles during the pains of parturition, even remote analogy might often cause us to apprehend some material lesion of their tendinous attachments; yet I do not recollect to have seen a record of such an occurrence to any considerable extent, and I am, therefore, induced to relate the following case:—

Mrs. Parsons, aged twenty-eight, was delivered of a very large child (her first), after a most severe labour, aggravated too by a premature rupture of the membranes. The pains at the latter stage were for about two hours almost incessant; and as the presentation was more that of the forehead than of the vertex, I had recourse to the vectis to bring the latter part under the pubes, and finish the labour. After her delivery, I administered the usual anodyne; and on the second evening a laxative. The contractions at the uterus were regular; and for two days my patient complained of no *fixed* pain. On the 3d day, however, I was informed, that she had for some hours complained of an acute pain about the umbilicus and pubes, with smarting in the vagina, on the evacuation of urine, which, however, was abundant, as were also the lochia.

There was nothing unusual in these symptoms; but the circumstance which struck me was this: on putting aside the bedclothes, I perceived a large irregular tumour, about midway between the umbilicus and the xiphoid cartilage, at that time about four inches in diameter, and two inches in elevation. Its irregular form at once proved that it was not abscess, and in a few seconds the changes which were continually taking place, both in its shape and size, convinced me that it was a protrusion of some portion of the intestines, whose peristaltic action was now distinctly visible, as if covered but by integument, and which produced the protean alterations alluded to. At some periods the surface of the abdomen presented its usual appearance—at others, and especially on the lapse of an hour or more, after taking light food, the protrusion would be very considerable, and the peristaltic action visible at some distance from the bed. On the contraction of the recti, I was enabled more minutely to trace the lesion. On passing my fingers along the edges of the canal formed between these muscles, my patient complained of soreness, similar to the friction of a raw surface; and on pressing more firmly, I was enabled to lay my fingers, as it were, on the cavity of the abdomen. No such surface as that of linea alba was to be felt affording resistance, and I was convinced that that tendon had given way to a considerable extent.

My first care was to subdue the acute symptoms; and I therefore ordered ten leeches to be applied round the umbilicus, and a blister above the pyramidales. The leeches bled profusely, and the blister rose freely. A cessation of the acute pain was the result. There was still, however, some tension, and a recurrence of the inflammatory symptoms took place on the following morning: the

former active mode of treatment was had recourse to (with the addition of repeated doses of hydr. subm. and pul. antim.) with the same good effect. It may be mentioned, that during her labour she felt a snap in her right ear, which was followed by partial loss of hearing; and that on examination per vaginam, at her request, I discovered that she had slight prolapsus of the uterus.

As the acute symptoms had now subsided, it was proper that I should direct my attention more particularly to the protrusion. I accordingly reduced the then prolapsed viscera, and applied a broad flannel roller round the abdomen over the umbilicus, and as high as the margin of the ribs. The bandage produced an immediate sensation of ease and support to the patient, the previous feeling of debility being directly removed. On the evening, however, soon after the application of the bandage, a discharge of pus, to the amount of about two ounces, issued from the vagina; but from what particular part I could not from the nurse's account, or from any previous symptoms, determine.

On removing the bandage about a week after its first application, as my patient was lying on her back, I could still feel a considerable depression between the recti, and she complained of a degree of smarting on the pressure of the fingers, but there was no protrusion. After the lapse of another week, I removed the bandages as *she was sitting*. The hollow was still apparent; but the sensation of soreness much less, and there was no protrusion. It is now a month since the birth of her child; she continues to wear the bandage. The only inconvenience she complains of is from the prolapsus uteri, which, however, is not continual; but is often produced by the contraction of the abdominal muscles in expelling the intestinal or vesical contents.

I am disposed to believe, that during the excessive pains of labour very much advantage is derived from compression of the abdomen by bandage; yet such an auxiliary is not generally employed. With a somewhat similar precaution, we support the perineum on the protrusion of the fœtus; and among persons who are addicted to very laborious exertion, the system of bandaging is by no means uncommon to preserve a closer compact of muscular fibre, thereby concentrating and increasing power, and of course diminishing the danger of laceration. In modern surgery, too, something like this principle has guided us in the application of adhesive plaster to indolent ulcers, with a view to impart tone and healthy action to those vessels whose office it is to restore the losses, and repair the morbid changes of the body.

Upper Stamford Street, Feb. 19th, 1826.

III. *Case of Uncommon Distension of the Urinary Bladder.* By Edward Thompson, Member of the Royal College of Surgeons, London.

On the 11th of October I was requested to visit Mr. Baker, to give an opinion as to the necessity of his being tapped. He had been

affected for some time with a complaint in his bowels, attended by considerable enlargement. His constitution appeared to have given way to the affection, for he was weakened and emaciated, and his spirits depressed. The disorder had come on in a gradual manner, and so silently that he could not name the time of its commencement; but it would seem to have existed a length of time before it had excited serious attention. The symptoms were, when I saw him, (and I only saw him once alive,) dull pain in the abdomen, with slight soreness on pressure; a low irritative fever, with entire loss of appetite; a well-defined swelling in the belly, extending from the pubes to the cartilages of the ribs, accompanied by a feeling of fluctuation; a difficulty in passing urine, although enabled to discharge a quart in the day; a frequent desire to micturate, preventing sleep, and an irregular state of the bowels. He had also slight œdema of the feet. His dejections were for the most part white-coloured, and occasionally streaked with blood. There was no pain or fulness in the region of the liver, yet the skin was tinged with bile. These were the whole of the symptoms I observed, and I suppose they did not materially alter, except that the skin became more suffused with bile, and the pain in the abdomen increased.

From the view I took of the symptoms, with the appearance and feel of the belly, I stated that I believed the swelling of the abdomen not to be caused by effusion into the proper cavity, but from enlargement or distension of the bladder; and instanced in proof of it two cases that had occurred on the Continent, which had nearly been mistaken for dropsical swelling. I give this opinion publicity in consequence of a misstatement that has been made respecting this patient.

The plan that was suggested was, in the first place, the employment of the catheter, which was expected to meet with obstruction both from scirrhus and diseased prostate; that an irritating application should be applied to the abdomen; that he should take portions of a mixture composed of bals. peruvianum, tinct. digitalis, and vin. colchici, along with an anodyne mercurial pill at night. The catheter, after repeated trials, I was told could not be introduced. No medicines had any effect, as might have been expected in a constitution so broken down as his was; and he sunk, after much suffering, on the 2d of February last. On the 3d, I assisted in opening the body. Present, Messrs. Robinson and Fox, Mr. Wilkinson, and Mr. Thompson, along with the pupils of the first and last.

Sectio cadaveris.—On laying open the cavity of the abdomen, a large oval body presented itself, reaching from the pubes to the cartilages of the ribs on the right side. It was with the greatest difficulty this enlargement could be separated from the peritoneum, to which it was attached in front through its whole surface. That membrane was much diseased and thickened, and so incorporated with the substance of the tumour, that, in separating them, a fear was entertained of injuring the part beneath, to which attention was now particularly directed. On clearing this body of various

other diseased attachments which it had with the parts around, it was found to be the bladder enlarged to an enormous degree. It rose from the pubes nearly thirteen inches, and filled the abdomen from one side to the other, pressing the intestines high up in the cavity. The whole mass was carefully removed. The bladder contained, although far from full, a measured gallon of very dark urine, almost black. Its coats were much thickened, being in some parts nearly three-eighths of an inch. The prostate gland was much enlarged, accompanied by a diseased state of the anterior part of the rectum, which was of a scirrhous hardness. All these parts, along with the bladder, were in a highly vascular state. The urethra was open and free, except in the neighbourhood of the prostate, where it was much straightened. The bladder contains when filled twelve pints. The most singular appearance which the dissection displayed was in the discovery of innumerable small bodies of a spherical shape, attached by minute pedicles to the external part of the bladder and prostate gland: they studded the whole lower and back part of the bladder. Of the nature of their formation I am ignorant; but, judging from their appearance and fracture, I suspect they are formations of the triple phosphate. I was not able to collect many; but the few that were saved I forward with this case. They possess an interest from the situation in which they were found, and from the difficulty of accounting for their formation. Had they lined the inner coat of the bladder they would have excited no attention; but situated as they were, on the external coat, they become interesting indeed. Unless we suppose the urine to have exuded through the coats of the viscus, there is no accounting for such deposit; and yet the internal part of the bladder was perfectly free from deposition of any kind, and the coat quite smooth.

Of the other visceta, nothing remarkable was observed except of the liver. This organ was much harder and smaller than common; yet the substance was not, when cut into, different in colour from the healthy state. It was likewise free from tubercles or particular disease, and had no unnatural attachments. The gall bladder and its duct, however, were much diseased. The former was nearly double the natural size, and held a quantity of bile as thick as honey. The duct was quite impervious down to its junction with the hepatic. At its origin, there was an enlargement larger than a Spanish nut, of very fine texture. The ductus communis was not by one-half so large in calibre as I have generally seen; its coats did not shew any apparent disease of structure. I did not mention that the omentum was shrivelled up to one-sixth of its size, and laid like a narrow band along the base of the stomach. The other cavities were not examined, as so much time was taken up in the examination of the abdomen; and the dissection was chiefly commenced to discover the affection of this cavity.

Remarks.—The necessity of attending to the state of the bladder, in cases of supposed ascites, is here displayed. Men of the very first standing in their profession have been deceived; and when I

mention John Hunter as one, it is unnecessary to name another. He punctured the bladder in mistake, and only found it out by tasting the urine. The quantity of water voided can be no guide, as the urine flows off as secreted after the bladder has attained a certain state of distension, the muscular fibres losing entirely their contractile power, and allowing of relaxation to an indefinite degree, without rupture, long after the former power has ceased to exist. Nature, indeed, appears anxious to prevent the consequences which a rupture might cause, by continually adding to the bulk of those hollow muscles placed in such circumstances as not to be able to expel their contents. But this addition of substance, although it may prevent the bladder from giving way to the distending power, has a tendency, particularly as respects the bladder, rather to retard than forward the after contraction, which is what we most desire when the distending cause is removed. The increase of substance having been deposited when the part was under other influences than those natural to it, cannot be expected to partake of actions which must be viewed as foreign to the matter so deposited, be it muscular fibre or not. It is a question not admitting of ready answer, whether the bladder ever suffers from excessive distension without undergoing a disorganising action, whether inflammatory or not, to a greater or less extent? I should be inclined to think that in all cases this takes place, and that it is from this alteration in the healthy structure that the bladder is prevented resuming its functions rather than from want of tone in the muscular fibres themselves. Are we to suppose animal fibre to bear stretching, without change of structure, like a piece of Indian rubber? If this was the case it would break, and no variation from health be displayed; but this is not the case. In the bladder, for instance, a slough is formed, and the water escapes through the opening, but the coats are not torn: they suffer inflammation and gangrene, and so give way.

When the distension is rapidly produced, the consequent inflammation of the coats of the bladder will be greater, and the danger from gangrene more immediate. A more gradual distension is followed by a milder degree of inflammation, not generally ending in gangrene, but producing morbid thickening of the muscular fibres and other tissues. This thickening increases, according to the time allowed for nature to offer resistance. In all cases, even in the most acute, it probably exists to a certain extent; and it is from this, and not from a want of tone, that the bladder is more or less slow in returning to its pristine state after excessive distension.

On the other points of this case I have little to say. Respecting the obliteration of the ductus cysticus, although singular, it is not very uncommon. There are instances related by several writers, yet it is not an occurrence of every day. Dr. Baillie only met with a single instance.

Whitehaven, April 3d, 1826.

Section II.—Abstracts of Practical Facts, British and Foreign, with Remarks.

I. *Fatal Apoplexy.—Remarkable Case, &c.*

Case.*—A strong man, aged forty-two, and by trade a leather-dresser, of a full habit, in general very healthy, and temperate in his mode of life, was the subject of the present article.

This man, on the evening of the 3d of January last, (1826,) complained on returning home from work, and for the first time, of being unwell. No particular complaint, however, seems to have been made but of a slight pain in the head, and after taking some warm gruel he retired to rest.

A few hours afterwards, however, (about one o'clock in the morning,) he awoke his wife, and being at this time very restless also, and breathing with great difficulty, he attempted to get out of bed, but fell immediately on the floor in a state of insensibility.

At ten o'clock on the following morning, he was found by the reporter labouring under a well-marked apoplectic paroxysm—the breathing being stertorious, the countenance collapsed and of a pale blue colour, the pupils dilated, and the pulse slow and oppressed.

On opening a vein in the arm the blood gushed out, we are told, as if an artery had been divided, and thirty ounces of that fluid were thus quickly taken away. This proceeding, however, produced no other apparent effect, than that of diminishing the force and increasing the frequency of the pulse. Sixteen ounces more of blood, therefore, were taken from the back of the neck by cupping, and a dose of calomel and an enema, were prescribed.

From these measures, however, no advantage of any kind was derived, and before others could well be instituted the disease terminated in death—the patient expiring at eight o'clock in the evening, that is, about nineteen hours after the actual invasion of the apoplectic symptoms.

Examination of the body.—The body was examined by Mr. Wade early next day, and the following are the principal morbid appearances stated to have been met with by him:—

The whole venous system on the surface of the brain was excessively distended with blood, and some blood even appears to have been effused under the pia mater. Between this membrane also, and the tunica arachnoidea, firm and extensive adhesions were found to have taken place, and a considerable degree of morbid *thickening* also, so that the two membranes agglutinated together were actually, as we are told, thicker than the dura mater itself.

* Abstracted from a communication by Mr. Wade, surgeon, in the Lon. Med. Journ. for March, p. 190.

In the plexus choroides of each lateral ventricle a tumour was found, the size of a large pea, resembling in appearance a small gland, and consisting chiefly of an earthy or calcareous substance.

In the centre of each corpus striatum also a small coagulum of blood was discovered, and the medullary substance around the coagulum had a dark, kidney-like aspect.

All the sinuses of the brain were full of blood; and a small quantity of extravasated and coagulated blood was found under the fore-part of the right lobe of the cerebellum.

The viscera of the abdomen are said to have been sound, and the lungs also; but the heart seemed rather larger than usual, and the right chamber of the thorax contained about half a pint of bloody serum.

Observations.—If it be really true that the subject of this case made no complaint of suffering or of sickness until the night before his death, and that he was even able to work at his trade up to that time; and if the report made of the morbid appearances met with in the head after death, be also admitted as correct and satisfactory, then assuredly this must be considered as a very singular and interesting case.

For these appearances, though all mixed up together by the reporter, and considered by him as all equally connected with the apoplectic symptoms,* are clearly distinguishable into two classes, and indicate manifestly two distinct states and stages of disease.

Thus the thickening of the membranes of the brain, and the adhesions observed between them, were evidently the result of inflammatory action, long continued and severe.† Whilst the deep venous congestion and the extravasation of blood were undoubtedly of recent origin, and the immediate cause of the apoplectic symptoms.‡

That inflammatory action, however, should have existed within the head so long and to such an extent as to produce the appearances here accorded, and this without exciting any uneasiness or distress, or functional derangement in the system, is a thing too wonderful to be readily admitted. We doubt, therefore, the account given of the patient's state of health previously to the fatal attack; and shall continue to entertain doubts upon this point, until some better testimony be adduced in support of it than that with which we are at present furnished.

* The case is given by Mr. Wade as a *satisfactory* example of post-mortual examination in a person who died *apoplectic*.

† We have been afraid to extract *verbatim* Mr. Wade's account of the inflammatory appearances observed by him, which really seems to us a little too highly coloured, *ex. gr.* "The under surface of the pia mater strongly resembled the mucous membrane of the intestines in a high state of inflammation."

‡ The small tumours in the plexus choroides were evidently a chronic affection distinct from the others, and which might have been gradually formed without producing any symptomatic derangement.

II. *Emphysema after Parturition.—Case, &c.*

A stout unmarried woman, aged twenty-five, was delivered (April 7th, 1825) of a large still-born fetus, after a very severe and protracted labour of more than two days.

During the entire progress of the labour, the patient, we are told, 'exerted her lungs immoderately,' and made also the most violent efforts to bear down; and immediately after delivery a paroxysm of coughing supervened, so severe as almost to threaten suffocation.

At the time these occurrences attracted no particular observation; but in about ten hours after delivery, when the patient was next visited, it was found that the face and neck had become much swelled, and that this swelling had thence diffused itself over the trunk of the body, and even in some measure to the extremities, to the great alarm of the attendants.

On examination it was found, that this swelling was distinctly emphysematous, and that it was accompanied by a cough, and some difficulty of breathing. As these latter affections, however, were not severe, and as the condition of the pulse was esteemed favourable (the patient, we may observe, had been bled very largely during the labour), no very active measures were instituted; and in the course of six or eight days the swelling and other symptoms seem gradually, and, as it were, spontaneously, to have disappeared.

Observations.—The preceding details are extracted from a communication by Dr. Campbell, of Edinburgh, inserted in the *Edin. Journ. of Med. Science* for January last, p. 108.

As Dr. Campbell is a lecturer on midwifery, as he was in attendance on the patient himself, and as he has put forth this case in a very ostentatious manner, we did expect on taking it up for examination to have found some new light thrown upon an affection, with respect to the origin of which we are still, it must be confessed, very much in the dark.

Upon this point, however, we have been much disappointed; the greater part of Dr. Campbell's communication being occupied with details, which any apprentice might have furnished, or crude speculations upon which no reliance can be placed.

One observation of a practical nature, and one alone has dropped from him—this we give in his own words, without at the same time pretending to vouch for its accuracy, or for the extent of his researches.

'Puerperal emphysema, *so far as I have been able to ascertain,* has always appeared a mild affection; and all the symptoms have ceased within a week, simply by the use of venesection and purgatives.'

III.—*Poisoning from Opium.—Case, &c.*

Case.—A married woman, aged twenty-eight, swallowed, in a fit of despondency, a quantity of Laudanum, amounting, as it was

alleged, to about two fluid ounces. This was about nine o'clock in the evening; and at about half past ten o'clock she was found in a state of insensibility by the reporter, who appears to have been the first medical man called upon to attend her.

By him a dose of *ipecacuanha* and *tartarised antimony* was immediately exhibited, which was followed in a little time by a strong solution of the *sulphate of zinc*, and large supplies of an infusion of *mustard*. By these means, together with constant irritation of the fauces with a feather, copious vomiting was, it appears, soon excited; after which the patient felt so far relieved as to be able to answer questions.

It not appearing, however, to the medical gentlemen present (for there were now two of them in attendance,) that the whole of the poison could well be dislodged by emetics simply, a third practitioner was summoned to their assistance, who speedily arrived, bringing with him Mr. Weiss, of the Strand, and a new *stomach-pump* of his invention. By means of this instrument the remaining contents of the stomach were, we are told, quickly evacuated; and that organ washed out with tepid water, until the fluid discharged no longer exhibited any traces of the laudanum.

The *cold affusion* was now determined on, and, as it would appear, 'liberally employed,' by pouring water from a jug over the head and neck of the patient,—and the first effects of this proceeding seem to have afforded great satisfaction; for the poor woman, we are told, '*raised herself up*, and, in a feeble voice, requested time to breathe.' But this 'reaction,' as it is called, was only of short duration; for the unfortunate patient sunk quickly again into that comatose state from which she had thus been recalled.

It was now deemed necessary to throw stimulants of various kinds into the stomach, and to administer others by the rectum;—the volatile alkali also was introduced into the nostrils, and frictions were 'incessantly employed' on the surface of the body. In fine, 'all the means usually adopted on similar occasions' were called into activity by the sedulous attendants: but in vain; for, notwithstanding 'the most indefatigable exertions' on their parts, the breathing soon became more difficult and stertorous; the whole frame sunk into a state of collapse; and, after one or two convulsive struggles, the woman expired at five o'clock in the morning, eight hours after having swallowed the fatal draught.

Examination of the body.—The body was examined thirty-three hours after death. In the *abdomen* no morbid appearance whatsoever, it is stated, was to be found; nor in the *thorax* was any thing observed worthy of notice, except the state of the heart, which was pale, bloodless, and flaccid.

In the *head*, however, matters were different; for, on removing the skull-cap, it was observed, 'that the vessels of the dura mater looked turgid,—those of the arachnoid membrane and pia mater still more so; and, upon examination of the cerebrum, the whole of the vascular system of the brain appeared enormously tumid, and every vessel seemed gorged with blood.' Some extravasated blood also

is stated to have been observed, particularly one portion or coagulum, 'upwards of an inch in extent,' which was found 'lying at the superior margin of the right lateral ventricle.'

Observations.—The preceding details are extracted from a communication, by Mr. JEWEL, of Gerrard Street, inserted in the London Med. Journal for February (p. 109). From the original article it appears that the patient had been confined in child-birth only fourteen days before the attempt made upon her life; that she had been previously subjected to a severe course of mercury, for some *supposed* syphilitic complaints; and that her mind had been for some time (perhaps months) in a state of extreme dejection and distress, in consequence of the alleged nature and apparent obstinacy of these complaints.

Under these circumstances, it is but reasonable to presume, that she was, at the time of the transaction above alluded to, but ill qualified, either in mind or in body, to bear up against infliction of any kind; or to endure with impunity, and still less with advantage, the continued application of powerful agents, whose chief operation consists in calling into *activity*, and therefore, to a certain degree, in *exhausting*, the remaining powers of life.

IV. *URINARY AND GENITAL ORGANS—Mal-conformation of. Case, &c.*

CASE.*—The subject of the present article, a male child, was first seen by the reporter in April, 1824, when it was two weeks old.

At this time it had in the hypogastric region a tumour—a firm resisting mass, bulging out considerably from the surface of the abdomen, somewhat oval, and more than an inch in its greater axis, which lay in a transverse direction.

This tumour was situated immediately below an indistinct cicatrix, which was said by the mother and the midwife to have been that of the naval-string, and above† the point where the symphysis pubis is usually met with. It was now of a deep-red colour, very sensible, in a state of high inflammation, and almost entirely covered over with a layer of thick yellow mucus, or coagulated pus.

At each of the inferior and exterior angles of the tumour there were a small point or hole to be seen, through which the urine generally dribbled away, or was discharged in jets, upon tickling or pressing the parts. At first these points were almost imperceptible, but after a little time their situation became marked by granulations in the form of papillæ, which shot up around them.

Lower down on the tumour, and between these points as it were, a smooth perpendicular groove was to be seen, like a small portion of the urethra cut open and turned back; and lower still, that is, a

* From a communication by Dr. Gairdner, of Edinburgh, in Edin. Journ. of Med. Science for January, p. 115.

† The word *above* does not, we may observe, appear in the original; but as it is evidently required to render the passage intelligible, we have introduced it.

little below the tumour itself, a flattened bifurcated prominence jutted out, which seemed like a section of the glans penis, with a portion of the urethra running along its centre. This portion, and that apparently attached to the tumour, formed, as it were, the upper and lower sides of the urethra; and where they met just under the tumour, a small hole was to be seen.*

At the point of the imperfect penis just mentioned, a somewhat loose portion of skin, like a part of the prepuce, and a frænum preputii were found; and below the penis there was a full-sized scrotum, in which one testicle, the left, was discovered; the other, as it afterwards appeared, had not descended from the groin. The perinæum and anus exhibited the usual appearances.

By strict attention to cleanliness, and other suitable measures, the health of the child in a few weeks improved considerably; and the surface of the tumour also became gradually freed from the purulent coat with which it had been covered, and assumed a florid, healthy appearance.†

In this state things continued until the 4th of August, (1824,) when the little patient, now nearly four months old, was suddenly, as it would seem, taken ill, and died in the course of a few hours, before the parents were aware of any serious danger, or could procure any proper assistance.‡

Examination of the body.—'We found,' says the reporter, 'as has been observed in other similar cases, a separation of the recti muscles, and a considerable *deficiency* of bone at the symphysis pubis.§ The space of the former was filled up by tendon; and fat, with cellular membrane, occupied the vacancy at the symphysis pubis, and formed considerable cushions in both inguinal regions.

'Internally the tumour formed a hollow or cup, which was lined by the peritonæum, and contained a portion of the small intestines. It (*the tumour*) seemed as if it were a posterior segment of the urinary bladder protruded and considerably thickened; the anterior part being wanting.'

The ureters, two from the right, and one from the left kidney, extended downwards as usual; and piercing the tumour, formed the two points or holes already mentioned on its exterior surface, from which the urine was discharged during life.‖

The vasa deferentia were traced from the testicles, (the situation

* At this point, as will be seen further on, the vasa deferentia from the testicles terminated.

† A 'delicate skin' was formed, we are told, over the surface of the tumour, as the health of the child improved.

‡ The cause of death, as it afterwards appeared, was an inflammation of the ileum and mesentery.

§ This, we apprehend, is a mis-statement; there may have been a separation, or rather an *interval* between the bones of the pubis, as well as between the recti muscles; but there was no *deficiency* of bone we are inclined to think.

‖ The double ureter on the right side, terminated, it appeared, in one orifice at the tumour.

of which has been already mentioned,) first ascending somewhat, and then creeping down upon the lower part of the hollow of the tumour; where they were seen to meet and run into the point or small hole below the tumour, which has been already described as formed apparently by the meeting of the sides of the imperfect urethra.*

Observations.—The particular species of mal-conformation which is the subject of the preceding abstract, has been examined and described, as observed in individual cases, by Dr. Baillie, Sir A. Cooper, and others in this country; and been treated of in a systematic manner by Dr. And. Duncan, as mentioned particularly in a late Number of the REPOSITORY.†—(Vide No. for March, p. 271.)

Still, however, examples of this anomaly are sufficiently rare and sufficiently interesting, to render any which do occur in our own times deserving of notice; and particularly when, as in the present instance, an opportunity is afforded to competent persons, of observing the condition and sufferings of the subject during life, and of examining the structure of the mal-formed parts after death.

For two other recent cases, the above-quoted Number of the REPOSITORY may be consulted.

V. *ON THE PRESERVATION OF ZOOLOGICAL SPECIMENS, &c. from the Depredations of Insects.*

THE difficulty of preserving Zoological specimens from the depredations of insects, has long been a subject of anxiety and regret to the lovers of natural history; for although many methods have been proposed for obtaining this desirable object, yet none has hitherto been found to afford permanent satisfaction.

Thus solutions of arsenic and of the corrosive muriate of mercury, which have been found so effectual in destroying the insects, are really very injurious to the specimens in other respects; whilst camphor, which has been long in use, and *tallow*,‡ more lately recommended, are not, we fear, in general to be relied on.

We have much pleasure, therefore, in laying before our readers the following extract from a communication on this subject, addressed to Dr. Traill, of Liverpool, by Mr. William Gibson, preparer of objects of natural history in that city; from which it would appear

* No mention whatsoever is made by the reporter of the vesiculæ seminales —the absence or presence of which, at least, should certainly have been notified.

† By Dr. Baillie, in the Trans. of Society for the Improvem. of Med. and Surg. Knowledge, vol. i.—by Sir A. Cooper, and by Dr. Duncan, in Edin. Med. Journ., vol. i.

‡ Pieces of this substance, placed in the cases containing zoological specimens, were said by M. Temminck to act as a preservative of the latter against the attacks of insects. It has been tried, however, in the museum of the University at Edinburgh by Mr. Jameson, and not found of any use.—(Vide *Edin. Phil. Journ.*, Jan. p. 136.)

that a safe, satisfactory, and effectual method of preserving such objects from the depredations of insects, has at length been discovered.

'I have found,' says Mr. Gibson, 'that nothing destroys insects so effectually as rectified *oil of turpentine*; and my method of using it is as follows:—

'I put the turpentine in a bladder, the mouth of which is firmly tied with a waxed string; and nothing more is necessary than to place the bladder thus prepared in the box with the birds, or to tie it to the pedestal on which the birds are perched in a case.

'If there be any maggots on the birds, I have invariably found that they will soon be dislodged from the feathers, fall to the bottom of the case, and die in the course of two days.

'I have also made the experiment of introducing the common house-fly, the large blue-bottle fly, and moths, into a case of birds so defended, through a small hole in the bottom of the case. The moment the flies enter the box, they begin to vomit a whitish glutinous matter, they are much agitated, and the largest of them died in seven minutes.

'I have, in like manner, repeatedly introduced active American cock-roaches; and these strong insects soon became uneasy, often rubbed their sides with their hind feet, and died in about an hour and a half.

'I next got a bird skin full of living maggots, and placed it in my defended case: in about three hours they were seen coming out in all directions, and fell to the bottom of the case, where they died.

'For large cases of birds, a pig's or a sheep's bladder is sufficient; for middle-sized cases, a lamb's or a rabbit's bladder will do; and for small ones we may use a rat's bladder.

'The turpentine evidently penetrates through the bladder, as it fills the case with its strong smell.'*

In corroboration of the statements contained in the preceding extract, Dr. Traill adds, that in collecting insects for preservation he had himself found the application of a single drop of the oil of turpentine to the corselet, a more speedy method of extinguishing life than the common practice of transfixing the animal with a pin dipped in aquafortis.

He lately also, he states, had an opportunity of observing in the Liverpool Museum, an example of the efficacy of the oil of turpentine in destroying the minute white *acari*, which so frequently infest the hair of specimens; and which, in this particular instance, had resisted the repeated application of a strong solution of corrosive

* This extract, &c. is taken from a communication by Dr. Traill, on the same subject, inserted in the journal just referred to, p. 135. The *extract* we have given in the original language, and are not, therefore, to be held responsible for the grammatical errors it contains — errors, we may observe, which reflect more discredit on him who sent them to the press than on him with whom they originated.

sublimate. The specimen was a large one, of the phoca leonina, *Linn.*, and one brushing with the oil of turpentine seems to have been sufficient to clear it completely of the vermin with which it was infested.

The editor of the Edin. Phil. Journal, also, Professor Jameson, states, that the oil of turpentine has, for a considerable time past, been employed in the museum of the University of Edinburgh (of which he is the keeper) for the purpose of preserving zoological specimens; and 'most successfully,' he adds,

In the island of Ceylon also, he informs us, this oil is used for the purpose of destroying *bugs*—a practice which might perhaps be adopted with advantage in this country, where these animals are so frequent a nuisance.*—(*Vid. ut supra.*)

On board-ship, also, in tropical climates, it might perhaps, we may observe, be advantageously employed for the destruction of the *cock-roaches*; which, in such situations, from their numbers (*sine numero*), and noxious habits, are so dreadful a nuisance; and on shore even, within the tropics, it may perhaps be found useful, against the hordes of insects with which almost every habitation is there infested.

Finally, to all furriers, and other dealers in skins, feathers, hair, &c. the oil of turpentine must, we think, be found, under judicious management, a valuable acquisition; but time and further experience will of course be required to determine this, and other questions of a similar nature.

VI. *Rabies Canina.*—*Observations respecting Rabies in the Dog.* By Mr. W. Youatt, Veterinary Surgeon.

Being well acquainted with the great attention Mr. Youatt has paid to this important subject, and knowing that he brings great scientific knowledge and powers of close observation to its investigation, we are hence induced to give a full abstract of a paper respecting it, published in a work which does not frequently come in the way of many of our readers. Mr. Youatt first considers the question, whether or no canine madness may result from the wounds inflicted, either on their own species or on the human species, whilst fighting or quarrelling? and states his opinion as follows:—

'Although there have been many instances of considerable disease having been produced by the bite of an enraged animal, I have never heard that rabies has been the result of such bite, nor do I believe it possible; or that the excitation produced by the most

* To these testimonies we may perhaps be permitted to add our own; the writer of this note having many years since been in the habit of employing the oil of turpentine for the preservation of small zoological specimens in the island of Jamaica, and uniformly with success. The specimens whilst drying, and afterwards, were frequently brushed over with the oil; and sometimes even dipped in it, so as to bestow upon every part of the surface a delicate coat of varnish.

protracted combat can degenerate into rabies: but there is a view of the subject, in which the prevalence of rabies does materially depend on the disgraceful practice of dog-fighting.

'The symptoms of rabies differ in different species of dogs, and in dogs of the same species, according to their previous disposition and habits. In all there are usually considerable peevishness and pettishness; but in some breeds, where the tractability and docility of the animal have been cultivated, that pettishness is a mere momentary impulse, which may be easily guarded against when the nature of the malady is suspected; and, often, the disease runs its course, in the spaniel particularly, without one attempt to break from confinement, or to injure those to whom the dog has been attached.

'The bull-dog and the different varieties of the fighting terrier are naturally ferocious. That ferocity is diligently cultivated for a brutal purpose, and the peculiar excitation of the disease increases in a tenfold degree the natural and acquired ferocity of the animal. If he recognises, he obeys not the voice of his master: he scorns all control: his efforts to escape from confinement are violent and incessant; and when he has effected his purpose he ranges through the country, eagerly seeking his prey. At first his attacks are confined to his own species, but his irresistible desire for mischief increasing with its gratification, he at length falls with indiscriminate fury on every animal that comes in his way.

'There is no fact capable of clearer proof, than that the danger to be apprehended from a rabid dog, and the mischief which (*cæteris paribus*) he effects, are in precise ratio with his natural or acquired ferocity; and the experience of fourteen years, and the inspection of nearly a thousand cases of rabies, enable me confidently to affirm, that, in the neighbourhood of the metropolis at least, by fighting dogs, in a tenfold greater degree than by any other breed, is this dreadful malady propagated.

'In the country likewise the terrier and the bull-dog are the principal agents in the work of destruction; although the cur is there often an active ally. His education and habits sufficiently account for this. Coward as he is, it is his employment and his pleasure to attack every passing object, whether man, horse, or dog; and when he unfortunately labours under a disease which gives ferocity to the brave, and fearlessness of danger to the poltroon, the mischief which he will effect may be easily guessed.

'It is for these reasons, and with these limitations, that I attribute canine madness chiefly to the prevailing and disgraceful practice of dog-fighting; and so far as my argument goes, I concur in the conclusion that it is in the power of the Legislature, by discouraging these worse than useless breeds of dogs, to circumscribe and almost to annihilate this fearful and destructive pest.'

Mr. Youatt next proceeds to state that rabies is more prevalent in some seasons and districts than in others, and that more cases of it have occurred in the two last years than in the four or five preceding ones. This circumstance he cannot, however, otherwise

account for than by supposing that there may be some states of the atmosphere peculiarly favourable to the propagation of this as well as of other animal poisons, as in the instances of small-pox, measles, &c. He does not consider that canine madness is now spontaneously generated; but that having at one time originated in some morbid state of the constitution, it is now propagated by contagion or inoculation alone. Respecting this part of his subject, and the symptoms of rabies in the dog, Mr. Youatt gives us the following very precise information. As we know that his experience of rabies in this animal is perhaps unequalled, we shall make no apology to our readers for the length of the quotation. It is of the utmost consequence to the medical practitioner that he have an accurate idea of the symptoms of rabies in this interesting animal, and on this account we are anxious to furnish him with what we consider the very best information on the subject.

'In proof that rabies canina is thus propagated, (by contagion or inoculation,) and thus alone, I might contend that it was never known to occur spontaneously in the horse, in cattle, in sheep, or in the human subject. There is, indeed, a tetanic, or hysterical or nervous affection in the latter, which is characterised by some of the symptoms of rabies, and occasionally even by the dread of water; but there is an essential difference in the commencement, progress, and termination of the two diseases. I might contend that there are many parts of the globe where the supposed exciting causes of rabies exert their fullest energy, and where that malady is unknown; and that to the majority of islands in every quarter of the world it has not yet found its way. I might contend that, in all the cases which I have seen, with the exception of certainly not more than thirty, the disease was clearly traced to the bite of a rabid animal; that in a great majority of the excepted cases, the animal had been in the way of dogs, and might possibly have been bitten; that in not more than two or three did the owner stoutly maintain that a bite was impossible; and that, even in them, I was far from being convinced of that impossibility.

'It is a question which can be determined by facts alone; and I believe that the only reason why there is not an universal agreement as to these facts is, that the characteristic symptoms of rabies in the dog are not determined. That which many term "rabies" may be, and I imagine would be, found to be tetanus, or epilepsy, or phrenitis, or distemper. With the exception of the excellent publication of Mr. Blaine, (I except not Mr. Gilman's Treatise, for all his information on the symptoms of canine madness was borrowed, without acknowledgment, from Mr. Blaine,) we have no authority to guide us. The only method then by which we can arrive at a satisfactory conclusion is, to agree on the *nosology* of the disease; to determine what are its symptoms in the living animal, and its morbid appearances in the dead one; and then inquire whether the disease so characterised has now a spontaneous origin, or is to be invariably attributed to contagion.

'The symptoms of rabies in the dog are the following, and nearly

in the order in which they usually appear: — An earnest licking, or scratching, or rubbing of some particular part; sullenness, and a disposition to hide from observation; considerable costiveness and occasional vomiting; an eager search for indigestible substances — as bits of thread, hair, straw, and dung; an occasional inclination to eat its own dung, and a general propensity to lap its own urine. The two last are perfectly characteristic circumstances. The dog becomes irritable; quarrels with his companions; eagerly hunts and worries the cat; mumbles the hand or foot of its master, or perhaps suddenly bites it, and then crouches and asks pardon. As the disease proceeds, the eyes become red; they have a peculiar bright and fierce expression; some degree of strabismus or squinting very early appears; not the protrusion of the *membrana nictitans*, or haw, over the eye, which, in distemper, often gives the *appearance* of squinting, but an actual distortion of the eyes; the lid of one eye is evidently more contracted than the other; twitchings occur round that eye; they gradually spread over that cheek, and finally over the whole face. In the latter stages of the disease that eye frequently assumes a dull green colour, and at length becomes a mass of ulceration.

'After the second day the dog usually begins to lose a perfect control over the voluntary muscles. He catches at his food with an eager snap, as if uncertain whether he could seize it; and he often fails in the attempt. He either bolts his meat almost unchewed, or in the attempt to chew it, suffers it to drop from his mouth. This want of power over the muscles of the jaw, tongue, and throat increases, until the lower jaw becomes dependent, the tongue protrudes from the mouth, and is of a dark and almost black colour. The animal is able, however, by a sudden convulsive effort, to close his jaws, and to inflict a severe bite.

'The dog is in incessant action: he scrapes his bed together, disposes it under him in various forms, shifts his posture every instant — starts up, and eagerly gazes at some real or imaginary object: a peculiar kind of delirium comes on: he traces the fancied path of some imaginary object floating around him: he fixes his gaze intently on some spot in the wall or partition, and suddenly plunges and snaps at it: his eyes then close, and his head droops; but the next moment he starts again to renewed activity: he is in an instant recalled from this delirium by the voice of his master, and listens attentively to his commands; but as soon as his master ceases to address him, he relapses into his former mental wandering.

'His thirst is excessive (there is no hydrophobia in the dog), and the power over the muscles concerned in deglutition being impaired, he plunges his face into the water, up to the very eyes, and assiduously, but ineffectually, attempts to lap.

'His desire to do mischief depends much on his previous disposition and habits. I have known it to proceed not beyond an occasional snap, and then only when purposely irritated: but with the fighting dog the scene is often terrific. He springs to the end of his chain — he darts with ferocity at some object which he conceives

to be within his reach—he diligently tears to pieces every thing around him; the carpet or rug is shaken with savage violence; the door or partition is gnawed asunder; and so eager is he in this work of demolition, and so regardless of bodily pain, that he not unfrequently breaks one or all of his tushes. If he effects his escape he wanders about, sometimes merely attacking those dogs which fall in his way, and at other times he diligently and perseveringly hunts out his prey: he overcomes every obstacle to effect his purpose; and, unless he has been detected in his march of death, he returns in about four and twenty hours, completely exhausted, to the habitation of his master.

'He frequently utters a short and peculiar howl, which, if once heard, can rarely be forgotten; or if he barks, it is a short, hoarse, inward sound, altogether dissimilar from his usual tone. In the latter stages of the disease a viscid saliva flows from his mouth, with which the surface of the water that may be placed before him is covered in a few minutes, and his breathing is attended with a harsh grating sound, as if impeded by the accumulation of phlegm in the respiratory passages.

'The loss of power over the voluntary muscles extends after the third day through his whole frame, and is particularly evident in the loins: he staggers in his gait; there is an uncertainty in all his motions; and he frequently falls not only when he attempts to walk, but when he stands balancing himself as well as he can. On the fourth or fifth day of the disease he dies, sometimes in convulsions, but more frequently without a struggle.

'After death there will invariably be found more or less inflammation of the mucous coat of the stomach; sometimes confined to the rugæ, at other times in patches; generally with spots of extravasated blood, and occasionally intense and occupying the whole of that viscus. The stomach will likewise contain some portion of indigestible matter (hair, straw, dung), and occasionally it will be completely filled and distended by an incongruous mass. The lungs will usually present appearances of inflammation, more intense in one, and generally the left lung, than in the other. Some particular points and patches will be of a deep colour, while the neighbouring portions are unaffected. The sublingual and parotid glands will be invariably enlarged; and there will also be a certain portion of inflammation, sometimes intense, and at other times assuming only a faint blush, on the edge of the epiglottis, or on the rima glottidis, or in the angle of the larynx at the back of it. If in addition to these or the greater part of these circumstances, it is known that the unfortunate patient bit another animal, which in due time died of a similar disease, the description of rabies is complete.

'On a late examination of some of the most eminent practitioners of the obstetric art, one of them affirmed that he put little or no faith on the statements of others, and that medical men "would lie like the devil to make their own case appear good." For the credit of that profession of which I form the humblest member, I will not

believe that this ever was or can be true; and I will not imagine that it can by possibility happen in this discussion. If any gentleman will assure me that he has witnessed these symptoms, and these morbid appearances, and this propagation of the disease, in an animal that was not exposed to the danger of contagion, and that *could not have been bitten*, I will acknowledge that I have formed an erroneous opinion as to the occasional cause of rabies. However firmly I may believe, and most firmly I do believe, that, whatever may have been the origin of rabies canina, it is now propagated by inoculation alone, I trust that I shall be open to conviction, and have the honesty to confess my error.

'Before I conclude, I beg leave to state, that having been engaged during the last two years in collecting materials for a history of rabies contagiosa in man, and in the brute, and feeling how utterly inadequate are the labours of one person, even with the most favourable opportunities, to the accomplishment of such a task, I do respectfully and earnestly solicit from my brother veterinarians, and from medical men generally, the communication of any interesting facts on cases that may have occurred in their practice. Such communications will be most gratefully received, and duly acknowledged. I should be particularly thankful if I were permitted to witness the character and progress of the disease in the human subject.'

3, Nassau-street, August 7, 1825.

VII.—*Erysipelas—On the Efficacy of the Actual Cautery in Traumatic Erysipelas.* By M. le Baron Larrey, Surgeon in Chief, (*clinique* of the Hospital of the Garde Royale.)

The erysipelas which supervenes in the neighbourhood of a wound, on the fourth or fifth day, is owing to an excess of excitement in the nervous and vascular systems of the edges and deep parietes of the wound, and this over-excitement is generally caused by their too hasty re-union, particularly where the division is not of a simple and uniform kind, like that made by the knife of the surgeon: but it may also be occasioned by the use of tents, or the introduction of agaric or other foreign bodies; by the application of greasy or irritating substances, or by emollient applications applied too warm, or by the access of cold and humid air; by the state of attrition or laceration of the wounded parts; or by a gastric bilious affection. When the injured and very sensible parts become subject to this over-excitement, a contraction or erethism of the ruptured vessels is occasioned, which is productive of suppuration and relief of the inflamed tissues: the capillary veins of the cutis, on the other hand, which, by their character and superficial situation, partake less of this erethism, absorb the fluids poured into the wound, and transmit them, by a peristaltic and divergent contraction, towards the external surface forming the erysipelas. When this kind of absorption takes place immediately after the receipt of the wound, whether the wound is closed or abandoned to the efforts of nature, the result is a more or less extensive ecchymosis, equally formed by

the passage of sanguineous fluid into the cutaneous veins, by which it has been absorbed within the wound, and conveyed to a distance which depends on the causes of local irritation or disturbance. When the fluids poured into the wound are so changed as to have a purulent character, their absorption by the same vessels gives rise to an erysipelatous affection; for at the same time that these morbid principles, passing along these vessels, provoke a spasmodic contraction of their tunics, the blood contained in them becomes more fluidised in consequence of the increased heat of the part, and by its mixture with the purulent and acrid molecules which were collected in the wound. All these causes produce *exuberance* and redness of the epidermis, the intensity of which is augmented by its contact with the oxygen of the atmospheric air. [We beg to observe that we merely translate Baron Larrey's words as nearly as we can, without entirely professing to understand them.] In consequence of this continued operation of irritation and infection, the erysipelas increases, is rapidly propagated, and is only arrested by the more or less close adherence of the integuments, such as take place on the osseous prominences. If to the traumatic cause there is superadded a deleterious miasmatic principle, proceeding from mephitic emanation, or from a focus of contagious disease, the erysipelas soon terminates in gangrene: and as the vital principle of the internal organs is in turn stupefied by this latter affection, the result is a cessation of the functions of life in the injured part or tissue, soon followed by the death of the individual, unless we can check or circumscribe the progress of mortification.

In those cases in which there is bilious aberration, the erysipelas and the wound take a yellowish hue, and are complicated with symptoms of hepatitis. If there is atony of the stomach, with nausea or sour eructations, the erysipelatous exanthema becomes pale, the edges of the wound become tumefied, and the bottom of it covered with a thick, greyish, and putrescent substance, which characterises loss of power (*adynamie*) and hospital-gangrene.

Having formerly pointed out the means of preventing or dissipating the ecchymosis which accompanies wounds or contusions, we shall now treat exclusively of traumatic erysipelas, which is only a modification of ecchymosis; for the difference between these two kinds of morbid injection wholly depends on the nature of the fluids circulating in the infiltrated vessels. Erysipelas is produced by the greater or less admixture of purulent molecules with the venous blood; whilst ecchymosis is occasioned by blood flowing into the wound from the small arteries that are cut or torn, and which is absorbed (*repompé*) by the veins, and extravasated on the surface of the skin, or in the sub-cutaneous lamellar tissue: but the tissues are not inflamed, and consequently the indication is not the same. What then is to be done in erysipelas? The different authors who have written on this affection have advised as many different kinds of treatment; but almost all, and especially those who have embraced the Broussaian doctrine, advise, as the first and most important step, capillary bleeding, by means of leeches

applied to the erysipelatous part. These think that, by thus emptying the engorged vessels, the disease is arrested and put an end to, because not only is the redness diminished, but the pains are relieved, and sometimes removed. But there is some error on this subject; for the depletion produced by leeches does not operate on the injected or erysipelatous vessels. The leeches avoid these, and, carrying their sharp teeth deeper, seek the small arterial branches at the bottom of the cutis, preferring the vital blood flowing from them to the sanguineo-puriform fluids contained in the superficial veins*. *The pathological engorgement remains then stationary*; the only vehicle of general life is reduced; sensibility is obtunded; the functions of the individual are weakened, and the vital properties are soon extinguished in the engorged parts, which are at first struck with stupor, and soon afterwards with a gangrenous affection, the progress of which it is afterwards difficult to arrest. Besides this, the instantaneous irritation produced by the leeches in the dermoid system, is sufficient to give the disease a phlegmonous character, by causing the erysipelas to spread to the cellular membrane; a result so much the more unfortunate, as no sooner is the tissue inflamed than a process of suppuration is established, the effects of which are prolonged by the production of sinuses and purulent fistulæ, of which the consequences are denudation of the muscles and skin, and more extensive exfoliation of the cellular tissue itself. Emollients, however prepared, equally increase the debility and the engorgement, and give rise to analogous phenomena. Repellant and rubefacient applications, which are extolled by some authors, have the further inconvenience of aggravating and extending the inflammation; and the excoriations caused by the latter are often followed by gangrene.

The variety of means recommended, and the disastrous effects of most of them, have caused some physicians to maintain that the treatment of this disease should be left to nature; but nature is seldom equal to the cure; and there is often a kind of metastasis of the morbid principles of this exanthema to the internal organs, so that if the patients die not from the deleterious and contagious effects of the local gangrene, they perish in consequence of sympathetic and consecutive affections of the viscera.

Without regarding the concomitant causes of this malady, we require the prompt employment of a means capable of checking this inflammatory peristaltic process, by absorbing the morbid principle with the fluids which contain it, and at the same time by re-establishing the vital property in the diseased tissues from whence

* I learned the disposition of the vessels of the cutis by the anatomical preparations and fine injections I saw in the cabinets of the celebrated Proschaska and Soemmering, in Germany. These injections, part of which I am in possession of, are so well prepared, that, by the help of a microscope, the two laminæ of vessels are distinctly perceived. The most superficial is entirely composed of veins, and the second of arterial vessels, penetrating by a deep net-work into the interior of the cutis.

this morbific stasis has expelled them. It has appeared to us that the actual cautery produced this double effect, and the most extraordinary success has justified our attempt. Towards the end of the last century, M. Pelletan, of the Institute of France (from whose eloquent lessons have been derived most of the luminous ideas which have led modern physiologists to so many discoveries), pointed out this application as a powerful revulsive in erysipelas. When the iron, heated to a white heat (*incandescent*), is applied to the reddest points of the erysipelas, and to those nearest the wound, it arrests, even instantaneously, the march of the inflammation; and this application, which scarcely causes any pain, is immediately accompanied or followed,—1st, By a gasiform effluvia, having an animal odour, rendered visible by a light smoke which surrounds it: 2dly, the disappearance of heat and tensive pain from the inflamed part: 3dly, by a disappearance of the redness and swelling: 4thly, these cauterisations are not followed by suppuration, and are not liable to produce gangrene, like rubefacient applications; the burnt parts of the cutis fall off in small carbonaceous scales, leaving no sensible cicatrix: 5thly, the purulent discharge from the wound, the suppression of which preceded the erysipelas, is almost immediately re-established: 6thly, the strength of the patient is recovered at the same time, and the impaired functions of the viscera, and particularly of the stomach, are restored, concurring to accomplish the complete resolution of the exanthematous disorder. Or, if any signs of gastric disturbance should remain, the revulsive action of the cautery may be aided by the administration of a grain of tartar emetic, dissolved in a cold infusion of ipecacuanha.

Such are the facts:—in what manner are they to be explained? I leave the question to be answered by physiologists, having only attempted to draw the attention of practitioners to the efficacy of the cautery in the disease under consideration. Some of the phenomena, however, which could not have been calculated upon without understanding their explanation, I shall endeavour to account for:—1st, It has been said that the application of the hot iron to the erysipelatous part does not excite much pain. This insensibility appears attributable to the nervous tissue of the skin being isolated, and protected by the more or less thick bed of interlaced and injected vessels, covered by the already disorganized epidermis. 2d. In the same manner, the burns do not suppurate: the sensible tissue of the skin, the seat of the arterial vessels which are alone susceptible of suppuration, being protected from the cautery. In fact, when the heated iron is applied lightly and promptly, as it always should be in these circumstances, to the erysipelatous exanthema, the cauterisation is limited to the injected vessels, which are in some degree deprived of life; and the little eschars which result from it are detached in the form of dry and carbonaceous scales; and the epidermis of all that part of the skin which has been affected by the erysipelas falls off in the same manner. 3d. Lastly, the cutis itself not having been touched, the burned parts shew no cicatrix.

VIII.—*Upon the application of Cold Water in Croup.*

In Hufeland's Journal for April 1825, this application is recommended in the form of cold effusion of the back, and cold bathing to the neck itself.

The cold effusion in this disease was first practised by Dr. Harden, of Petersburgh, on his own child. In this instance the patient is represented as having been nearly moribund, and recovered after the effusion had been repeated ten times. Professor Aberle, of Salzburg, has also communicated to the Salzburg Journal for 1822 a successful case. The patient, a child, already breathed with extreme difficulty, the danger of suffocation was imminent, the head was thrown back, the shoulders raised, the upper extremities cold, and the pulse intermitting. Although the professor did not see the patient till the fourth day, and, under the circumstances just described, the cure was completed by the fourth application of the effusion. The employment of evaporating lotions to the neck itself is represented as equally useful. The difficulty of breathing gradually disappeared, a copious expectoration of mucus, mixed with blood and pus, occurring at the same time. The author of the article Croup, in the Dictionaire de Médecine, has not spoken of this plan from experience, but is unfavourable to it from theory. It certainly is a bold practice; yet, when the disease appears hopeless, we should advise its adoption. 'Anceps remedium melius quàm nullum,' is an observation of Celsus, and no cases occur in which it would be more applicable than the last stage of croup. When the usual remedies have been employed unsuccessfully, and a fatal termination appears inevitable, no good ground can exist for not recurring to a plan which may appear to afford a chance, however slight, of recovery. Such are indeed the circumstances under which, in general, new remedies ought to be tried; and the experience gradually thus obtained will lead, in the securest manner, to the determination of all questions of this kind.—Editors.

IX. *Of Dr. Goelis's Practice in some Diseases of Children.*

Dr. H. M. Brosius, who attended Dr. Goelis's practice in the diseases of children, has given, in Hufeland's Journal for March 1825, an account of that physician's treatment and opinions in this department of medicine.

The paper appears to us to contain much that is worthy of notice, and we shall therefore extract some of the more valuable remarks for the information of our readers. They need not be told, we trust, that Dr. Goelis is one of the highest, if not the very highest authority in any thing connected with the disorders of children. Dr. Brosius states, that he laid his journal before Dr. Goelis at his departure from Vienna, and received his full assent to the accuracy of its contents.

'*Inflammatory Diseases.* According to the experience of Dr. Goelis, two-thirds of all the diseases of children are inflammatory; hence stimulating remedies must be very cautiously recurred to; and in doubtful cases the treatment should be very mild.'

'*Angina Faucium.*—Goelis has a peculiar manner and ability in opening the mouths of children, so as to obtain a complete view of the fauces and pharynx. He places his little finger upon the root of the tongue, in consequence of which an attempt is made to vomit, and the fauces are thoroughly exposed to view.

'When catarrh is general, the fauces are always examined, that an angina may not be overlooked.'

'*Inflammation of the Medulla Spinalis.*—This disease may be certainly known by the following symptoms:—extended position of the body, with the arms close to the trunk, the elbow joint, somewhat, but the wrists more, movable, so that the hand can be raised to the chest, but not to the mouth. The legs stretched out, lie closed together, and upon any attempt to separate them the child shrieks. He shrieks likewise when the trunk is moved by means of the shoulders; and there is a tendency to diarrhœa. These are the symptoms before the inflammation reaches the brain; when this happens, convulsions ensue, and the diarrhœa ceases. The treatment must be strictly antiphlogistic.'

'*Hooping Cough.*—Goelis praises belladonna in this disease, when it is purely spasmodic, and totally free from inflammatory action. The root he considers superior to the leaf, because the latter is sometimes too powerful. His prescription is the following:

'Radic. belladonnæ gr. j.; opii pur. gr. ii.; sacch. alb. gr. iv.; fiat pulvis in dos. viij. dividend.: one to be taken night and morning; or, according to circumstances, every three hours, till the countenance becomes flushed.

'The tartarised antimonial ointment is generally useless, as well as cruel, in hooping cough.'

'*Abdominal Diseases of Children.*—When the watery diarrhœa of children is preceded by pain in the abdomen, it is probable that a sub-inflammatory action is always present.' This remark of Dr. Goelis is very valuable, though his practice is rather inert; as he recommends diluents alone for this disorder. We generally apply leeches to the abdomen of children in watery colic and diarrhœa with great advantage. The disease is indeed an inflammation of the mucous coat of the intestines.—EDITORS.

'*Infarctus Intestinorum—Atrophia.*—Goelis has remarked a peculiar diagnostic symptom in this disease. It is a singular tuberculated condition of the cheeks of children, situated principally over the cheek bone, as if an almond were under the skin, and very perceptible when the child cries or laughs. When this symptom is present, the disease is incurable.' The author of the paper has added, in a note, that this observation is confirmed by his own experience. We have to regret, however, that we have not a more defined account of the disease meant by *infarctus intestinorum*. The atrophia of medical authors, we know, comprehends many different diseases of the abdomen, having emaciation, very frequently, the only circumstance in common. It is desirable to ascertain the accuracy of Goelis's remark.—EDITORS.

X. *Hydrophobia.—Case and Dissection.*

A pork-butcher, of Beaucaire, was bitten, on the 5th June, 1825, in the thumb of the left hand by a little dog. The dog had destroyed some fowls, and was killed without its madness being ascertained. The wound was not considered of much consequence, and cicatrised in five or six days. On the forty-fifth day after receiving the bite (July 20,) the man complained of pain in the forearm; and towards evening the whole arm, and particularly the deltoid muscle, became unsupportably painful. Leeches, and a blister, subdued these sufferings. The next day he complained of severe pain in the lumbar region; it seemed to him, he said, as if a cord was tied round him and pulled with strength sufficient to cut him in two. The pulse was now excited, deglutition began to be difficult, but the patient did not refuse to drink. The respiration became frequent and oppressed. He was bled without relief; and in the course of the morning deglutition became more difficult, and he began to have a horror of liquids. The pain in the loins gave place to similar distress about the thorax. A number of leeches were applied under the clavicles; but the patient was unable to take the whole of an antispasmodic draught. In the evening he was again bled, and sinapisms were applied to his thighs and legs. In the night he began to discharge a great quantity of thick and frothy saliva and mucus. On the third day he was seen by M. Plenidoux, who relates the case: he was sitting up by the side of his bed, supported by two of his friends; his mental faculties were undisturbed; his face was very animated; his eyes were sparkling, the pupils much dilated; tongue red and dry; the sub-lingual arteries were engorged, but no vesicles were observed. The saliva was so thick as to be ejected with the utmost difficulty. The pulse was small and frequent, the respiration rattling and sighing, the whole body covered with a cold perspiration; convulsions were excited when any liquid was presented. The patient was now so restless that leeches could not be applied; but he derived relief for a short time from a bag of ice applied round the neck; and took a few spoonsful of a mixture of lemon juice and syrup. The symptoms, however, were very soon renewed, and about noon, on the third day of the disease, the patient died. He was not at any time delirious, and seemed to have no suspicion of the connexion of his sufferings with the bite of the dog. The symptoms which seemed even more tormenting to the patient than all the rest, was an insupportable pruritus of the nose, which, on the third day, was so extreme that he rubbed off the epidermis in attempting to gain relief.

Dissection.—The mouth was filled with frothy saliva: the little vesicles spoken of by Marochetti were not present. The interior of the larynx was of a reddish violet colour; its mucous membrane was thicker, and more wrinkled than usual. The colour of the lining membrane of the trachea and of the bronchi was like that of the larynx. The right lung was healthy—the left a little hepatised, and having some adhesions: the heart was very large, and the

quantity of fluid contained in the pericardium was considerable: the cavities of the heart were completely empty. The lining membrane of the œsophagus was somewhat red, but less so than that of the air passages. The stomach was very much inflamed; and its mucous membrane so softened and thickened as to be easily removed by the scalpel. The intestines were natural: the blood vessels of the head were a little injected; but there was nothing remarkable in the appearance of the membranes, or of the brain. The arm which had been affected by the bite was carefully examined, from the thumb to the shoulder, but did not shew the slightest traces of inflammation. The muscles of all the upper part of the thorax, and those of the shoulders, were very red; and their veins, as well as those of the neck, gorged with blood. Nothing particular was observed in the lumbar region.—*(Rev. Méd. Février.)*

XI. *Animal Magnetism.*—*(Rév. Méd.)*

'I have frequently,' says M. Rostan, 'repeated the following experiment, but was at last obliged to desist from it on account of the prodigious fatigue it occasioned to my somnambulist, who told me that if I continued it she should become mad. The experiment was made in the presence of my colleague and friend M. Ferrus. I placed my watch within three or four inches of the patient's occiput, and asked her if she saw any thing.' 'To be sure, I see something bright: that hurts me.' Her countenance was expressive of pain, and astonishment was reflected in ours, ('*la nôtre devait exprimer l'étonnement. Nous nous regardâmes,*' says the original, which is very dramatic, but not easily transferred into our matter-of-fact language.) 'M. Ferrus was the first to speak, and observed, since she saw something shining, she could doubtless say what it was. 'What is it that shines?' 'Oh, I don't know; I can't tell.' 'Look again.' 'Stop, that fatigues me—stop;' and after a moment of great attention, '*it is a watch.*' 'But,' says M. Ferrus, (we half suspect this 'friend and colleague' not to have been quite so great a dupe as he affected to be,) 'if she sees the watch, she can doubtless say what o'clock it is. 'What o'clock is it?' 'Oh, me, that is too difficult.' 'Try.' 'Stop; I will endeavour—I may perhaps tell the hour, but not the minutes;' and after very great attention,—'it wants ten minutes to eight,' which was right. M. Ferrus wished to repeat the experiment himself, and did so with complete success: the hands of the watch were repeatedly moved; but the patient was never deceived.

What is to be said, says Dr. Dupau, (who has endeavoured to expose this business in some letters addressed to Professor Alibert,) when a man tells you I have *seen* this. Fontenelle once replied to a man on such an occasion—'I believe you have seen it; but if *I* had seen it, I would not believe it.' It is needless to consider the various means of deception which might have been made available to the above experiment; and we agree with Dr. Dupau, that we are justified in supposing any thing before believing in narrations of this kind. It may be worth while to know M. Rostan's

theory of animal magnetism; premising that its cause is ascribed to the nervous fluid, which, circulating in the nervous canals, and also passing out of them, forms a nervous atmosphere capable of influencing the will.

'This active nervous atmosphere of the magnetiser places itself in relation with the passive nervous atmosphere of the person magnetised: the latter becomes so affected, that intuition and all the faculties of the external senses are at once abolished; and the internal impressions, and those communicated by the magnetiser, are conveyed to the brain by another channel. This nervous agent possesses the property of being able to penetrate solid bodies—a limited property doubtless, but one which explains the manner in which the somnambulists are influenced through partitions and doors, and also their mode of perceiving odours, tastes, &c. The commixture of these two nervous atmospheres *fully* explains the communication of the desires, the will, and even the thoughts of the magnetiser, with those of the person magnetised. These desires and will being actions of the brain, are by it transmitted by means of the nerves to and *beyond* the surface of the body; and when the two nervous atmospheres meet, they are so identified as to form but one: they perceive, they think together; but one of them is always in a state of dependance upon the other.'

It is unnecessary for us to endeavour to shew that the effects produced on patients who believe in the above theory may be accounted for without admitting its truth. There can be no question at all concerning the extraordinary influence which dexterous pretenders to the mystery of magnetism may exert over the mind and body of the weak and deluded. The most common results appear to be a state resembling somnambulism, with a disposition to revery; but it is important to remember, that paralysis has not unfrequently been caused by these experiments, and that mental alienation has sometimes been produced. On the moral inconveniences that may arise from such a subjugation of one mind to another, we need not make any remark. The subject would scarcely have justified any observations being made upon it, were it not that animal magnetism seems likely to come into favour with certain physicians in France, no less than with those in what has been called the 'classic land of magnetism,'—Germany. A commission, consisting of MM. Husson, Adelon, Burdin, Marc, and Pariset, have recommended the serious notice of this subject, because, say they, in 'matters of science' the first judgment pronounced may have been defective, alluding to the opinion publicly expressed in 1784; because the new theory and practice of magnetism differs from the old one; because the honour of French physicians is concerned in their not being behind those of other nations; and, lastly, because animal magnetism being professed as a *secret medicine* comes under the proper cognisance of the Academy.

The report having been confirmed by a majority of the votes of the academicians, owing, it would seem, in a great measure to the eloquence of M. Husson, we may expect animal magnetism once

more to become fashionable; and to furnish, together with the cures of the Prince Hohenlohe and the dreams of the Sœur Nativité, a humiliating proof that the advance of the human mind towards truth is any thing but steady.

XII. *Ossification of the Retina—Case of.*

Jean Baptiste Pelletier, aged sixty-seven, and who had been blind about forty years, having been admitted into the hospital at Chartres, with chronic pulmonary catarrh, died Dec. 18, 1824; and the following description is given by Dr. Manoury of that place:—

'The wasted state of this individual's eyes attracted my attention. The right eye had lost its primitive form, and was scarcely one-fourth of the natural size, being almost reduced to the external coat. The cornea had not, in any of its diameters, an extent of more than half a line: it was thickened, and had lost its transparency. The sclerotica was flabby, and flattened on four sides, so as to present a superior, an inferior, an internal, and external face; and these faces, which were nearly flat, answered to the straight muscles; and each was separated from the other by a deep depression. There were four projecting edges in the inner surface of this membrane, corresponding to the depressions, and almost completely dividing the interior of the eye into four parts, which were empty, the humours of the eye having disappeared in consequence of violent inflammation caused by a blow with a stick about fifty-seven years before. The iris, of which the structure could hardly be distinguished, had contracted an adhesion with the posterior face of the cornea. All the rest was confused, and presented nothing remarkable.

'The volume of the left eye was diminished by one-half; and this diminution had taken place chiefly at the expense of the antero-posterior diameter of the organ. The sclerotica was flabby: the cornea had become opaque, and had much resemblance in colour to the part of the nail called the onyx: this membrane was much thicker, and less wide than in the natural state, and had become flat anteriorly; it was tumefied, and much thicker where it unites with the sclerotic. At the anterior and external part of the globe of the eye, there was a deep cicatrix, about three lines and a half in length, involving a portion of the cornea and sclerotic, and having a direction from within outwards, and from below upwards: this cicatrix was the mark of a wound caused about forty years ago, in a fall from a carriage, in which the eye came in contact with the sharp edge of a stone.

'Having opened the eye in a circular manner, a small quantity of a yellowish fluid flowed out. I found no remains of the crystalline or of the vitreous humour, which had doubtless escaped through the opening made in the transparent cornea and sclerotic. The anterior face of the iris was universally adherent to the posterior surface of the cornea; and a portion of this membrane had formed a hernia through the wound above

spoken of, with the edges of which it had contracted adhesions: the great circumference of the iris was not detached from the ciliary ligament. At the bottom of the eye there was found an osseous body, concentric with respect to the other membranes, as thick as the sclerotic in some parts, and thicker in others, presenting an external and internal face: the external was convex, covered by the choroid, which did not adhere to it, and had the aspect, colour, and consistence of the bony parieties, deprived of their periosteum; the internal face was concave, smooth, polished, of a glossy white colour, and lined for one-half of its extent by a whitish membrane, shining, and of a fibrous consistence. When this membrane was dried, and seen in a strong light, it was transparent and shining, and had considerable resemblance, as to colour, to a portion of the crystalline, which had undergone a certain degree of desiccation. Under this membrane, the osseous surface was rough and uneven, and not so thick as the other surface, which was not so covered. It appeared to me that this osseous body was nothing else than the retina, completely ossified in some points, and partially in others. In one part of the circumference of this osseous membrane, there was an irregular opening, with uneven sloping edges, not giving a passage to any thing, and evidently the consequence of defective ossification. This shell, or tunic (*coque*), which appeared to be formed of successive laminæ, comprised nearly the two posterior thirds of the retina, and presented anteriorly a circular, rugose, uneven edge, sharp in some places, and thicker in others: it was perforated near its centre by a round opening, two lines and a half in circumference, through which passed a whitish pulpy nerve, which filled it, without adhering to its edges. This nerve, which projected about half a line on the internal face of the ossified membrane, where it was free, passed through the choroid and sclerotic with the optic nerve, of which it was evidently the termination. The optic nerves were not examined beyond their entrance into the orbit.'

(We fear the above translation is not very clear; but the language of the original is by no means so precise as anatomical description, to be useful, should always be.)

XIII. *Laws of Mortality in France.*

M. Benoiston, of Chateauneuf, has drawn up a memoir on the changes which the laws of mortality appear to have undergone since 1755; containing, among curious and interesting observations, the following:—

Of 100 infants, 50 were formerly found to die in the course of the first two years of life: the number of deaths is now reduced to 38·3, a difference which is in a great measure ascribed to vaccination.

Of 100 children, 55·5 formerly died before ten years of age: at present the number is 47·7.

Of 100 male children, 21·5 only reached to the age of fifty: at present the number attaining that age is 32·5.

It was formerly ascertained, that the rate of annual mortality was 1 in 30: it is now 1 in 39. The births were formerly in the proportion of 1 to 25: they are now 1 to 31. Marriages were as 1 to 111: they are now as 1 to 135. The fecundity of marriages was calculated as presenting an average of 4 children to every married couple; and in this respect no change is found to have taken place.

Thus, it seems, the marriages have *decreased* in number; and as a consequence, although it cannot be called a direct one, the *births* are fewer. But the term of life seems to have been prolonged, and thus the population has become greater. If these calculations be correct, they afford a sufficient refutation of theories, of which the tendency has been to discourage early marriages, as if the petty political economy of man was of more authority than the plain ordinances of the Almighty. This is of course not the place to inquire into the causes of the diminished number of marriages in France, or into the evils which must accrue to public morals from such a circumstance.

XIV. *Spinal Nerves.*

The spinal marrow, according to M. Bellingeri, is divided into six portions, or bundles. He admits that the posterior roots communicate both with the posterior cornua of the grey substance of the spinal marrow and with the posterior bundles; that the nerves implanted in the middle or lateral bundles preside over the organic functions; and, lastly, that all the anterior roots which communicate with the anterior bundles have a relation with the movements of flexion of the head, of the neck, and of the trunk; flexion and adduction of the superior extremities, abduction of the thighs, and extension of the legs: whilst the posterior spinal nerves, and the corresponding bundles, preside over the movements of extension of the head, of the neck, of the back, of the upper extremities, and of the hands and fingers; the elevation of the upper jaw, the abduction of the upper extremities, and the abduction and flexion of the legs.

In support of this system, by which so many movements are referred to what are supposed their origins, Dr. Poleti relates a case, illustrating the relation between the nerves of the anterior bundles of the cervical portion of the medulla and the motions of the flexor muscles of the neck.

A coach varnisher was troubled for six months with a spasmodic contraction of the muscles of the neck, which was strongly bent upon the right shoulder, more backward than forward: the patient could not easily keep it fixed, and from time to time experienced shooting pains on the opposite side. The scaleni and inter-transversales muscles seemed to be chiefly affected by the contraction; the former particularly: there was very little external swelling or engorgement of the neck. Several means were tried by the patient without success; and he died eventually in consequence of an enormous aneurism of the ventral aorta. On examination after death, the substance of

the cervical portion of the medulla was found unaltered, but the pia mater enveloping the anterior roots was excessively red, thickened, dense, and rendered a sharp sound *(criait)* when cut by the scissors. The portion of the membrane also comprised between the first three or four cervical vertebræ was of a lively red colour, which gradually disappeared lower down.—*(Arch. Gén.)*

XV. *Morbid Anatomy.—Transposition of the Abdominal and Thoracic Viscera.*

M. Baron lately met with the following singular arrangement of parts in a male child, one of twins, and which died when eight days old. The heart was placed in an oblique direction from left to right; the cavities containing dark blood were towards the left; those containing red blood towards the right. The vena cava superior was placed along the left side of the mediastinum, giving rise to two sub-clavian branches, of which the longest was the right; the right branch of the pulmonary artery was also longer than the left; the aorta proceeded from the right ventricle, and took a direction along the spine. The left lung was more voluminous than the right, and was divided into three lobes; the right lung consisted of two lobes only, and presented a depression corresponding with the apex of the heart. The direction of the stomach was from right to left, the cardia being on the right, and the pylorus on the left; its great curvature in the right hypochondrium, where it was covered by the spleen; the pylorus and liver being in the left hypochondrium, and the lobes of the liver arranged inversely as to their ordinary state. The same variety was observed in the position of the duodenum and the whole of the intestinal canal: the cæcum was on the left side, the sigmoid flexure on the right; and there was a corresponding disposition of the vessels and nerves. The other twin died a few days afterwards, but its organization presented no deviation from the natural arrangement.—*(Arch. Gén., Jan.)*

XVI. *Operation for Phymosis.*

M. J. Cloquet's method of operating in cases of phymosis, whilst t is as expeditious as any other, has the advantage of leaving no disfigurement after the operation. He introduces a grooved sound nto the cavity of the prepuce, in the situation of or parallel to the renum, and then divides the prepuce at the lower part: if the renum is very short, he divides it also with the scissors. The longiudinal wound thus made becomes transverse when the prepuce is lrawn behind the glans, and cicatrises in a linear or transverse lirection, and the cicatrix is scarcely visible.

Section III. — Intelligence relating to the Medical Sciences.

I. *An Account of the Present State of Medicine in Italy.* By Fr. W. Oppenheim, M.D.*

'Our author describes the institutions of the Italian states, according to the order in which he visited them, beginning with the kingdom of Sardinia, in which there are two Universities, one at Genoa, and one at Turin.

'In the Genoese University ten professors are employed in teaching the different branches of medicine and surgery. None of these professors, however, enjoy much celebrity; practical anatomy is shamefully neglected, and there is no anatomical museum. The languishing state of science in this University is attributed by our author to its being under the direction of the Jesuits, who are in possession of its revenues, and expend considerable sums upon the purchase of theological books, while they almost entirely neglect, or give but little encouragement to the cultivation of natural history, comparative anatomy, and the other departments of medical education. During the short-lived constitution of thirty days, the students ranked themselves on the side of the anti-royalists, in consequence of which, the University was closed for three months upon the return and restoration of the king.

'The population of Genoa amounts to 90,000. It has two civil, and one military hospital, besides a work-house.

'The *Ospedale Pammatone* is very large, and externally resembles a palace more than an hospital. Its pillars, stairs, and balustrades, all of Carrara marble, lead the stranger to expect a commodious interior. But here he is miserably disappointed, and finds a total want of every thing suited to promote the health or comfort of the patients. The wards are very spacious, but badly lighted, imperfectly ventilated, and extremely filthy. The floors are made of tiles, half worn out, and scarcely ever cleaned. The bedsteads are of iron, have no curtains, and are ranged in three rows, two of which are so close to each other that they touch.

'The patients are attended by nuns, belonging to the order of *Nostra Donna del Rifugio.* Three physicians and four surgeons are attached to this institution, which has 1600 beds, but is capable of containing 4000. When our author visited it in 1824, the number of patients amounted only to 826. Post mortem examinations are here very rare, and the anatomical cabinet consequently very poor, containing only about a dozen dried preparations, and one skeleton! In 1821, the admissions amounted to 9344; the proportion of deaths to recoveries as 1 to 6.

'*Spedale degli Incurabili,* is a handsome but badly situated

* From the Edin. Medical Journal.

building, containing 1000 beds, and destined for the reception of the aged, the poor, and the insane. Patients of the latter description occupy a separate wing of the building. Their wards are spacious, but here again we meet with three rows of beds; and our feelings revolt at the situation of these wretched beings, the greater number of whom are chained hand and foot to their iron bedsteads! Where such a mode of coercion is employed,—where the strait waistcoat is unknown,—where the physicians, Drs. Isola and Timoni, (we wish not to conceal their names,) hurry daily through this abode of misery, without giving a single direction to the nurse-tenders concerning the treatment of the patients; can we wonder that a cure is scarcely ever effected? We are sorry to find, that, disgusting as such a scene must be, it is even surpassed in an asylum at Vienna, where Dr. Oppenheim has seen the lunatics not only chained, but caged, like beasts in a menagerie!

'While we feel it our duty to record this barbarous treatment of lunatics in one of the first cities in Italy, we are yet far from wishing to stigmatise the Italian character as inhumane, or their physicians in general as ignorant, for we ourselves recollect the existence, and that at no very distant period, of abuses not less enormous in Great Britain.*

'Dr. Oppenheim is doubtful whether to attribute to absolute want, or a degraded state of national character, the alms-begging which prevails in the Italian hospitals. 'As I passed each bed,' he observes, 'its sickly tenant stretched forth his meagre arms to implore for charity!'

'*Albergo dei Poveri*, a splendid building, adorned with costly architectural ornaments, but deficient in more essential qualities. It contains 2000 persons, consisting of the poor, the aged, and many orphans. The internal management of this institution is much better than that of those already described. The paupers and orphans appeared clean, well clothed, and well fed.

'In Genoa there are also a military hospital containing 800 beds, and an institution for the instruction of the deaf and dumb. The latter was founded in 1801, by the Abbé Octavius Assarotti, who still presides over it, and pursues nearly the same mode of instruction

* For an account of the dreadful and even appalling abuses in British Lunatic Asylums, see an article on that subject in the Edinburgh Review, August 1817. See also the Report of a Committee appointed by the Irish House of Commons, to examine into the causes of the mortality observed among the children admitted into the Foundling Hospital in Dublin. Two-thirds of the children admitted perished from neglect or maltreatment. The cause of death, in many cases, was opium, in the form of a mixture, left in the hands of the nurses, who administered this *sedative* when the children became uneasy, or cried perhaps from hunger. Great numbers of *healthy* children were put at once into the condemned or venereal ward, in which, of course, no wet nurses were employed, and the infants were so negligently attended, that a majority of them perished in the course of a few days. This practice had existed for many years, during which it was *proved* to have been fatal to many thousands. The physician of the hospital, during that period of infantine slaughter, obtained the name of Herod the Great!

as is usual in France. In Italy, as elsewhere, this malady has been observed to be much more frequent among the poor than among the rich. The state of this institution, which contains 20 boys and 12 girls, is highly creditable to the Abbé.

'Turin, for a population of 80,000, has four civil hospitals. That of S. Giovanni is the largest, being capable of containing 600 patients. But at the time of Dr. Oppenheim's visit, there were not more than 200 in it. The wards are large, and well ventilated. The proportion of deaths to recoveries, out of 4557 patients admitted in 1821, was as one to seven. There is a clinical ward in this hospital, containing 20 beds.

'*Casa dei Pazzi* contained 260 lunatics, of whom more than one-third were chained. Their situation seemed even more deplorable than that of their fellow-sufferers at Genoa. Although there are three physicians and three surgeons attached to this asylum, yet Dr. Oppenheim could not discover that any curative measures were ever employed.

'The University of Turin has eleven medical and surgical professors. The number of medical students generally amounts to nearly 100. The medical practitioners of the kingdom of Sardinia are much divided as to the systems they pursue. The juniors who have studied in Paris adhere in general to the doctrines of Broussais. Some of the seniors are still Brunonians; and what is singular, the younger Rasori has fewer followers than might be expected.

'The Grand Dutchy of Tuscany has one University at Pisa, and three medical academies, viz. at Florenz, Pistoia, and Sienna. In order to obtain a license to practise, the student must not only have attended an hospital in one of the above towns for seven years, but must have practised during that period under the direction of the clinical professor, and must finally submit to an examination. Even those who have taken the regular academical degree of M.D. elsewhere, must attend one of the Tuscan hospitals for two years, before he is allowed to enter on private practice.

'The academies at Pistoia and Sienna are too inconsiderable to claim attention. Our author therefore passes at once to the University of Pisa, which has nine medical and surgical professors. There is here, however, no school for teaching midwifery.

'The University building is small and inconvenient, and contains a few lecture-rooms, besides an anatomical and surgical theatre; but the latter is so badly lighted, that most of the operations are performed in the former.

'The medical courses commence in November, and conclude in August. The students of medicine amount to about 200, of whom many are Greeks. Dr. Oppenheim had an opportunity of hearing one of the lectures on anatomy, and declares it was the worst he ever heard.

'We shall give our author's account of the medical institutions at Pisa, in his own words.

'*Ospedale Santa Chiara é Casa dé Trovatelli* contains 300 patients, the wards are clean, spacious, and lofty. The medical and

surgical patients, in this as in the other Italian hospitals, are not separated from each other, but lie in the same ward. There is a clinical ward with twelve beds for the treatment of medical cases, under the direction of Professor Morelli, besides one for surgical cases, under the direction of Professor Vacca Berlinghieri. The attention of these professors is not however confined to the clinical patients, for they make remarks upon every interesting case in the hospital. The surgeon's visit is made at seven in the morning, the physician's at ten. The hospital pupils here, as in all the other Tuscan schools, wear a particular uniform, consisting of a red surtout, and a white apron; as the domestics of the hospital are similarly dressed, they are scarcely distinguishable from the students. Professor Vacca Berlinghieri is extremely polite to strangers, and is very communicative upon professional subjects. I shall relate what I saw and heard while in his company. His method of lithotomy* is well known from his three memoirs on that subject. His success has undoubtedly been considerable; for of 29 patients upon whom he has operated, he has lost but two, and of these, one was more than sixty-four years old. I saw two persons upon whom he had operated; one was a boy four years old, who had been cut for the stone five days before. He seemed to be doing well, the greater part of his urine being already voided through the urethra, while the wound was beginning to heal. The other was a very melancholy case of a young man, on whom the operation had been performed fourteen weeks previously to my visit. The stone had been broken in the first attempt to extract it, and the fragments were successively removed, great care being taken by the professor to leave no part of it in the bladder. He used injections and every other usual precaution; but nevertheless, and although the wound had assumed a healthy appearance, the patient complained of calculous pains on the twelfth day, when the professor discovered another piece of the stone in the bladder. In removing this he made no new incision, but merely dilated the original wound with his finger. This fresh irritation caused a violent inflammation of the parts, and the swollen part of the rectum, which had performed the office of a valve in preventing the fæces from entering the bladder, sloughed away, so that a fistulous opening was formed between the rectum and the bladder, and the urine was consequently evacuated partly *per anum*, and partly through a catheter introduced into the urethra. When the catheter was introduced only as far as the neck of the bladder, the urine flowing through it was mixed with fecal matter; but when it was pushed higher, towards the fundus, the urine was natural. When I saw the patient, he was less hectic than he had been; but still the fistulous opening into the rectum remained—its calibre was, however, diminished. When this operation had been revived in France by Sanson, and improved in Italy by Vacca, who merely makes an incision into the neck of the bladder, it excited much attention, and was practised by many French and

* He opens into the bladder from the rectum.

Italian surgeons with considerable success. Scarpa, however, urged many objections against its safety, the most important of which was the danger of wounding the vesiculæ seminales. To this Vacca replied by stating, that of 80 patients thus operated on, none had felt a diminution of their sexual powers. It is very remarkable, that so celebrated a surgeon as Dupuytren should have so suddenly changed his opinion concerning the propriety of this operation. He now declares himself decidedly hostile to it, and yet when I was in Paris, in 1823, he was quite enthusiastic in its favour; for I heard him say, that the number of patients who suffered from a fistula after this operation, was not greater than that of those who died after any other!

'Calculous complaints are very rare in the neighbourhood of Pisa, and the majority of the cases operated on by Vacca, come from Bologna, Genoa, and the Piedmontese countries, whose population subsist almost entirely on vegetable nutrition; a fact proving that the formation of stone does not depend upon a superabundance of nitrogen.

'Diseases of the large arteries are so unfrequent at Pisa, that there had been no operation there for aneurism during ten years.'

'Dr. Oppenheim, however, saw at Pisa one case of popliteal aneurism in a healthy man. It is singular that Vacca refused in this case to perform the operation, alleging as a reason, that he believed the patient's blood possessed too little *plasticity*, and the arterial coats had too much inclination to suffer from distension or rupture, to authorise a reasonable hope of successful termination. He could not assign any intelligible grounds for this opinion, which was, however, justified by the event; for another surgeon having performed the operation, hæmorrhage took place on the third day, which was stopped by tying the femoral artery above the origin of the profunda. This resource proved also ineffectual; for a fresh hæmorrhage occurred in three days after, and the patient died.

'Dissection shewed that all the coats of the artery had been divided by the ligatures, while no sufficient coagulum had been formed, and no attempt made towards the exudation of coagulable lymph.

'What symptoms Vacca conceived to contraindicate the operation in this case, we, as well as Dr. Oppenheim, are unable to guess.

'Fistula lachrymalis is a very frequent disease at Pavia, and Vacca has observed it to occur in women more frequently than in men, in the proportion of 7 to 1. His operation consists in making an opening into the sac with a small straight bistoury; he afterwards widens the sac with a fine silver probe, and introduces into the duct a bit of extremely fine catgut, having a silk thread fastened to its upper extremity, by means of which it is secured above. In the course of a few days the lower end of the catgut is forced through the nostrils, by blowing the nose; it is then drawn down and detached from the silk thread, to which he fixes a small dossil of charpie, and is thus enabled to introduce the latter, from below upwards, into the lachrymal sac. The advantage of this method is, that the dossil being

introduced into the sac through the lower opening, the superior external opening need not be enlarged or stretched so as to render it liable to inflammation. Vacca insists upon the necessity of dividing the tendon of the orbicularis muscle in this operation, as a portion of the sac lies directly under this muscle, and of course cannot be touched with the necessary escharotics, and if this be not done, he contends that this portion of the sac will remain in a state of inflammation, and will occasion a relapse of the disease. In my opinion, the division of this tendon cannot be effected without danger of also dividing the lachrymal duct.

'One of the most interesting cases I saw at Pisa, was an emphysema caused by fracture of the ribs on the right side of the thorax, together with injury of the pleura and lung, but without any external wound. The patient was brought to the hospital five days after the accident, when the emphysema was excessive, and had extended over the entire neck, chest, abdomen, and scrotum. The patient felt very little pain, and was quite free from the usual symptoms, cough and expectoration of blood. He could lie on either side, but preferred lying on the uninjured side. His respiration was free, and he could make a deep inspiration without its causing uneasiness. The transverse fracture of the rib was quite evident on examination. This case is certainly extremely interesting, and seems inexplicable. Under other circumstances it would have been necessary to make an immediate incision, but Vacca merely applied a few leeches, and the disease disappeared gradually.

'Vacca has lately abandoned an operation he was formerly in the habit of performing frequently, I mean tying the saphena vein in cases of varix and varicose ulcers. The success of this practice was for a time considerable, but cases afterwards occurred in which dangerous symptoms were occasioned, such as violent inflammation of the vein. In a few instances this inflammation proved fatal.'

'Dr. Oppenheim observes, that an operation occasionally attended with such dangerous consequences ought never to be undertaken for the relief of a complaint in itself destitute of danger.

'We subscribe most willingly to this opinion, having ourselves learned, from an extensive experience, the uncertain issue of tying the saphena vein. One case we shall not easily forget. A young person, otherwise enjoying perfect health, was admitted into an hospital in order to undergo this operation. It was performed. Inflammation of the venous system supervened, and the patient died in a few days! For further information on this subject, see Hodgson on Diseases of the Veins and Arteries, Mr. Carmichael on Varix and Venous Inflammation, Dublin Hospital Reports, Vol. II., and an excellent article on '*Varices*,' in the Dictionnaire des Sciences Médicales.

'*Florence*... Population 80,000.

'There are two hospitals, besides a foundling hospital.

'1. *Spedale de Santa Maria Nuova*, capable of containing 1,200 patients, but Dr. Oppenheim found in it only 600 in April 1824. The wards are large and lofty. The lower wards are in the form of a cross, and contain from 150 to 200 beds. They are badly venti-

lated, and uncleanly. Six physicians and six surgeons are attached to this institution, and attend in rotation, each for one month. Dr. Oppenheim blames this practice, as subjecting the patients to constant change of treatment. The clinical wards of this hospital contain 50 beds, and what is remarkable, almost all the operations are performed by the pupils; of course, however, in presence of the professors. Dr. Oppenheim saw here many cases of compound fracture, which were treated according to Dupuytren's method. He saw a case of medullary sarcoma affecting the testicles; castration was performed; but in five days a new fungous growth began to arise from the wound.

'Another melancholy picture was presented by a case of fungus of the antrum highmorianum, which had forced its way into the mouth. Indeed I do not think I ever visited an hospital containing so many desperate diseases; such as, hopeless cases of morbus coxarius, cancer, and abscesses, attended with confirmed hectic. Fistula lachrymalis is here also common; and I had an opportunity of seeing some cases of suppuration within the substance of the mastoid process, one of which proved fatal, from caries and effusion of matter in the dura mater. It was attended with symptoms of cerebral compression.'

'Scrofula in all its forms, such as tubercular phthisis, caries of the bones, &c., is not less frequent here than at Pisa. The Italians administer occasionally muriate of barytes in this affection; and Vacca often sends his scrofulous patients to the sea for the benefit of bathing.

'The operation for cataract employed both at Florence and Pisa, is depression or else reclination, the needle being introduced through the sclerotica.'

(*To be concluded in our next Number.*)

II. *Medical Poets.*

A French author, M. Sainte-Marie, has published a dissertation on the subject of medical poets, in which, with great ingenuity, he defends the conduct of such practitioners as relieve their minds, after the fatigue of professional duties, by composing verses, even if their verses are detestable: he thinks, at least, that it is quite as pardonable to be addicted to writing verses, as it was in Mead to spend his leisure and his fortune in collecting paintings, engravings, and antiquities, and exposing himself to be the constant dupe of those who had such things to sell. He reminds the reader that Boerhaave used to recreate his intellects by playing the guitar, and Tralles by playing on an organ. 'It is evident that the exercise of the imagination, under proper restraints, may be as useful, and is therefore quite as justifiable, as the exercise of any other faculty of the mind; and none but those who are full of vulgar prejudices would think a physician less likely to cure his patients because he was able to write a respectable sonnet. The instance of Dr. Darwin is alone sufficient to prove that the most exact practical knowledge may be united with the most poetical fancy. M. Sainte-Marie has tried to enumerate all the medical men who have been poets: we confess we

were surprised to see the name of Dante among them. Haller is well known to have been a poet; and Schiller was a military surgeon. Poor Goldsmith is not forgotten: we believe he graduated in Edinburgh; but he never owed much to physic. We do not observe the name of Armstrong, whose Art of Health is, without question, one of the most elegant poems in our language.

III. *Lithotome Cache—Proposed Improvement on.*

It is well known that some of our most eminent surgeons, both in their lectures and in practice, give the preference to the *scalpel*, above all other instruments, for the performance of the lateral operation of lithotomy. The use of this instrument, however, still is, and probably long will be, confined to a very limited number of operators, as it demands for its safe and effectual employment a combination of knowledge, confidence, and skill, not very generally to be met with.

Next to the scalpel, perhaps, in the estimation of adepts, stands the *lithotome caché* of Frère Cosme, an instrument also deservedly regarded by most surgeons, British and continental, as the best adapted for general use of any perhaps hitherto contrived. To it, however, it is well known, many serious objections have been made, founded principally upon the dangers to which the parts engaged in the operation are exposed, from the manner in which the instrument is opened in the bladder, and withdrawn from that organ.*

We are gratified, therefore, in having in our power to state that a modification of this useful instrument has lately been submitted to the profession, which seems well calculated to obviate many of the objections above alluded to. For this we are indebted to Dr. Blake, surgeon of his majesty's 7th dragoon guards, who, in an article inserted in the London Medical Journal for January last (p. 32), has given a very full description of the new instrument, illustrated by a plate.

To that article we must now refer those who desire further information on the subject; as it would be manifestly useless to enter here into particulars which could not possibly be understood without an engraving, which it is not in our power to give. We may add, however, that the instrument itself may be seen (we are told) in the hands of Mr. Millikin, an instrument-maker in the Strand.

IV. *Artificial Production of Animal Monstrosities.*

At a late meeting of the Académie des Sciences in Paris (April 3), M. Geoff. Saint-Hilaire communicated to that learned body a very singular discovery which he had recently made at an establishment at Anteuil, where *artificial incubation* has been for some time successfully carried on. This discovery is nothing less than that of

* 'Il est vrai, qu'on peut léser le rectum et les vaisseaux houteux, si l'incision est faite trop en dedans, ou trop en dehors—que le basfoud de la vessie peut être ouvert, si l'on élève trop le poignet—et les parois de ce viscère percées d'outre en outre, si l'on enfonce l'instrument d'une manière trop brusque, et avec trop de force.'—*Richerand.*

the power of producing at pleasure certain monstrous appearances or developments in the animal kingdom.

One of these particularly mentioned by him is the existence of a *single cerebral lobe*, situated on the median line. This is a monstrous appearance frequently met with, we are told, by naturalists under fortuitous circumstances; and one which may, according to M. Saint-Hilaire, be produced in the chick at pleasure, simply by relieving *one-half* of the egg during incubation from the influence of the external air. This object M. S.-H. attains at present by dipping one-half of the egg in melted wax, and preserving it so covered during the entire process of incubation.

The subject, as may be supposed, has already excited a considerable sensation among the French philosophers, in whose hands the true value of the alleged discovery will no doubt be very soon determined.—(*Private Correspondence.*)

V. *Bag of the Pericardium Deficient.—Recent Case.*

An interesting and well-marked example of this singular *lusus* was some time since, it appears, met with in an adult subject, at the Ecole de Médecine in Paris.*

Fortunately for the interests of science, this specimen fell into the hands of persons well qualified to appreciate its value; and the parts, therefore, were not only carefully examined and preserved, but models and drawings were also prepared from them in their natural situation. From these drawings, plates, we find, have lately been engraved, which will shortly, it is expected, be given to the public, accompanied by a full and accurate description from the pen of Mons. Breschet, the distinguished anatomist, under whose care the whole of the proceedings relative to the case have, we believe, been conducted.

This publication will, we trust, supply a deficiency which has long been felt and regretted by anatomists; for the accounts hitherto given of the state of the heart and surrounding organs, in cases where the pericardium was found deficient, are, as every one knows, extremely vague and unsatisfactory, with the exception perhaps of that left by the late Dr. Baillie,† which, however, is defective in this respect, that there are no plates or drawings to illustrate the text.

VI. *Comparative Anatomy.—Structure of the Heart in the genus Rana.*

In a communication lately read before the Royal Society of London, from Dr. John Davy, it is stated, that this gentleman has ascertained that the heart of the common *toad*, the *bull-frog*, and the common *frog*, does not consist, as is generally imagined, of *one* auricle and the ventricle, but that it contains *two* auricles, divided by a proper septum.

Should this statement be authenticated by others, and should a

* Private correspondence.—*Archives Gén. de Médicine*, Janvier.

† Vide 'Works,' by Wardrop, vol. i. for an account of a case of this nature met with by Dr. Baillie himself.

similar structure be found to exist, as we are told there is reason to believe it does, through the entire order of *batraciens*, an anomaly will be removed which has long occasioned some difficulties to naturalists in the arrangement of reptiles. (Vide *Ann. of Phil. Feb.* p. 138.)

VII. *Teas of Commerce. — Botanical Notice.*

The common *black* Chinese teas consist chiefly of the *old* leaves of the *thea viridis*, mixed with those of the *Camellia Sasanqua* or *oleifera*, and sometimes with fragments of the leaves of the *olea fragrans;* while the finest teas, both *green* and *black*, appear to be produced by the *thea Bohea*, the quality and colour depending solely on the age of the leaves and the mode of preparing them.

Mr. D. Don, upon whose authority the preceding statement is given, adds, that although he has long attended to the subject, he has never been able to find, in those teas said to be adulterated, either *willow* or *sloe* leaves, or any thing else of *British* growth; and thinks it probable that the leaves of the *Camellia*, above mentioned, may have been mistaken for *sloe* leaves. —(Vide *Edin. Phil. Jour. Oct.* 1825, p. 381.)

VIII. *On the Poison of the Toad.*—(*Rana Bufo.*)

We noticed in our last Number (April, p. 379) a communication lately made to the Royal Society by Dr. J. Davy, on the poison of the common toad.

In that notice we gave Dr. Davy credit for recalling the attention of naturalists to this subject, and furnishing us with grounds for believing that the notions long entertained by the vulgar, with respect to the poisonous qualities of the toad, were really well founded, though contrary to the opinions most generally received among the learned in the present day.*

Since the publication of that article, however, our attention has been directed to one or two passages in the work of Messrs. Paris and Fonblanque on Medical Jurisprudence, published in 1823, which contain, it must be confessed, much of that information, &c. for which we and others had inadvertently given credit to Dr. Davy. We deem it, therefore, but justice to all parties to lay these passages also before our readers, leaving it at the same time to every one to form his own opinion on the subject.

Our authors, after detailing at some length the opinions formerly entertained upon this subject, proceed thus:

'Modern naturalists recognise no poisonous *species of toad;* even the most formidable of *the species* to appearance, that of Surinam, is said to be perfectly harmless.† * * * * * * * * * * * * * * * *

* 'Ce sont des animaux d'une forme hideuse, degoutante, que l'on accuse mal à propos d'être venimeux par leur salive, leur morsure, leur urine, et même par l'humeur qu'ils transpirent.'—(Cuvier, *sur les Crapauds, Regne Animal*, vol. ii. p. 94.)

† In this short sentence the term species is employed, first in a *specific*, and then again in a *generic* sense—an irregularity we should not have expected to find in a scientific publication of the present day.

'It has, however, been shewn by late experiments, that the *toad* has, under particular circumstances, the power of ejecting from the surface of the body *an acrid secretion, which excoriates the hands* of those that come in contact with it;* and this fact may perhaps have assisted in supporting the general belief respecting the poisonous nature of this reptile.

'Pelletier has ascertained that this corrosive matter, contained in the vesicles which cover the skin of the common toad; has a yellow colour, and an oily consistence; and to consist of, 1st, an acid, partly united to a base, and constituting $\frac{1}{20}$th part of the whole; 2d, a very bitter, fatty matter; 3d, an animal matter bearing some analogy to gelatine.'—(*Medical Jurisprudence*, vol. ii. p. 139.)

IX. *Tobacco.—Notice of its Injurious Effects on Silk-worms.*

'Here I must observe, that tobacco is an immediate and mortal poison to the silk-worm.

'If a few grains of *snuff* shall happen to fall upon one of these insects it immediately shews great signs of agitation and distress, and in about a minute's time it is thrown by it into convulsions, which end in death. Hence it appears to be necessary that persons who are employed in feeding the silk-worms should either give up entirely, at that time, the use of *snuff*, or should at least be extremely careful not to suffer the smallest grain of it to fall upon the silk-worms.'—(Stephenson *on the Silk-worm*, *Technical Repository*, April, p. 251.)

Our author adds, that just before expiring under the influence of the tobacco, the silk-worm throws out from its mouth a small watery globule; and that any other worm touching, or being touched with this fluid, will inevitably perish, as if touched with the tobacco itself. This latter circumstance, however, is too singular to be readily admitted, whilst at the same time we do not feel authorised to deny or reject it altogether without further inquiry.

X. *Mr. Hume and Dr. Barry.—(On Poisoned Wounds.)*

[We give insertion to the following observations, at the request of a respected correspondent, who feels an interest in the subject to which they relate, and to whom we are indebted for the articles which have already appeared in this Journal relative to Dr. Barry's late researches.—Ed.]

Anderson's Journal (Quarterly) of the Medical Sciences.

The editor of the above Journal, in noticing in his last Number, (p. 289,) what he calls the report of a committee of the 'Académie des Sciences,'† on a late memoir of Dr. Barry's on obsorption, has

* No authority is quoted for this statement, of which it is evident the editors had no personal knowledge; nor can we, at this moment, furnish any precise information on the subject.

† The report was made to the Académie *de Médecine*, not *des Sciences*, as the editor might have observed in the 'Medical Repository' for February, p. 176; from which, what he calls his 'conclusions,' are copied almost verbatim.

introduced the name of Mr. Hume, of Long Acre, as having written on the 'same subject more than twenty years ago.'

To prove this, and of course to establish for Mr. Hume a claim to the honour of an alleged discovery, he reprints a short and sensible letter, addressed by that respectable chemist to the editors of the Philosophical Journal in 1804, and having, for its object, to *suggest* the application of an exhausted cupping-glass to poisoned wounds.

To that letter the following editorial observations are prefixed:—

'We think it not a little strange that Dr. Barry should have made no allusion to this paper in what he has *published* on the subject. It is scarcely possible that he can plead ignorance of its existence.'

Now, to the charge and imputation here conveyed we shall simply reply,

1st. That Dr. Barry has as yet published nothing upon the subject in question.*

2d. That his memoir was written and presented to a *learned* society to make known what he himself had done, and not to detail what had previously been done by others; and,

3d. That Mr. Hume's suggestions on this subject could never, under any circumstances, have been entitled to notice, as they were merely founded upon conjecture, and did not even possess the merit of novelty.

And now we, in our turn, may perhaps be permitted to say, 'we do think it not a little strange,' that the learned critic should have thought otherwise; and particularly that he should have made 'no allusion' in his remarks to what our father Celsus has left us upon this 'same subject;' for although the writings of the Roman Hippocrates may, without reproach, perhaps be overlooked by the practical chemist, 'it is scarcely possible' the editor of a Medical Journal 'can plead ignorance of their existence,' or of what they contain.† B. M.

XI. *Contagion of Yellow Fever and Plague.*

In a former Number we noticed the offer made by MM. Costa, Lassis, and Laserre, to subject themselves to some personal experiments, in order to set this question at rest, such as wearing infected clothes, &c. The offer was referred to a commission of the French Royal Academy of Medicine, and has, we find, been rejected, partly

* Dr. Barry has only just now published in Paris his Memoir of the Motion of the Blood in the Veins; his 'Researches' upon that subject, and upon absorption, also, will shortly be given to the public in this country. The work, indeed, is at this moment in the hands of the printer, and will be published by Messrs. Underwoods, Fleet Street.

† Speaking of wounds, Celsus, amongst other things, says, 'Utique autem si rabiosus canis fuit, *cucurbitula* virus ejus extrahendum est. Serpentium quoque morsus. Dein venenum extrahendum est—id *cucurbitula* optime facit.'—Lib. v. cap. 27.

Thus, it appears, the only merit which can be claimed for Mr. Hume is that of having *suggested* the *trial* of a remedy which had been familiarly and successfully employed at least seventeen hundred years before he was born.

because the experiments would not be conclusive, partly because they would be attended with danger to other persons than the experimenters, and, partly, because infected clothes could not be imported into France without breaking the laws. Should the plague or yellow fever be accidentally introduced into France, it is intimated that the offer of these gentlemen, whose zeal is at least praiseworthy, will be accepted.

XII. *Transfusion of Blood.*

The French critics are quite horrified at the idea of Mr. Waller's patient having twenty ounces of brandy, one hundred and sixty drops of laudanum, a considerable quantity of ammonia, three yolks of eggs beat up with brandy, and some beef-tea, thickened with oatmeal: and after going through the whole case, they conclude by remarking, that truly they do not know which most to admire, the medical theories leading to such practice, or the constitution of the individuals who support it.

XIII. *Rhus Toxicodendron.*

The medical properties of the rhus toxicodendron in paralytic affections, although some time since strongly insisted on by Dr. Alderson, have not, we apprehend, been much confided in of late years. Dr. Givesius (Bull. de Sc. Méd.) has lately made some experiments which have been sufficiently successful. Five paralytic patients were treated with one-fourth of a grain of the leaves twice a day, and of these four are reported to have been cured.

XIV. *Preventive Power of the Belladonna against Scarlet Fever.*

Hufeland says, it gives him great joy to be able to confirm, by the results of fresh experience, the efficacy of belladonna as a preventive against scarlet fever. Five years have now elapsed since in his Journal the request was for the first time made, to employ the belladonna with this view; and, since that time, every year has brought fresh proofs of its power. This recommendation, which originated in German ground, is beginning to excite attention in France and England, and we may at last hope that its real merits will soon be appreciated. Dr. H. has used the medicine repeatedly in his own practice, and has never seen it fail in a case where it had been properly tried.—(*Hufeland's Journal der practischen Heilkunde, Nov.* 1825.)

Clinical Report of the most prevalent Diseases during the preceding Month.

April has been generally a fine and dry month. Towards the latter end, there were occasional heavy showers; and the wind has blown almost continually from the north-west.

As respects the quantity of disease this month, it has been unusually healthy; but the disorders that have occurred have been for the most part highly inflammatory, and required more active depletion than for some time past. Pneumonic complaints have still taken the lead, both in frequency and severity; and we have heard of, although we have not seen any fatal cases. Rheumatism, in the form of arthritis rheumatica, has been common, but easily re-

moved; and there have been some instances of general fever. In these last, the sensorium has not often been disordered, nor frequently has it been possible to refer to any one organ as particularly affected.

We have seen more cases of dropsy in the last month than have usually fallen under our notice in the same time. In several the effusion appeared to have commenced in the chest; and afterwards to have extended to the cellular membrane of the whole body. The abdomen did not participate in the effusion so early as the extremities. The elaterium was very serviceable in these cases; but required much caution on account of the great subsequent debility. In an instance now under treatment, and evidently connected with hepatic derangement, mercury, united with digitalis, has almost removed the effusion.

Headach, accompanied with paralytic symptoms, has been common; and in every case, there has been a great deficiency in the urinary secretion. The same circumstance has been noticed in palpitation of the heart, which, in several examples, has been much relieved, and in some entirely removed, by acting strongly upon the kidneys.

LITERARY INTELLIGENCE.

Dr. Paris's new work on Diet, with a view to refute several prevailing opinions, and to establish, on practical grounds, a system of rules for the prevention and cure of the various diseases incident to a disordered state of the digestive functions, will be published in May.

Dr. Barry, of Paris, has nearly ready for publication, Experimental Researches on the Influence of Atmospheric Pressure upon the Venous Circulation, Absorption, and the Prevention and Cure of Hydrophobia, and the symptoms arising from every species of poisoned wounds.

Mr. Curtis has in the press, a fourth edition of his Treatise on the Physiology and Diseases of the Ear, in which he has shown what may be done in acoustic surgery, particularly in otitis otorrhea, and in cases of deaf and dumb.

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

1. Recherches Expérimentales sur les Causes du Mouvement du Sang dans les Veines; Mémoire lu à l'Académie des Sciences le 8 Juin, 1825. Par David Barry, M.D., &c. &c., avec le Rappart de Commissaires de l'Institut de France. Paris. 1825. 8vo. Pp. 74.

   Dr. Barry is, we are happy to learn, about to publish in our own language an account of his researches.

2. The Anatomy of the Brain, with a General View of the Nervous System. By G. Spurzheim, M.D., of the Universities of Vienna and Paris; Licentiate of the Royal College of Physicians in London. Translated from the unpublished French MS. By R. Willis, Member of the Royal College of Surgeons in London. With eleven Plates. 8vo. Pp. 255. Highley, London. 1826.

   This is a most interesting work, and one which will be perused with advantage by the anatomist and physiologist.

3. Remarks on the Present State of the Medical Profession, shewing chiefly the Necessity for the Division of Labour in its Practice. By Leonard Stewart, M.D., Licentiate of the Royal College of Physicians; Fellow of the Royal Medical Society of Edinburgh; and Secretary for Foreign Correspondence to the Medical Society of London. 8vo. Pp. 32. London. 1826.

THE METEOROLOGICAL JOURNAL,

From the 19th of MARCH, 1826, to the 20th of APRIL, 1826.

By Messrs. HARRIS and Co.

Mathematical Instrument Makers, 50 High Holborn.

March.	Moon.	Rain Gauge.	Therm.			Barom.		De Luc's Hygrom.		Winds.		Atmo. Variation.		
			9 A. M.	Max.	Min.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	2 P. M.	10 P. M.
20			44	48	36	29 84	29 85	73	74	NW	N	Fine	Fine	Fine
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27			36	42	34	29 82	29 82	66	61	ENE	SW	——	——	——
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3			55	66	45	30 02	30 09	76	75	WNW	NW	——	——	——
4			51	58	49	30 05	30 02	80	70	WSW	W	——	——	——
5			51	57	48	29 98	29 97	74	63	W	WSW	——	——	——
6			54	60	49	30 10	29 96	76	74	WSW	WSW	——	——	——
7	○		54	63	50	29 96	30 06	77	68	W	WSW	——	——	——
8			56	63	52	30 03	29 86	68	66	W	SW	——	——	——
9			60	65	42	29 64	29 66	61	80	SSE	WSW	——	Rain	——
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11			56	60	46	29 67	29 62	79	72	WSW	SW	Rain	——	Rain
12			51	54	45	29 07	29 46	79	75	WSW	WNW	——	——	Fair
13		51,	47	57	49	29 95	30 00	70	73	NNW	WSW	Fair	Fair	Fine
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The quantity of rain fallen in the month of March was 1 inch 33·100.

NOTICES TO CORRESPONDENTS.

The Readers of the Medical Repository may perceive, from this Number, that it is our intention to extend our monthly limits to at least six whole sheets, or 96 pages, and to print the greater part of the work in a closer and more uniform type than formerly, which will be equal to a still farther extension of the limits of the work.

Several Communications are received, and are under consideration.

Literary Notices, &c. cannot be inserted in the body of the work, unless with a very few exceptions, which will rest with the Editors.

Correspondents, and authors of works, or of papers in other Journals, who may wish to have their productions noticed, may send them under cover (post paid) to the Editors, 1 Bolstrode Street, Cavendish Square, or to the Publishers', Fleet Street.

The Index to the preceding Volume will be delivered with the next Number.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the Editors, to the care of Messrs. T. and G. Underwood, 32 Fleet Street.

THE LONDON MEDICAL

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No. 150. JUNE 1, 1826. Vol. XXV.

No. XII.——NEW SERIES.——Vol. II.

PART I.

REVIEW.

I.

OF THE USE OF THE STETHOSCOPE.

An Introduction to the Use of the Stethoscope, with its Application to the Diagnosis in Diseases of the Thoracic Viscera; including the Pathology of these various Affections. By William Stokes, M.D. Edinburgh, 1825. Pp. 226.

Observations on M. Laennec's Method of forming a Diagnosis of the Diseases of the Chest, by means of the Stethoscope and of Percussion; and upon some points of the French Practice of Medicine. By Charles Scudamore, M.D., F.R.S., etc. etc. etc. etc. London, 1826. Pp. 123.

A Treatise on the different Methods of investigating the Diseases of the Chest, particularly Percussion and the Use of the Stethoscope. Translated from the French of M. Collin, by W. N. Ryland, M.D. London, 1825. Pp. 67.

There is no profession that shews itself more ready to examine every new method proposed for the advancement of science than the profession of medicine. This is perhaps a natural consequence of the great uncertainty at all times attendant upon its practice, and of which they who have made the highest attainments are generally the most deeply convinced. Still, however, even in a profession which appears to us more nearly on an equality with the general spirit of the times than any other, there are individuals who from idleness neglect the improvements that are offered, and pretend to despise that which they will not trouble themselves to investigate. We are ourselves among those who have not inquired into the value of the stethoscope to any very considerable degree, yet we truly believe that in the hands of the inventor and his more industrious disciples, it is really

capable of affording very much of the information which they profess to draw from it; and we do consider accuracy of diagnosis so important, and at the same time we know its acquisition to be so difficult, that we should feel ourselves guilty of something like crime were an opinion of ours to prevent the cultivation of any means in the most distant degree tending to so desirable an end.

Generally speaking, we fear that medical men somewhat undervalue the importance of accurate diagnosis, and think it quite sufficient, if acquainted with the general characters of a disease, they are able to direct its general treatment, although its precise site should not be known. To us, however, it does really seem, that advantage is derived to the practitioner in proportion to the minute accuracy he is capable of attaining in the distinction of the situation of a disorder. Dr. Scudamore has instanced this with respect to pneumonia, and we believe correctly. The inflammation of the lungs, or of the pleura, very seldom involves the whole organ, and yet general bleeding is the principal means recurred to; or if leeches be applied, still they are applied at random, and without any reference to the point of inflammation, unless this should be indicated by pain, which very frequently is not the case. Here, therefore, any plan which would enable us to recognise the inflamed spot is peculiarly desirable.

But we regard accuracy of diagnosis as important in another point of view, and this is connected with a more enlarged notion of the duties of a physician than appears in practice to be generally entertained. For not only does correct diagnosis add to our own comfort and peace of mind, but it enables us very often to give comfort also to our patients and their friends. Symptoms frequently are so confused, and diseases fatal and curable so little distinguishable, that honest professional men will naturally give a doubtful opinion, lest the event should prove them deceived; yet in the meantime they may either be inflicting unnecessary pain, or, on the contrary, unwisely, or at least unjustly, nourishing hope. To us either case is evil. We know there are those who play with the feelings of mankind, as if human suffering were of no import, as if, provided the physician obtained credit, it little signified what misery was endured by others, and who nourish hope, or rend the heart with anguish, merely as they imagine their own interest dictates. But such conduct can never be defended—it requires only to be mentioned, to meet with that execration which it so richly deserves. Those, however, who wish to conduct themselves honourably, and to add by their own integrity to the general character of their profession, will seek to give no unnecessary alarm by

announcing danger where danger does not exist, and will gladly employ every aid that can enable them to deliver a correct opinion; and if danger is present, if a fatal termination is inevitable, to a certain extent at least, the heaviness of the blow is broken by previous expectation.

We have indulged ourselves in these remarks, because it has appeared to us that the medical profession is rarely regarded in a moral point of view; and because, generally speaking, medical men themselves think they have done enough when they have employed all the aids in their power to corporeal ailments, not regarding, as we think they ought to regard, the mental emotions also of surrounding friends. And it struck us, likewise, that some observations of this kind might propitiate our readers to the consideration of the stethoscope—an instrument professing to render us capable of that accuracy of diagnosis which we think in every respect so valuable. The works at the head of the article will enable us to give some account of it, and its application; and either of the two first works may be recommended as good books for students. Dr. Scudamore's book, as the title announces, is merely a collection of observations, containing, however, much interesting matter upon the French practice of medicine.

It cannot be necessary to describe the stethoscope, as the nature of the instrument is now generally known; but as the correctness in the formation must necessarily be of importance, we are perhaps serving those who wish to learn its use by giving the following note of Dr. Scudamore's:—

'M. Laënnec had the goodness to present me with a stethoscope constructed according to his last improvement. For the convenience of my professional brethren, I directed an ingenious workman to imitate this stethoscope; and Mr. Garden, No. 372, Oxford Street, has undertaken to keep a constant supply of the instruments for sale.'

With respect to the manner of employing the stethoscope, the first remark to be made is of importance, as it completely answers what in this country would be deemed an objection to its employment, viz. the necessity of entirely exposing the person of the patient. All silk, and any thick dress, is to be removed, because these interfere with the sounds of respiration; but linen or flannel may remain. The instrument should be placed perfectly flat upon the chest; and if from emaciation, or any other cause, this is not possible, the vacant spaces should be filled with lint. It should be held in the same manner as a pen, the fingers embracing the lower end of the stethoscope, and thus being capable of ascertaining whether it is applied correctly or not to the chest. A little

practice will soon render the student acquainted with the proper manner of applying the ear, and when he should press lightly or firmly against the instrument.

The phenomena exhibited by the stethoscope are those either of natural or disordered respiration; and we are advised to practise first upon persons in perfect health, that having thus learned the sounds emitted in the sound state of the lungs, we may the more accurately recognise them when changed by disease. The voice likewise furnishes different phenomena, according to the condition of the lungs.

The phenomena of healthy respiration vary according to the points examined, according to its frequency, and according to age, sex, temperament, &c.

When the stethoscope is applied to the chest of a healthy individual, a gentle murmur is heard, and which we readily distinguish as the effect of air entering into the cells of the lungs. This murmur is tolerably uniform over the whole chest, but is rather stronger in the points where the lungs are nearest the surface of the skin. In the hollow of the axilla, and the space between the clavicle and the edge of the trapezium, it is most distinct. In children, women, and men of a feeble habit, it is peculiarly sonorous, giving the idea of air entering into larger cells than usual. To this phenomenon of respiration, M. Laennec has assigned the title of puerile; it is not a consequence of disease in the portion of lung where it is heard, but is frequently attendant when some neighbouring part of those organs are unable to perform their proper office. Dr. Stokes tells us, that it is heard in pulmonary catarrh, bronchitis of British authors, and in some cases of asthma and hysteria. The explanation seems to be the effort of the sound portion of the lung to supply the place of that which is diseased.

In disease, the respiratory murmur is subject to several variations. It may be almost or quite inaudible—it may be tracheal, that is, furnishing the same sound as is heard when the stethoscope in an healthy individual is applied to the trachea—it may be 'cavernous,' as when the air passes into an excavation of the lungs—and, lastly, it may be accompanied by different 'rales.' This last word, we think Dr. Stokes thoroughly justified in anglicising; the term 'rattle,' which is employed by Dr. Ryland in the translation of M. Collin's small work, does not certainly sufficiently express the meaning.

The absence of the respiratory murmur must necessarily spring either from the lungs being utterly impermeable to air, or at least those parts of the organs near enough to the skin to offer indications to the stethoscope. The diseases in which

this want of sound is observed, 'are pleurisy accompanied by effusion, pneumonia in its advanced stages, pneumo-thorax, emphysema, and bronchitis.'

Dr. Stokes says, that 'the total absence of sound after some hours of disease is completely pathognomic of pleurisy with abundant effusion;' the return consequently of the respiratory murmur is an omen in a case of this kind.

Emphysema of the lungs is another disease in which the murmur is not heard; but its absence is by no means constant. Before, however, entering into the diagnosis of pulmonary diseases by aid of the stethoscope, we must conclude our account of the different phenomena it furnishes.

The varieties of respiration above mentioned, viz. puerile, tracheal, and cavernous, may be either pure, or accompanied with different rales. These latter are again distinguishable into crepitating rale, which is likened to the sound emitted by salt when decrepitating, or a piece of lung when pressed between the fingers; the mucous rale produced by the passage of air through mucus accumulated in the bronchi, or through the matter of softened tubercles; the dry sonorous rale, somewhat like snoring, and probably caused by swelling of the inner membrane of the bronchi; and the hissing rale. These are the phenomena which respiration furnishes by means of the stethoscope.

The voice, however, also assists in the diagnosis of pulmonary diseases; and the phenomena afforded by it are resonance, pectoriloquy, and hægophony.

Resonance presents no articulate sound; but as the term plainly indicates, is nothing but a confused noise, scarcely appearing to enter the canal of the instrument. It often exists for a considerable time before pectoriloquism has place.

Pectoriloquism is present when the patient's voice is distinctly heard passing through the stethoscope, so that in some cases the articulation is even more clearly heard this way than with the ear alone. It is perfect, imperfect, or doubtful, and may be manifest, and again disappear several times. It is always owing to some cavity in the lungs, communicating more or less freely with the bronchial tubes. When the lining of the excavations is firm, and the parietes thin, pectoriloquism is much more perfect than in an opposite state of the parts. The communications of several cavities with each other render this phenomenon confused, as if the voice were badly articulated.

When the parietes of a cavity on the surface of the lungs do not adhere to the costal pleura, but sink in expiration,

pectoriloquism is wanting. It is less distinct also as the cavity is more filled with fluid of any kind.

Hægophony is another phenomenon of voice afforded by the aid of the stethoscope. It is described as resembling the shrill quivering tones of the goat, and may be heard over the whole chest. M. Collin says, that it appears to him at all times indicative of the existence of a moderate quantity of fluid in the cavity of the pleura, or of pseudo membranes tolerably thick, but still soft. M. Laennec explained this phenomenon formerly by compression of the pulmonary tissue, and the transmission of the voice through a thin layer of fluid. Now, according to M. Collin, it is attributed by the inventor of the stethoscope to the flattening of the bronchial tubes.

To these various phenomena of respiration and voice, separately is to be added what is termed ' metallic respiration, resonance, and tinkling ;' and which is furnished both by the voice and respiration. ' Metallic tinkling consists of a peculiar sound, which bears a striking resemblance to that emitted by a cup of metal, glass, or porcelain, when gently struck with a pin, or in which a grain of sand is dropped. It is in general heard in a most striking manner during cough, and when in any degree doubtful, this action ought to be performed.'

Metallic resonance is present when, in the language of M. Collin, or rather Dr. Ryland, ' the voice bounds under the cylinder, as if the patient spoke under a cistern ;' and metallic respiration when a murmur is heard ' similar to that caused by blowing into a rather narrow-mouthed metal vessel.'

' The morbid states in which these phenomena occur, are a fistulous communication between the cavity of the pleura and the bronchia, and the accumulation of a certain quantity of air in the sac formed by that membrane ; an effusion both liquid and gaseous, with or without communication ; finally, a very large excavation, with thin and compact adherent walls. Metallic respiration and metallic resonance will exist in the first case ; metallic tinkling will be joined to them in the third, or will be found alone if there be no bronchial fistula.'—*Collin*, p. 31.

These are the phenomena presented by respiration—those furnished by the heart, we do not purpose noticing in the present paper. The following observations of M. Collin upon the employment of the stethoscope and diagnosis, appear to us worthy of particular notice, and may serve to guard against too exclusive a reliance upon this instrument. They may be useful also, as clearly proving, that they who

have the highest opinion of the stethoscope have been most industrious in their employment of every other method of diagnosis.

'There is no disease of the chest in which auscultation does not afford some sign. Among these some are sufficient alone to characterise the complaint; thus the different kinds of rattle in catarrh and in peripneumony; hægophony in pleuritis; pectoriloquy in excavations of the lung; the metallic tinkling in pneumo-thorax. Others, though fewer, are common to many diseases; the auscultation becomes insufficient, even deceptive, and we must have recourse to another method.

'Percussion is the method which gives most aid to auscultation. It unites with it to strengthen the diagnosis of the first-mentioned affections; and in others prevents the errors which might follow the use of the cylinder alone. Thus it establishes the distinguishing character of peripneumony in the second stage, from emphysema of the lungs, pneumo-thorax, and emphysema, slight œdema, and the first stage of peripneumony.

'Succussion gives the pathognomic sign of pneumo-thorax with effusion. Mensuration gives one of the constant characters of empyema, which can sometimes be distinguished by this alone from hepatisation of the lung.'

Having thus stated, as concisely as we were able, the phenomena afforded by the stethoscope, with the principles laid down by M. Collin for its employment, we proceed to mention the correspondence of peculiar sounds with certain morbid alterations of the lungs and the pleura.

The first disease which M. Collin mentions, and respecting the diagnosis of which the stethoscope greatly assists, is bronchitis, or, as the French authors have named it, pulmonary catarrh. The general symptoms of this disease have been well described by Dr. Badham: and more recently Dr. Hasting has noticed its several forms. Our object here, however, is merely to state the signs afforded by the stethoscope in this affection. These signs vary as the disorder is dry or moist.

'In the dry catarrh, we observe weakness, or even absence of the respiratory murmur in parts of the lung, of greater or less extent; but these change every moment, and during the course of a short examination may occupy different parts in turn; so that the murmur may become distinct where it was absent, and absent where it had just before been clearly perceived.

'This weakness of the respiratory murmur is very often accompanied with the dry, sonorous, or the sibilant rattles. The first little variable; the second very much so, disappearing for a longer or shorter time after the effort of coughing, or even without any evident cause; returning abruptly, assuming an increased intensity, or losing that which it had at first. Sometimes, however, both are

constant, intense, and occupy the greater part of the organ. The catarrh is then extensive and violent.

'In the humid catarrh the same phenomena may exist, but they are then usually attended with a third, the mucous rattle, or this alone is heard, and is sufficient to characterise the complaint; less frequently varying its situation than the hissing-rattle, it presents shades, either in force, frequency, or extent, which make known the different degrees of the catarrhal affection.'

The next disease of which M. Collin speaks as readily distinguishable by the stethoscope, is that plethoric state of the lungs which the French have entitled pulmonary apoplexy, and we, less correctly perhaps, hæmoptysis. The phenomena afforded by the stethoscope are thus described:—

'The crepitating rattle develops itself in more or less numerous and circumscribed points of the lungs. The spaces between these still present a perfect and even puerile respiratory murmur. At the end of a longer or shorter time, it ceases to be heard; an abundant mucous rattle, in large bubbles, succeeds to it, indicating a copious exhalation of blood in the air cells and bronchiæ, occupying very soon the whole lobe or affected lung, and the bloody expectoration soon confirms the diagnostic already pointed out by these phenomena.'

The following observations of M. Collin on emphysema of the lungs, appear worthy of notice, though we much fear that the disease is one which can be little benefited by medicine. In its most evident symptoms, however, it might very readily be confounded with other complaints which are much more readily curable.

'On percussion, the chest yields a more than naturally clear sound, whatever may be the degrees of plumpness of the patient; but this exaggerated resonance is not equal at all points, because the disease rarely occupies a whole lung. If the affection is double, it is difficult to appreciate this increase of sonorousness of the thorax; and when the emphysema exists only on one side, it becomes a deceptive sign, the value of which can only be judged by auscultation.

'In fact, the murmur of respiration is very weak, or wholly absent in all the points attacked by emphysema, a slight sibilant rattle imitating the cooing of a dove, is heard in deep inspirations, and sometimes alone in expirations. The contrast of this greater resonance or hollowness of the thorax, with the diminution or absence of the murmur, forms the characteristic symptoms of this disease. It is true, that these characters of the respiration, and the existence of the rattle, are inconstant and variable; but they always remain a long time, and their changes are only momentaneous.

'When the complaint is chronic and very extensive, another sign drawn from mensuration may be added to those just enumerated,

the dilatation of the side affected; and if the affection is on both sides, the almost cylindrical form of the chest projecting behind and before.'

Pneumonia, we mentioned, in the earlier part of this paper, as one of those diseases in which the stethoscope might prove serviceable. The following is M. Collin's account of the phenomena observable in this complaint :—

'To establish the signs afforded by the five modes of inquiry in pneumonia firmly, we must distinguish three periods in this complaint. . . . In the first stage of pneumonia, the respiration is high, small, accelerated, unequal, difficult—sometimes laborious. It becomes abdominal if both sides are at the time affected in a high degree.

'The chest sounds as in health; but its sonorousness is often diminished, and even completely lost in a more or less considerable extent, very exactly limited to the part diseased.

'The respiratory murmur is feeble in all parts, where the sonorousness is diminished, scarcely distinct, or sometimes covered by a crepitating rattle—at one time dull, at another sonorous enough; and the presence of which indicates both the nature of the alteration, and the whole extent it occupies. The respiration then often becomes puerile in the other lung, and in all the parts of the affected lung yet remaining healthy. These phenomena very soon change. If the disease terminates by resolution, the crepitating rattle diminishes in intensity every day, the movements of the chest return to their rythm, their extent, and simultaneousness; the sound returns, and the mucus in a greater or less degree indicates the change of expectoration.

'On the contrary, if the lung passes to the state of hepatisation, the alteration of the movements of the thorax continues, the sound becomes completely dull; the crepitating rattle ceases, but the respiratory murmur does not return; the smallest quantity of air cannot penetrate the hardened tissue of the lung. Respiration is wholly absent, or if heard, is so only in the vicinity of the bronchial tubes; it is then tracheal, cavernous, and often very loud: the hollowness of the voice redoubles in all the affected parts; often in induration of the upper lobe, even a true pectoriloquy begins to complicate the diagnosis, and throw doubts upon the nature of the affection. We must have recourse to the commemorative circumstances, to the general circumstances, to the general symptoms, to prevent our supposing the existence of pulmonary phthisis.'

It appears to us, that after having thus given the general account of the phenomena offered by the stethoscope in pneumonia, we cannot do better than add the following illustrations of it taken from the publication of Dr. Scudamore. Our readers will be thus the better enabled to perceive, that if the value of the stethoscope is to be determined

by credible evidence, no invention ever deserved more attention.

'Even when it is manifested to us by ordinary indications, that the inflammatory action is prevailing on one side of the chest, it is of great advantage that we can detect, by means of the instrument, the particular part of the lung thus affected. I shall illustrate the truth of these remarks by the recital of a few cases.

'A gentleman, dangerously ill with inflammation of the lungs, which had supervened on an attack of asthma, experienced in the evening a renewal of the feelings of suffocation, which in the morning had been relieved by copious bleeding from the arm. In the middle of the upper part of the chest he had a severe sensation of tightness; but was not conscious that the lungs were affected more on one side than the other. His cough was most urgent. The stethoscope applied to the lower part of the right side conveyed to the ear a strong sonorous rattle, both on inspiration and expiration, much resembling the sounds of loud snoring. These sounds could not be detected in any other parts of the chest. In addition, therefore, to a fresh bleeding from the arm, cupping was used very freely at this part, and with evident good effect. Almost immediately the sounds abated. Two days after, leeches and a large blister were used with further benefit; and the actual relief of the patient perfectly corresponded with the improving indications afforded by the stethoscope. Occasional bleedings from the arm were afterwards required; but the inflammation was finally subdued, and the constitution of the patient was restored to its previous state: this gentleman being habitually subject to spasmodic asthma.'

Examination after death, however, is to many readers far more satisfactory than any successful case, which of course does not allow of this verification. Now that the stethoscope would actually have afforded information in the case we are about to mention, we cannot state from our own experience; but the instance in question made us particularly sensible of the advantage of any means which would render us acquainted with the precise spot of inflammation. A man, engaged in labour in the open air, died of pneumonia, having been bled in the first instance, though not very copiously; and when at length coming under the care of a most intelligent physician, being too weak to admit of much farther general depletion. By percussion, the lung which was principally affected, was ascertained, but not the spot inflamed. Upon examination after death, the posterior portions of the lungs and pleura were most inflamed; and the adscititious membrane was in these parts far stronger than in any other. Might we not therefore suppose, that this patient would have had a better chance of recovery had the precise spot of

inflammation been known, and leeches or cupping-glasses applied accordingly? We are much inclined to believe that he would.

We here conclude our account of the stethoscope, of which we have endeavoured to give such a statement as may induce our readers to examine the subject for themselves. One consequence, we are certain, will flow from it. They must at the same time attend more minutely to the distinctions of thoracic complaints, and will necessarily be thus far benefited, even should they ultimately decide against the value of this instrument. We do not fear a charge which has been made against it, that its employers will be less regardful of other symptoms; for if they have industry sufficient for this purpose, we are certain that they will carry their observation farther; and that the desire of verifying the indications of the instrument will form even an additional inducement.

Dr. Stokes has added an appendix, containing an essay upon gangrene of the lungs, and an abridged translation of M. Andral's thesis on expectoration. As we have some intention shortly of returning to the morbid anatomy of the lungs, we shall pass over the former paper till we can consider the subject at more length, and confine ourselves for the present to the consideration of M. Andral's thesis.

M. Andral having stated the general source of the matter of expectoration and its varieties, proceeds to the description of its appearance in different diseases, and of the indications it affords as to the nature and tendency of the affection in which it is observed.

The first disorder which he notices is pulmonary catarrh, or bronchitis. The first period of this disease is unattended by expectoration of any kind. In a shorter or longer time expectoration ensues, of a transparent, glairy mucus, similar to the white of egg, and of great tenacity. Its tenacity is in proportion to the violence of the inflammation, and sometimes may be taken for the expectoration arising from inflammation of the lungs themselves. This is, however, distinguishable by attention to the sputa after the cessation of fever, when their extreme tenacity is lost, and they are much more fluid.

The sputa are often streaked with blood, which, however, only '*mixed* with the mucus, and not combined with it, as the sanguinolent expectoration of pneumonia.' M. Andral notices also the occurrence of small granular white bodies in the expectoration, which he states not to come from the lung, but from the numerous glands of the pharynx, &c. 'This

remark is of importance, as these grains have been mistaken for the débris of pulmonary tubercles.'

While the expectoration retains these characters, inflammation remains undiminished; but as soon as this begins to subside, the sputa lose their transparency, and are mixed with yellowish or green opaque masses, which at length form the entire expectoration. These characters, however, exceedingly vary towards the conclusion of acute catarrh.

M. Andral considers the expectoration in pneumonia to be one of the most certain symptoms of the existence of this disease. It differs materially, however, in the different stages.

In the commencement, the patient only expectorates a little bronchial mucus, cough, dyspnœa, fever, and a deep-seated pain in the chest, being already present. Percussion often gives a clear sound; but in one side the crepitating rale begins to be heard. As this increases, generally towards the second or third day, the expectoration becomes more characteristic. The sputa are tinged with blood; and in proportion to its quantity, they assume different lines. They become at the same time ' extremely viscid, and form a transparent homogeneous mass;' but still will easily flow out of a vessel. Sometimes the inflammation of the lungs does not pass beyond this state, but is gradually resolved; in others, it proceeds to hepatisation of the lungs; and the sputa then becomes more viscid, and ' no longer detach themselves from the vessel.' The inflammation is now at its height, and the expectoration undergoes various changes, according to the termination of the disease.

If resolution takes place, all the above characters diminish gradually, the expectoration becoming less viscid, less bloody, and more easy. Any exacerbation of pneumonia is readily recognisable by the sputa resuming in a greater or less degree their former character.

When the inflammation proceeds to suppuration, the expectoration exhibits a different alteration, In many it altogether ceases; but in general the secretion of the matter continues, while the expectoration is diminished from debility, and the patient dies asphyxiated. Where the secretion itself ceases, the termination is very doubtful, recovery sometimes taking place, though slowly: at other times, the lungs become hepatised, and the patients die, apparently exhausted.

If the disease terminate in chronic inflammation, the expectoration resembles that observed in pulmonary catarrh, which has been already described.

M. Andral, in imitation of French authors, who are exceeding fond of quoting the ' auctores principes medicinæ,' says, that he agrees with Aretæus, ' that it is by the consideration of their physical properties, that the sputa peculiar to tubercular' phthisis can be most readily distinguished. The continued dry and short cough may first excite suspicion; but after some time small white granular bodies are expectorated, which vary from the size of a pin's head to a pea. ' They remain separate, and fall to the bottom of the vessel; and when broken, they exhale a very fetid odour.' These bodies may be confounded with those already described, which are very viscid, and not, as the expectoration arising from tubercles, friable and easily broken. The translator states a more accurate mode of distinguishing them, is to put them on paper. ' The secretion of the tonsils and neighbouring glands is sebaceous, and therefore greases the paper. This is not the case with the tubercular matter.' The expectoration gradually becomes more characteristic, the tubercular matter is more manifested, true pus, in greater or less quantity, is mixed with it, and it continues always distinguishable, though very variable in colour, till the termination of the disease.

The odour of expectoration in phthisis is occasionally very diagnostic. In most consumptive patients it always exhibits a nauseous and disagreeable smell; but in others, although long inodorous, it becomes extremely fetid. The cause of this change seems uncertain; ' but from whatever cause the fetor may arise, it is one of the most fatal symptoms when occurring in a patient whose expectoration was previously inodorous.'

We would strongly recommend to our readers the perusal of this treatise of M. Andral's; his observations appear to us very accurate, and the connexion of the changes of the expectoration with the morbid phenomena render it much more valuable in our opinion than any of the essays that have appeared upon the distinction between pus and mucus. Upon the whole, Dr. Stokes's work, though pretending to nothing original, is creditable to his powers, and exhibits a thorough comprehension of his subject. We would, however, rather recommend M. Collin's work to those who are merely beginning to study the use of the stethoscope; and Dr. Stokes's when somewhat more advanced.

II.

OPERATIVE MIDWIFERY.

Elements of Operative Midwifery; comprising a Description of new and certain improved Powers for assisting difficult and dangerous Labours; illustrated by Plates; with cautionary Strictures on the improper Use of Instruments. By DAVID D. DAVIS, M.D., Member of the Royal Colleges of Physicians of London and Edinburgh; formerly a Physician to the Sheffield General Infirmary; late Obstetric Physician to her Royal Highness the Duchess of Kent; one of the Physicians to the Royal Maternity Charity, &c. &c.; and Lecturer on Midwifery. London. HURST and ROBINSON, and S. HIGHLEY.

WE owe the author of this valuable work an apology for not having taken an earlier notice of it. We, indeed, thought that we had made an arrangement several months ago for the supply of an extended article upon the subject; but we were disappointed, and therefore have thus late been obliged to apply for assistance to another quarter. The delay, however, makes our present duty both more easy and more satisfactory to us, inasmuch as we have now little more to do than to embody into our pages the almost unanimous expression of public opinion on the merits of this very useful volume.

The work before us is distributed into five sections; of the contents of which, severally, we shall endeavour to give a brief, but we trust a faithful and substantial account. The first is chiefly devoted to a discussion of the subject and interests of midwifery generally, as a branch of professional study. In this part of the performance, we think we can recognise the first powerful movements of the spirit of professional reform, which has recently been seen to agitate the members of the obstetric body in the metropolis, on the question of obtaining a legislative enactment for the insurance and extension of proper qualifications for the practical duties of the art. In illustration of this remark, we may quote, from among many others, the following passage:—

'How far we are to attribute to our own indifference, and to the almost total absence of improvement in this more exclusive branch of our art, the prevalence of very incorrect notions as to the importance of obstetric studies in general, I shall not take upon myself to determine.

'That such notions do actually exist, even among well-informed members of our own faculty, there can be no doubt; it being a fact equally notorious and remarkable, that the profession of midwifery, for many years viewed with suspicion, perhaps with disdain, in certain high quarters is not even yet deemed worthy of the

smallest recognition, much less of protection and encouragement, by any of the learned professional colleges or corporations of England. I am sorry to add, that those impressions, so obviously injurious to the best interests of the art, are not confined to the public bodies of the profession, nor to any privileged casts of practitioners, whether physicians or surgeons, who may be supposed to act more or less under the influence of the jealous and exclusive spirit of their respective institutions.

'On the contrary, they prevail to a lamentable, and, I am afraid, to an increasing extent amongst the profession generally. I am informed, that of late years it has become a very common practice with a certain class, even of students, whilst engaged in walking the hospitals, to speak of midwifery as of a very subordinate object of attention, and of its few and simple duties as being easily attainable by private reading, and therefore not worth the time, and the very moderate expense usually bestowed on the acquisition of it by some of their better-informed fellow-pupils.

'Loose notions of this kind, as of course they are not original and innate conceptions of these young gentlemen's minds, nor can they be admitted to be the results of any legitimate and well-founded induction, are no doubt to be ascribed to the influence of a very defective and vicious system of early professional education, to associations contracted during the listless years of apprenticeship, and not unfrequently, as I have good reasons to know, to the ignorant counsels and precepts of incompetently educated masters.' —P. 9.

In the second section, the author enters upon the practical matter of his subject. The process of child-birth being ordinarily the operation of a natural and healthy function, is for the most part effected without much difficulty, so as very rarely to require the assistance, or to admit of being benefited by the use of artificial powers. To this law, however, there are occasional exceptions, inasmuch as the function of parturition, in common with all other vital actions, is liable to morbid influences; and perhaps more frequently than some others, to mechanical obstructions and impediments. To assist nature in overcoming these casual difficulties is an exclusive province of operative midwifery.

When this object is attained compatibly with the preservation both of the mother and of the child, then, indeed, is the triumph of the art complete. But the difficulties of some unfortunate cases are so great as to compel us to limit our efforts to the exclusive preservation of only one life, and of course preferably, whenever practicable, of the more valuable life of the mother. Hence obstetric instruments have usually been distributed into two principal classes; the former consisting of two or three varieties of power, possessing in common the competency of being used compatibly with the

preservation of the mother and her offspring; and the other comprising the more formidable implements of the art, such as are only used to perform mutilating operations on the fœtus, or certain other operations scarcely less dangerous on the mother. Among those of the former class, the forceps is incomparably the most important; and we accordingly find that our author has taken great pains to improve that instrument, to adapt certain varieties of it for the relief of specific varieties of cases, and to supply the profession with rules, which, indeed, we think are extremely valuable, for its safe and proper application in practice. Dr. Davis has brought to the consideration of this subject a mind peculiarly well fitted both to improve and to extend the resources of his art. All his instruments are accordingly so simple, and so well adapted to their respective purposes, as to excite surprise that they have not been thought of long ago. We could here very much wish to transcribe the author's description of his own forceps; but we cannot afford the space.

It is a light and neatly constructed instrument, with wide fenestræ, curved like Osborn's in the direction of the edges of the blades; the blades themselves very thin, and hollowed out, so as to admit of the reception and firm purchase of extensive portions of the lateral parietes of the fœtal head. The author gives his decided preference to the mechanism of the English method of locking the forceps. But in the construction of his own forceps, he has lengthened the shanks of each blade by a full inch and a half; by which contrivance he has been enabled to remove the locking apparatus so far back, *i. e.* towards the handle end of the instrument, as to make it impossible, in ordinary operations, to include within it any portions of the maternal structure. In the shank of the right-hand blade there is a joint, by means of which the handle may be made to bend outwardly, that is, in the direction of the convexity of the blade. Without laying great stress upon this part of the mechanism, our author thinks that it may add occasionally to the facility of introducing the right-hand branch of the forceps. Such is a very brief account of Dr. Davis's common forceps; but from particular conformations of the maternal pelvis, or certain inconvenient positions of the child's head, an instrument with two broad blades may not all times be easily introduced, nor safely applied and used.

To meet the peculiar indications of cases of this kind, the author has adapted to each broad-bladed branch of his forceps another branch, with a narrow blade each to each respectively. These narrow-bladed counterparts may be either fenestrated, or not, to suit the taste of their possessor;

and they differ essentially from those of Osborn and Hamilton only in the length of their shanks and the position of their lock.

In certain positions of the fœtal head within the pelvis, viz. those with the child's face directed to either side of the pelvis, our author discards altogether the instrument which we have just described, and furnishes two other pairs of forceps, which appear to us to be perfectly new in their principle. In these positions of the fœtal head within the pelvis, it is, indeed, impossible to apply the common forceps to its lateral parietes in the ordinary manner, without exposing the maternal structures both within and at the outlet of the basin to much danger of laceration. But we consider this part of the subject so important that the author shall state his views in his own language.

'In this' (the author's third) 'position, the forehead of the child is directed towards the right side of the pelvis, and the right ear is to be felt immediately behind the symphysis of the pubes. The fœtal head is especially liable to become arrested in its progress when presenting in this position; and the arrest being for the most part solely attributable to the unfavourableness of the position, it follows that to rectify that position will constitute the practitioner's principal, or perhaps only duty.

'That being accomplished, nature will then, in most cases, finish her own work with perfect facility and prosperity. . . . . With any forceps in common use, it is very difficult to effect the object here proposed, viz. that of changing the relative situation of the fœtal head within the pelvis from the third and fourth into the first position without exposing the perinæum to great risk of over distension, and the frænal fibres, especially of the fourchette, to fretting and laceration, and the still more important structures attached to and lining the cavity of the pelvis in front, to the danger of severe and destructive contusion.

'By the proper use of the instrument now proposed, all these serious inconveniences may be very easily and safely avoided.

'This instrument consists of two blades of unequal length, and so curved as to fit accurately to a fœtal head of ordinary size, when applied respectively, the one over the superior portions of the parietal and frontal surfaces of its right side, and including the greatest part of the right cheek, and the other immediately behind the left ear. To accomplish this intention, the short-bladed branch of the instrument is to be introduced into the left sacro-iliac district of the pelvis, and applied to the latero-occipital portion of the head, *i. e.* the part immediately behind the left ear, which will be found to correspond with the left sacro-iliac junction of the pelvis. The long blade is then to be passed up along the right lateral and anterior region of the pelvis, and so applied as to include within its fenestra a portion of the right cheek, and a considerable tract of

surface situated above and anteriorly to the right ear. The blades are then to be so adjusted, that the short one shall act as a fulcrum, and also in some degree as an antagonist to the other, and admit of easy adjustment at the lock. The instrument being now supposed to be properly applied, a gentle rotatory movement of the head is then to be effected from left to right, *i. e.* in the same direction with the sun's course, and consisting of about one-fourth of a revolution, so as to bring the occipito-vertical part of the head into the arch of the pubes, and to carry the face into the hollow of the sacrum. The reader may easily understand, that with an instrument of this construction the change in the position of the head may, in all cases admitting of relief by the forceps, be readily effected without exposing the parts either within or at the outlet of the pelvis to any risk of injury from severe pressure.

'It is evident, that no part of the short blade can come into contact either with the neck of the bladder or the urethra; a circumstance which of itself might be deemed sufficient to decide the superiority of this instrument over every other specimen of forceps that has hitherto been proposed.'

In the opposite position of the fœtal head, viz. with the forehead and face directed to the left side of the pelvis, another instrument must be used; one, however, precisely the same in principle, and only differing in the twisted obliquity of its curve. In this case, the face being directed to the left side, the required movement must be made from right to left, *i. e.* in the direction opposite to that of the former case. We consider the introduction of these modifications of the short forceps as a substantial improvement of this part of the art of midwifery; but we are sorry to find that the artist has not succeeded in the plates, where these two specimens of forceps are attempted to be represented, in doing perfect justice to the intentions of the inventor.

After suggesting the use of yet another pair of forceps, with blades of unequal length, for the description and special objects of which we must refer to the work itself, Dr. D. proceeds to discuss the merits of the instrument usually called in this country the long forceps. It is usually considered, both here and abroad, that the long forceps was first introduced into practice by our countryman Dr. Smellie. So far, however, was that great improver of our art from considering the use of such a power devoid of danger, that he carefully abstained from recommending it to others, and even from exhibiting a specimen of it in his lectures.

'I have known,' (says our author), 'more than one practitioner of eminence in this walk of the profession, who had made trials of the long forceps in the earlier years of their practice, but who had afterwards found reason to lay it altogether aside; and I would

observe generally, by way of caution to practitioners of limited opportunities, that its most ardent partizans, with a very few exceptions indeed, have been youthful candidates for professional distinction without sufficient experience to warrant the eager confidence of their pretensions.'

In the further discussion of this subject, the author lays down many important rules for its application, under the circumstances of several different positions of the fœtal head at the brim of the pelvis admitting of its use; and he proves, abundantly to our satisfaction, that the French, or our common long forceps, can be usefully applied for the relief of only a small proportion of the cases in question.

'At all events,' says Dr. Davis, 'I consider the old long forceps as decidedly unsuitable for the relief of cases of arrest of the fœtal head at the superior aperture of the pelvis, under the circumstances of either of its transverse positions. Accordingly I have to submit to the approbation and cautious trials of the profession, a form or modification of a pair of forceps, which may be used under these circumstances with considerable effect; and certainly if dexterously used, without any risk of doing injury to the mother.'

In one of the plates (pl. 10,) is represented a model of this instrument in actual application to a fœtal head, supposed to be arrested in a transverse position at the brim of the pelvis, the occiput being determined to the right, and the forehead to the left side of the mother. It consists of two counter-parts of unequal length, as well as of different and unequal powers. The long one is covered with leather, and lined with a padding of soft flannel, a considerable part of its blade being intended to apply firmly to the face of the child. At the distance of about an inch and three quarters from its point, this blade has a joint in it admitting of a limited degree of flexion and extension. When this branch of the instrument is carried up to its proper destination, the jointed part of the blade will be found to correspond to the superior portions of the face. When distinctly felt to have passed over the great convexity of the forehead, and it is ascertained by examination to be so far properly applied, the flexible part of the blade is made to fall upon, and to apply firmly to the face of the child by a contrivance precisely the same as to its principle with that of the living lever of Dr. Atkins. The short branch is then to be passed up on the opposite side of the pelvis, and applied to the child's occiput, to act partly as an antagonist, but chiefly as a fulcrum to the other. The power of this instrument is only partially that of a pair of forceps. There is here no coequal counter-pressure applied to the same parts on opposite sides of the head. On the other hand, it acts

principally as an adductor, the attracting power being applied to a surface nearly opposite to the presenting part of the head. The short blade being applied to the occiput, the two branches of the forceps are to be mutually adjusted at the lock, and the practitioner is directed to draw down in correspondence with the axis of the brim of the pelvis, and simultaneously with the parturient contractions of the uterus.

The author concludes this most interesting section of his work with general observations on some of the more practical points of instrumental midwifery. From amongst the valuable matter with which this very important part of the volume abounds, we cannot resist the temptation of presenting the reader with the following extract :—

' Of all the questions that may occur during a deliberate consideration of this subject, none can exceed in importance that of the average frequency with which we should appeal to the instrumental resources of our art.

' I am sorry to say, that we are not yet in possession of sufficient documentary evidence to enable us to decide this point; whilst the evidence we have is of so unsatisfactory and conflicting a nature as to afford us but very slender materials for useful practical induction. It has been stated by Professor Böer (see Medicina Obstetricia, p. 443), that the forceps has been used in the practice of an individual, or of individuals, whom, however, he has not chosen to name, in nearly one case out of every three labours. Professor Hagen, of Berlin, (Versuch eines neuen lehrgebäudes der Practischen Geburtshülfe, 1782), delivered thirty-nine women out of three hundred and fifty, or one in nine, with the forceps. Professor Nägele, of Heidelberg, reports, that in the practice of the lying-in institution of that city for the years 1817 and 1818, he used the forceps once in fifty-three cases—(see the Quarterly Journal of Foreign Medicine and Surgery, vol. ii. p. 288). Mr. Burns (Principles of Midwifery, edit. 6, note on p. 441) gives the proportions of Professor Nägele as ' very much corresponding with those of his own list.' In a statement of presentations at La Maison d'Accouchemens, between December 1799 and May 1809, furnished by the late M. Baudelocque (see Merriman's Synopsis, 306), we have the proportion of forceps cases to the whole number of labours as one in three hundred and fifty-three. In a synoptic table of the practice of L'Hospice de la Maternité, between 1797 and 1812, giving all the labours at 20,357 during that period, Madame Boivin (see p. 354 of her Mémorial de l'Art des Accouchemens) reports, that the forceps was used ninety-six times, *i. e.* once in two hundred and twelve cases. Madame la Chapelle, head midwife of La Maison d'Accouchement of Paris, in her Pratique des Accouchemens, vol. i. table comparative, No. 3, reports the proportion of forceps cases to have been as one to one hundred and sixty-six. I have private but official authority for stating, that the forceps was applied eight times

in the year 1823, in the practice of the lying-in wards of the Obstetric School of Göttingen; where the whole number of patients is stated to have been one hundred and fifty, giving the proportion of forceps operations to all the labours as one to eighteen three-fourths. . . . . In a similar communication from Dr. Cederschjold, Professor of Midwifery at the University of Stockholm, I have been obligingly informed, that the forceps had been used for some years past at the obstetric institution in that city, on the average of one in a hundred cases. Dr. Luders, a physician of the official rank of Royal Danish District Physician, at Eikenförde, in Holstein, states the proportion of forceps cases in his practice as one in a hundred and nine, on the average practice of three years. M. Lobstein reports, that he used the forceps in the lying-in wards of the civil hospital at Strasburg twenty times in seven hundred and twelve cases. The late Dr. Bland reports (Philosophical Transactions, vol. lxxi.), that he used one branch of the forceps in four hundred and seventy-four cases. Taking the mean proportion of forceps cases as given in six different reports of the practice of the school of midwifery at Vienna, under the direction of the eminent Professor Böer (vide Medicinæ Obstetriciæ, pp. 65, 131, 203, 429, 486, and 585,) we have one forceps operation in two hundred and thirty-eight labours. In Dr. Clarke's abstract of the Dublin Lying-in Hospital registry, it is stated, that in the practice of that great national establishment, between the 1st of January, 1787, and the 1st of October, 1793, during which period 10,387 women were delivered, the forceps was used fourteen times. When it is considered, that the use of the forceps and the vectis has been very generally known in Europe at least for a full century, it cannot but appear surprising that there should still exist so great a discrepancy as to the proportional frequency of their employment in the practice of different persons. As to the highest proportional frequency referred to by Professor Böer, I have no hesitation in making it the object of my most unqualified reprobation. The Author of nature certainly never could have constituted so many of the more amiable part of our species so miserably imperfect as to expose a proportion of upwards of one-fourth of the whole sex to the detestable necessity of being placed at the mercy of steel instruments, in order to be able to consummate, most advantageously to themselves and to their offspring, a function so perfectly natural, and so necessary even to the existence of the human race, as that of parturition.'

After paying some well-expressed compliments to the talents of his former preceptor, Mr. Professor Burns, which are worthy both of the writer and of the eminent individual to whom they are applied, our author concludes his references and his reasonings on this vital question, with the following passage :—

'Upon the whole, therefore, I am much inclined to the opinion, that it cannot be absolutely necessary to have recourse to the use

of the forceps or the lever more frequently than once in three hundred, or at most in two hundred and fifty cases, in order to insure for puerperal women the greatest possible advantages attainable from the employment of these obstetric powers.'

The remaining parts of the practical observations are distributed into sixteen separate heads, which occupy as many pages, and of which, therefore, notwithstanding their extreme value, it is not in our power to give even a condensed report.

The fourth section has for its subject certain 'other expedients for preserving the lives both of the mother and the child.' These consist in two operations bearing no analogy the one to the other, which have been respectively proposed in France and England. The one is a very simple procedure, now pretty generally known in this country for the induction of premature labour; and the other, that of dividing the symphysis of the pubes. These subjects are briefly but very satisfactorily discussed.

The fifth and last section is devoted to the consideration of such obstetric operations as are exclusively calculated to insure the preservation of the more important life of the mother.

In this part of the work the ingenious author presents the profession with several varieties of guarded crotchets. We believe that these are the first specimens of the formidable-looking instruments of this class being armed with sufficient guards. The reader must not suppose that we have not seen the guarded crotchet of Dr. Leak; but what was called a guard to that instrument operated as a protection to its fang only during its introduction: whereas the danger of transfixing the maternal structures, or of wounding the operator's hand, can only take place during the adduction, or the pulling down of the presenting part of the child with the crotchet. The first of Dr. Davis's guarded crotchets is one intended to be applied so as to transfix the scalp and skull from the outside of the head. The hook part of the instrument is divided into three prongs, which are intended to enter the head at a little distance from each other, in order to avoid as much as possible any unnecessary laceration of the cranial integuments. This branch of the instrument is to be passed up precisely in the same manner as the common crotchet when applied to the outside of the head. The guard part, consisting of a simple but effectual contrivance, is then to be introduced into the vagina, and, through the aperture previously made in the head by the scissors or perforator, passed high up into the cavity of the skull. The two counter-

parts of the instrument are then to be carefully adjusted at the lock. Upon firmly pressing the handles together, the crotchet prongs are made to enter the fœtal scalp; and upon the application of moderate traction, they penetrate deeply into the substance of the skull. The plate which is given to illustrate the use of this instrument conveys a good representation of its action, and with proofs at once of its power and its safety. The author observes:

'That the power of it is such that it cannot fail to act, during every stage of its use, in perfect conformity with the intention of the operator, and according to the degree and direction of the force which he finds it necessary to apply to it. I may, indeed, observe, that some of my friends have considered it as unnecessarily bulky. My answer has always been, that the strength of the instrument is no farther an objection to it than can arise from its weight. Its weight, however, is only a pound and five ounces avoirdupoise.'

The object of so much power is to provide against the possibility of any accidents which might otherwise arise from the easy bending, or the mere action of the elasticity of either of its branches; which by the loss of the mutual parallelism subsisting between the crotchet and its guard, would expose the patient to all the risk of the common unguarded crotchet.

'Surgeons' instrument-makers are generally in the habit of making embryotomy instruments much too slight, under the impression, I presume, that they are more handy and portable; whereas the first principle of all extracting instruments with sharp hooks or teeth, should be an inflexible firmness of purchase.'—P. 292.

The second variety of Dr. Davis's guarded crotchet is one that is intended to transfix the fœtal head from within. This modification of the instrument is supplied from the abundance, we might almost say, from the exuberance of the author's mechanical resources, in order to accomplish precisely the same object as the foregoing; and it seems to us to be equally effectual and equally safe in its application. If, indeed, we were obliged to declare a preference, we are not sure that we should not give it in favour of the present specimen.

The author concludes this part of his subject with a series of rules and precautions, necessary to be observed in the use of craniotomy instruments. Some of the directions here given are not essentially new; but they are all so important, and so well calculated to promote the best interests of the unhappy persons for whose benefit they are intended, that we earnestly recommend all our obstetric readers to peruse, and most maturely to digest them.

Under a subordinate section, entitled, 'Of embryotomy operations in cases of extreme distortion of the pelvis,' we are presented with another proof of the eminent qualifications of the author, whose labours are now before us, for enriching the resources of his art. After stating the opinions of Dr. Osborn and others, as to the smallest dimensions of a female pelvis, which should be deemed compatible with safe delivery through the natural passages by any hitherto known methods of fœtal mutilation, he puts us in possession of an exceedingly ingenious implement, to which he gives the designation of osteotomist, or bone pliers, for reducing with great facility and effect the bulk of the fœtal skull when found too large to engage in a contracted pelvis, and which he characterises as follows:—

'In urging professional attention to the careful observance of these limits, I am happy to feel myself in a situation to offer a safe substitute for the exertion of inordinate force in the treatment of these deplorable cases; not only without contracting the limits of our art, but compatibly with a considerable extension of its power. The expedient I allude to consists in the application of a simple but very effectual contrivance for accomplishing a much greater reduction of the fœtal skull than has hitherto been attempted in the practice of modern times. It is, indeed, a power by which any portion of the fœtal skeleton presenting at the brim of a contracted pelvis may be broken down into fragments of about half an inch in diameter with the most perfect impunity to the structure of the parts of the mother concerned in the operation. As far as I know, it is an example of a new application of mechanical power, combining the principles of a punch and a pair of scissors.'

The whole instrument is made of solid and well-tempered steel. Its cutting ends are worked into two long and fenestrated oval rims of unequal size, but of nearly equal strength. The smaller is of a size to enter into and to fit closely within the parietes of the larger. The mutually adapted parts of each being formed into a continuous oval edge, they become competent, when brought together and firmly applied to their object, to exert a prodigious power upon a portion of bone placed within their grasp. The handles are of great length in proportion to the parts anterior to the joint; and being of sufficient strength to be perfectly inelastic and inflexible, their power must be deemed equal to the full length of their leverage, multiplied by the muscular force employed in using them.

'I have often, out of curiosity,' says Dr. D., 'and to shew the extraordinary power of this instrument to my pupils, made large breaches into strong ribs of beef, by cutting out of them a succession of pieces. Having a power like this in reserve, it is evident that

the employment of an inordinate force of attraction with the crotchet may almost in all cases whatever be happily and certainly avoided. One or two sections taken out by the osteotomist from the basis of the skull, which is by far the most bulky part of the fœtal cranium, will generally have the effect of putting an end to all difficulty. In some cases, however, of greater confinement, a few additional sections will be required to be made, in order to give a sufficient degree of facility to the after-part of the operation;' &c. &c.

The novelty of this instrument has never, we believe, been questioned; its simplicity and facility of application are also equally indisputable; and if the plate which exhibits its action be not indeed 'a fine fiction of poetic fancy' (for it really is a good specimen of the lithographic art), rather than a plain representation of a mechanical fact which any body may attest, it must obviously be possessed of all the power which its inventor attributes to it. But for ourselves, we beg to say, that we have no occasion to make hypothetical statements as to the power possessed by it. We have had it in our hands, and, after the manner represented by the author, have ourselves cut out successive portions of ribs of beef, and other bony structures with it. We are, therefore, perfectly convinced, that the unprejudiced and disinterested part of the profession will recognise in it a very substantial accession of obstetric power over the deplorable class of cases which it is more especially intended to relieve.

For descriptions of an embryotomy knife, and of some other expedients for the management of certain cases of cross births, incapable of being relieved by the operation of turning, we are under the necessity once more of referring the reader to the work itself. The volume closes with some practical rules and precautions of great importance to be observed in the conduct of embryotomy operations.

Of the general character of this work, our readers have no doubt already anticipated our sentiments. There is not a single subject touched upon, of which the practice does not seem to receive improvement from the suggestions of the author; and there is not a single page into which there is any thing useless, or even unimportant, introduced. It is now, indeed, the general opinion, that such a work was greatly wanted. But who ever heard of this opinion before the anticipated appearance of the present volume? It is true, there has been ample room for improvement in the practical part of midwifery for the last hundred years. But why has it not been filled up till now? Without pro-

fessing to be a systematic treatise on the entire subject of midwifery, very little of purely obstetric practice is omitted; nor is any point professedly undertaken in it which is not thoroughly discussed. The author's opportunities, it is well known, have been very extensive; and we do not doubt that the work before us will long remain a faithful monument of his industrious and successful improvement of them. He has, as we have already hinted, brought to the consideration of his subject a mind well adapted for improving the mechanical resources of his art; but we should guard our readers from supposing that this is his only excellence. On the contrary, his qualifications appear to us to be in all other respects co-extensive with the demands of his subject; and with this impression we cordially recommend his work to the careful study of every obstetric practitioner.

III.

Academical Examinations on the Principles of Chemistry, being an Introduction to the Study of that Science. By D. B. Reid. In two volumes. Longman and Co., London; and Black, Edinburgh.

The study of each science deserves attention just in proportion to the practical good likely to result from it; but it is not with this view alone that several of the sciences are cultivated. The desire of information which is natural to all men, and a wish to be acquainted with the phenomena of nature, have prompted many to the study of those branches of knowledge which are merely ornamental, as well as those which are positively useful. On reviewing the history of past ages, we find that those arts were first studied which had directly in view to supply the wants and relieve the necessities of mankind. In progress of time, as these were perfected, those arts or branches of knowledge which are usually comprehended under the term of polite literature, became more generally known, and were more extensively cultivated.

In the study of the different sciences, more or less intellectual exertion is required, ranging from the mere recollection of technicalities, to the most abstruse and refined reasoning. Hence, according to the capacities of the mind, or the original bent of the individual, this or that particular science has been selected. From this cause, it is also apparent why those sciences which are founded on tangible facts, and are connected with that species of reasoning, from

its precision and certainty properly denominated mathematical, have made more rapid progress than others, though from the peculiar character of such studies they are not very generally pursued. Chemistry is a science in which the reasoning partakes partly of the probable, and partly of the mathematical kind. Accordingly it possesses peculiar features of attraction; for, while there is a great deal of mere matter of fact, there is likewise room for much ingenuity and display of reasoning in arguing on those points already known and established, as well as on those partly known, but not finally determined: there is also a most ample and most interesting field open for discovery.

Chemistry is cultivated as well for mere information as for practical utility. It is now, indeed, studied as a branch of liberal education; and it is absolutely impossible to be at all acquainted with the every-day details of the world without having been instructed in the general principles of that science. Within the last forty years, such rapid progress, and such important improvements have taken place, that it has altogether assumed a new character. It may, indeed, be asserted, that if the progress of discovery continue for one hundred, or even for fifty years, as heretofore, it is impossible to say what wonders it may reveal, what new powers it may disclose, and what benefits may thereby be conferred on society.

'Its march,' as is forcibly expressed by the author of the present volumes, 'has been eminently progressive. Air, earth, and water, the elements of the ancients, have been resolved into more simple elements; and their reciprocal action and influence on all bodies, both animate and inanimate, explained. Chemistry has already enabled us to explore the atmosphere, to contend against wind and tide on the ocean, and to extract from the bowels of the earth a number of substances which essentially minister to the primary wants, the comforts, and the elegancies of life. It has increased the produce of the soil, given new vigour to life, afforded antidotes to poisons, disarmed contagion, and supplied the most powerful remedies for the cure of disease. Indeed, many of its discoveries are so new and surprising, as to shew that the dreams of the alchemist about the sovereign powers of his favourite science were not altogether vain; nor were the transmutations which he sought after more wonderful than the changing earth into metal, coal into diamond, and air into an exhilarating draught, or deadly poison.'

The changes that are continually taking place in this science, upon the decomposition of substances formerly considered as elements, and the immense accumulation of facts which are daily and hourly collecting, have exercised the

skill and the ingenuity of many able writers, not merely with regard to the proper arrangement that should be adopted, but also respecting the most instructive mode of communicating that knowledge to the student, and impressing it strongly on his memory. A plain narration of the facts, and statement of the reasonings connected with them, is the mode of instruction which has been followed in almost all scientific books. On chemistry there is only one or two publications in which the history of the science is given in the form of question and answer. On the particular merits of these two, it is not our intention to enter at present; suffice it to say, that they have been both remarkably popular, having gone through numerous editions. Neither of them, however, are properly adapted to the medical student. The books already before the public on chemistry are all general histories of the science; and consequently, in all of them, there are many facts which are not necessary for the medical student; and many points which more properly belong to him, and which demand a full and satisfactory discussion, are but casually mentioned, or at least treated only in a general way. This is what every student in medicine must have felt in the progress of his chemical studies. It is also what naturally might be expected from the rapid progress and great extent of chemical science.

To point out, then, amidst the numerous facts of chemistry what distinctly belongs to the general principles, and what is particularly connected with the medical part of the science, seem to be the leading objects always kept in view in the arrangement of the present work. That the author has perfectly succeeded, in so far as the nature of the science would admit, we have no hesitation to say. He has condensed the prominent truths of the science in a manner which must be highly satisfactory to the medical as well as the general student; while he has enlarged, with a scrupulous degree of accuracy and precision of detail, on all those subjects connected with pharmaceutic, animal, and vegetable chemistry, which are so specifically interesting to the former, and a knowledge of which is so indispensably called for on his part, before he can be said to be grounded in the principles of his profession.

It has been much agitated whether it is advantageous or not to instruct by means of question and answer, in preference to simple narrative. In the latter mode, the student never has one precise idea, to which he is to direct his undivided attention. The narrative continues, and he never pauses to consider what he has been reading. In the former, however, the very

reverse takes place: each question conveys an idea, a fact, or *some one thing*—it is distinct, precise, and complete in itself; when the student has read it, he knows precisely the idea, and he can be at no loss about the bearing of the fact, argument, or whatever it may be. Each question is indeed like so many beacons pointing out distinctly the objects he is anxious to be thoroughly acquainted with. The advantages resulting from this mode of instruction are self-evident. Precision and accuracy of knowledge are thus obtained; and nothing can be of more importance in a science like chemistry, so unwieldy from the mass of details, than a number of prominent truths clearly and distinctly impressed on the mind.

The present volumes are written in the form of question and answer: they fully illustrate the truth of what we have been saying. It would be difficult to select any part from them to bear us out in our assertion, as, from the nature of the science, the whole forms one connected link. From their simplicity and conciseness, they are admirably adapted as an introduction to the science of chemistry; and from their precision, fulness, and accuracy, in those points immediately connected with the study of medicine, they altogether form an excellent compendium of chemical knowledge for the use of the medical student.

Before concluding, we cannot refrain from directing attention to the discussion, in the second volume, concerning the nature of animal heat. The doctrine of Crawford, which so long was implicitly followed by chemical as well as medical philosophers, and which, notwithstanding the many objections advanced against it, must always be considered as an elegant specimen of medical reasoning, is there very fully examined: the experiments, tending to controvert that opinion, made by Mr. Brodie, are stated at length; and we think that our author, if he has not succeeded in completely overturning Crawford's theory, has at least the merit of calling the attention of the medical world to a subject which seems altogether to be excluded from medico-chemical reasoning—we allude to the influence of the vital energy on the laws of chemical action. We willingly insert the passages referred to, and regret that our limits prevent us from saying more at present on this highly-interesting question. After stating Brodie's experiments, and canvassing the objections urged against them, he says:

'Do any circumstances with regard to the cooling of the body after death affect this question?

'Yes: we may observe, that the rate of cooling in the body after death depends very much upon the cause which produced it, some being much more tenacious of their heat than others; and that there are many cases on record in which the temperature has fallen very little, even in the course of several hours.* This is quite inexplicable on the chemical doctrine of animal heat, for the circulation and respiration are equally suspended in all; but is very intelligibly connected with the different degrees of vital energy which may still remain, just as the muscles retain their irritability for a longer or shorter period after death.

'What effect has the exposure of the body to heated air on its temperature?

'From the experiments of Fordyce, Blagden, and Tillet, it appears that it scarcely rises above 98°, although it be exposed to an atmosphere heated as high as 260°, or even to 280°. This has usually been explained on the supposition that the excess of caloric which was communicated to it by the air, was carried off in a latent state, in consequence of the evaporation of moisture from its surface. Fordyce, however, denies this; and says that there could be no evaporation, as the air was already saturated with moisture: he seemed inclined to attribute it to the operation of some vital energy.

'Is the chemical doctrine of animal heat compatible with the laws of vital action?

'These laws, so far as they are understoood, form perhaps the most serious objection to this opinion. Innumerable attempts have been made in all ages to explain the laws of life, by mechanical and chemical action; these attempts, however, have generally failed; and there has not been a more fruitful source of error, in reasoning on the animal economy, than the rash application of false analogies borrowed from the other sciences. The laws of living action, so far as we have been able to trace them, are essentially different from those of dead matter; one of the most characteristic features of vitality being its power of counteracting those changes which matter spontaneously undergoes. If, therefore, animal heat be the result of an operation purely chemical, it stands alone as a singular exception to the phenomena of life. If carbon be really thrown off from the lungs, (although it is rather extraordinary that a simple element should be thus detached from the usual compounds of animal matter,) it must be as noxious or superfluous; we are, therefore, reduced to the necessity of believing that an excremen-

* We recollect, some years ago, having seen a case where the burial was delayed several days, on account of the great degree of heat which continued two days after life was extinct. The heat in the axilla, 43 hours after death, was nearly 54°, though the temperature of the atmosphere ranged between 40° and 46°, and the corpse lay in a very large room, covered only by a winding-sheet. Some very interesting facts might be ascertained by attention to this subject, especially in large hospitals. Bichat states the general fact.

titious matter, at the moment of its expulsion, generates that heat in one part which is essentially connected with the vital function of every part. This is an action of dead matter blended with the phenomena of life in a way which actually implies the cessation of that controling energy which we see life every where else exerts.

'According to this doctrine of animal heat, the chemical action is not confined to the lungs, but must be carried on wherever the arterial blood is expended in the various functions of the body, and converted into venous blood, otherwise we are not entitled to infer the evolution of caloric; for, if the action be vital, we have no right to transfer to it the laws of dead matter. But no one has yet attempted to prove that the different products which are derived from the blood are the mere result of chemical changes. There are also so many things assumed in this doctrine, which have never been subjected to strict proof, that we cannot but suspect the accuracy of the inferences in a subject of such extreme delicacy. It is assumed that the oxygen of the air combines with the carbon of the blood, merely because the one disappears and carbonic acid supplies its place. It is assumed that heat must be evolved under whatever circumstances oxygen combines with carbon; yet all we know of heat is its appearance under certain modifications of matter. It is assumed, that as the heat which is supposed to be generated is not rendered sensible in the lungs, the capacity of arterial blood is proportionally increased; and, moreover, that this increase of capacity arises from the mere abstraction of matter, without any new combination, in downright opposition to all that we know of the laws of capacity.

'So many are the difficulties which every where meet us when we attempt to fix down a principle, purely chemical, on vital action. Its energy seems to control, by a power peculiar to itself, the properties of dead matter. We know nothing of heat but its connexion with certain modes of matter; we have no right, therefore, to limit its sources. We know that life resists it and chemical changes according to laws of its own, and perhaps it may generate it also.

'Were the facts unquestionably established, our reasoning on this doctrine would be out of place; but it implies a series of assumptions, not one of which has been strictly demonstrated, nor have they any necessary connexion with each other, or with the purposes of the animal economy; and we all know the fate of hypothetical reasoning in physiology: it has uniformly ended in shewing that our methods are different from hers, and that the true induction of the science is to generalise its laws, without attempting to explain the essence from which they spring.'

IV.

An Essay on the Application of the Lunar Caustic in the Cure of certain Wounds and Ulcers. By JOHN HIGGINBOTTOM, Nottingham, Member of the Royal College of Surgeons, London. LONGMAN and Co. 1826. Pp. 148.

THE work before us is divided into three chapters, in the first of which the author treats of the process of healing by eschar. The healing process in wounds and ulcers often takes place by the formation of scabs. This is a means which nature employs for protecting the raw surface from the injurious influence of the atmospheric air. This natural process of healing suggested to the author of the present volume, that an artificially formed scab or eschar would be attended with effects equally beneficial, being at the same time free from the objections applied to the natural scab. There are many disadvantages attending the scabbing process, from which the mode of healing by eschar is free; for instance, it frequently happens that suppuration takes place beneath the scab, so that when the scab is thrown off the ulcer is as extensive as before, and often more irritable. The surrounding skin also becomes more inflamed and tender; it looks angry, and the patient suffers considerable pain in the seat of the sore. These unpleasant symptoms, the author has proved, do not occur when an eschar is produced by lunar caustic, for the protection of the ulcer.

'In the formation of this eschar several things require particular attention. The application of the caustic should be made over the whole surface of the sore; and indeed no part requires so much attention as the edges. To make a firmer eschar, the caustic should even be applied beyond the edge of the wound, upon the surrounding skin; for the eschar in drying is apt to contract a little, and in this manner may leave a space between its edges and that of the adjacent healthy skin.

'At the same time, much attention must be paid to the degree in which the caustic is applied. In cases of recent wounds, unattended by inflammation, it may be applied freely; but when inflammation has come on, too severe an application of the caustic induces vesication of the surrounding skin, and the edges of the eschar may in this manner also be loosened and removed. If every part is touched, a slight application of the caustic is generally sufficient.'

The eschar, when produced in this way, affords a complete protection to the surface of the wound or ulcer, 'and allows

the healing process to go on underneath uninterruptedly and undisturbed.' By exposure to the air, it becomes hard and black, resembling a bit of sticking-plaster; and it renders the application of plasters unnecessary. The chief point to be attended to, is to render the eschar adherent to the surface of the ulcer, and to avoid every cause which may detach it; because we are informed, that 'in every instance in which the eschar remains adherent from the first application, the wound or ulcer over which it is formed invariably heals.' In order to render the adhesion more secure, Mr. H. recommends the part to be covered by a piece of gold-beater's skin.

The eschar produced on the surface of the wound or ulcer becomes sometimes unadherent, from the formation of a scab or of pus underneath. When there is fluid underneath, 'it may be ascertained in the space of from twelve to twenty-four hours; the centre is generally observed to be raised, and to yield to the pressure of a probe.'

'When it is ascertained that there is fluid underneath the eschar, a slight puncture is to be made by the point of a penknife, the fluid is to be gently pressed out, and the caustic is then to be applied to the orifice thus made. The same plan is to be adopted if the fluid ooze out at the edge of the eschar; it is to be fully evacuated by pressure, and the orifice is to be touched with the caustic. The healing process goes on best, however, when the orifice is in the centre of the eschar. After this treatment, the eschar occasionally remains adherent; but more frequently the fluid requires to be evacuated repeatedly, and this should be done every twelve hours, or once a day, according to the quantity of fluid formed, taking care that the eschar be not needlessly separated, by allowing the fluid to accumulate underneath. If, from accident, the eschar is separated before the sore be healed, I would re-apply the caustic. At length the eschar becomes adherent, and in due time begins to peel off, leaving the surface healed.'

If a scab should form underneath the eschar, which may be known by its not separating favourably, 'the whole must be removed, by the application of a cold poultice for two or three days.' The caustic is then to be applied as before, in order to produce a fresh eschar.

The second chapter is '*On the application of these modes of treatment to particular cases.*' The mode of treating wounds and ulcers by the application of caustic, is here illustrated by several cases, some of which we shall lay before our readers.

'Case I.—A. B. received a severe punctured wound by a hook of the size of a crow-quill, which pierced into the flesh between the thumb and fore-finger on the outside of the hand; scarcely a drop

of blood followed, but there was immediately severe pain and tumefaction. The lunar caustic was applied without loss of time, deep within the orifice and around the edge of the wound; and the eschar was left to dry. The smarting pain induced by the caustic was severe for a time, but gradually subsided.

'On the ensuing day the eschar was adherent, and there was little pain; but there was more swelling than usual after the prompt application of the caustic, owing to the mobility of the part.

'On the third day the swelling remained as before, and there was little sense of heat. On the fourth day the swelling and heat had subsided, and the eschar remained adherent. On the succeeding day the eschar had been removed by washing the hand, and the puncture was unhealed, but free from pain and irritation. The caustic was re-applied.

'From this time the eschar remained adherent, and at length gradually separated, leaving the part perfectly well.'

The following case was more severe, and the caustic was not applied for some time after the accident, yet the recovery was very rapid, considering the nature of the injury.

'Case IV.—William Chantry, aged fifty, received a stab in the wrist with a hay-fork, yesterday, and applied a poultice; to-day there are great pain and swelling, and the wounded orifice is very small. I applied the lunar caustic within the puncture, and directed a cold poultice to be worn over it; the arm was kept in a sling.

'The next day the swelling and pain were diminished, and a little lymph flowed from the wound. I again applied the caustic, and continued the poultice.

'Two days afterwards, the swelling and pain were nearly gone. The poultice was merely continued, the caustic not being requisite from the subsidence of the inflammation. The patient came to me again in four days more, quite free from pain and swelling. The poultice was discontinued, and the caustic was then applied in order to form an adherent eschar, in which I was successful.'

The author recommends a similar plan of treatment in wounds received during dissection; and quotes several cases which prove its efficacy in the bites of animals. It is unnecessary for us to present any of these cases to our readers, inasmuch as the mode of applying the caustic is the same as in those which we have already given. We shall now follow him to the treatment of *bruises*. The following case is very important, and strikingly proves the efficacy of the remedy in question:—

'Case XV.—Mr. Granger, aged thirty-six, was exposed to a severe bruise by a great weight of stones, which had been piled up, falling upon the outside of the leg; he was extricated from this situation with much difficulty. Besides the bruise, the skin was removed from the outside of the leg to the extent of ten or twelve inches in length, and in some parts an inch and half in breadth;

and in the forepart of the ankle a deep furrow was made by the rough edge of one of the stones. I applied the caustic in about half an hour after the accident, over the whole surface of the wounds, and protected the eschar by the gold-beater's skin. The patient was directed to keep the leg cool and exposed to the air. He took no medicine.

'On the succeeding day the leg was a little swelled, but the patient did not complain of any acute pain, but only of a sense of stiffness. An adherent and perfect eschar was found to be formed over the whole extent of the wound. There was no fever.

'On the third day the swelling had abated. No further remedy. The patient was still enjoined to rest.

'On the fourth day the swelling was nearly gone. The eschar remained adherent. The patient walks about.

'From this time, the patient pursued his avocation of a stone-mason; no further remedy was required; no inconvenience experienced; and the eschar separated in about a month.

'I think it totally impossible to have cured this wound, by any other remedy, in less than a month; during which period the patient must have suffered much pain and fever, and have been quite confined.'

The treatment laid down for *ulcers* is similar to that of wounds and bruises. The caustic is to be applied over all the surface of the ulcer, and to a little extent beyond its margin. The part is then exposed to the air, in order to harden the eschar, which is afterwards to be covered with gold-beater's skin. If, on the following day, any part of the eschar is found unadherent around the edge of the wound or ulcer, the caustic is to be applied to the unadhering portion; and the same thing must be repeated daily till all the eschar becomes adherent to the surface underneath. If fluid be found to exist under any part of the eschar, an incision is to be made to give it exit, and the caustic to be applied to mend the breach. This is to be repeated as often as required.

In order that our readers may form a correct notion respecting the merit of the present volume, it is necessary that they should make themselves acquainted with all the cases illustrative of the efficacy of the practice. Those which we have pointed out are interesting; but the work contains a great many more equally as interesting, if not more so. We have a high opinion of the remedy which Mr. H. recommends. Since we first read his work, we have had some opportunities of applying the caustic in the way in which he recommends, and have found it fully to answer the expectation which we entertained from reading the history of the cases in which he tried it.

V.

Thoughts on Medical Education, and a Plan for its Improvement; addressed to the Council of the University of London. By A. Todd Thomson, M.D., F.L.S.

Dr. Thomson's little tract is a good one, and very much to the purpose; we have, therefore, nothing to say in the way of animadversion upon it. Wishing well to the institution to whose superintendants it is addressed, and desirous, as we are, to forward all views that contemplate the improvement, and are calculated to advance the respectability and usefulness of the profession,—we cherish a cordial hope that the subject may receive the attention it merits. Assuming the principle, that a course of medical education cannot be too extended, we heartily subscribe to the accuracy of the opinions expressed by the author.

We have been all along disposed to entertain high anticipations of benefit to society through the powerful agency of the institution now projected for the education of the youth of London, and have no small expectation of vast improvement in the department of medicine; having been led from the beginning to believe that a comprehensive scheme of medical instruction will form a conspicuous feature in the arrangements of the London University, and that the arrangements for this purpose will be so complete as to shame the existing patch-work, the cobbling and tinkering, by which too many of the scions of existing establishments are vamped up for practice. This we expect: but there is another most important matter, in which we do not see that there is ground for sanguine anticipation.

We have no doubt, that in medicine, as in every other branch which will be comprehended among the studies promoted in this institution, the greatest care will be shewn in the selection of the teachers. It must be taken for granted, that these persons, upon whom the prosperity of the establishment must essentially depend, will be as nearly unexceptionable as such a body can be. In fact, it cannot be otherwise, if such a seminary is to be effective; for this can only be done by the reputation and talents of the working members. But to what purpose will the Sydenhams of the day, the Boerhaaves, the Gregorys, the Hunters, and others of paramount distinction, be sought for, and established in their various chairs, if these chairs are to be set up in the face of *empty benches?* There is something more to be

looked to than able professors, well-furnished libraries, rich and valuable museums, apparatus, and *materia qualiscunque*, for the use of those who will not come to use them. History, philosophy, classic lore, mathematics, and other branches, may flourish, at the instance of the influences now alluded to; but unless something beyond this be brought to the aid of the medical faculty, it will never raise *its* head to any elevation.

In all the medical schools of note, the fame of the teachers has been the means of crowding the halls with pupils from all quarters; but the highest celebrity here will not be sufficient for the accomplishment of the medical practitioner, without the junction of a little law on their side, as well as a great deal of learning. Men may be mathematical *practitioners*, *operative* chemists, book-makers of all descriptions, mechanists, pure or mixed, without the necessity of conforming to any particular act of Parliament, being catechised by any corporation, or paying taxes to any *imperium in imperio*. But it is far different, and should be different, with regard to those who purpose making a livelihood by medical skill and its exercise. We admit, in the fullest sense, the necessity of a guarantee to the public, that those who profess the important art of curing diseases should be tried as to their capacity, and not allowed to meddle in such dangerous matters if not found competent; consequently, it is right that a penalty should attach to all who are found meddling without legal permission, as evidence of qualification.

We subscribe to the propriety and necessity of all this; and we acknowledge the sufficiency of the existing precautions of the country—at least we concede the question, on the present occasion, as to their ostensible sufficiency; and, even at the risk of being impeached of singularity in our opinion, shall profess satisfaction with the powers that be.

These powers have prescribed that the surgical and pharmaceutical youth of England shall not study above half so much as Dr. Thomson recommends for the new school. For example, this gentleman recommends *philosophy*, natural and moral—natural history—obstetrics—medical jurisprudence, and medical ethics. Why, there are thousands of confounded clever fellows, all over the country, who get on famously without *philosophy*, at all events; and as for the others, there is no occasion to study them—for they are the common weeds and herbage of the profession, which we pick up as we go along. What does it signify if a few scores of women die from mismanagement, or die undelivered, every year? or a few hundred unborn babies'-brains are scooped out because we have not time, or skill, or patience, to give nature

fair play? It always was so; and it is very good of us to pay *any* attention to matters which the * * * * * and * * * * * do not approve of our attending to. And as to that puzzling and endless affair, which is making such a fuss, called medical jurisprudence, the seniors and patterns, the guides and guardians of the profession, do not know what it means; and some of the younger ones have looked into a little book, and gone off to court, and sworn away.* Plague on the lawyers, though—if we had only to deal with our own *wigs*, we might get through well enough—for they neither can nor will examine us; but what we lose in dancing attendance at Lincoln's-inn-fields and Blackfriars, the lawyers make up in turning us round whenever they happen to catch us. As for medical ethics—medical *what?*

But seriously. Are any measures to be devised for insuring to those who shall pursue their medical studies in the proposed school the rights and privileges of professional competency? There is to be no charter, we understand—no academic power of conferring degrees; and we are not aware that any license, diploma, or certificate, to practice, can be substituted.

It is not to be supposed, that the young men educated at this institution will be a whit inferior in acquirements to apprentices and *London*-hospital walkers; we need not be so foolish as predict that they will be *fitter* for examination, for we fear that will not be tried. We seriously apprehend that certain things which have past, may be looked on as earnest of serious impediments in future. Will the constituted corporations look upon the teachers of the London University as fit and lawful preceptors for those who may present themselves for legal qualification to practise? Will they admit their pupils to examination, or refuse to recognise their testimonials of study as entitling them to undergo the ordeal? We should not like to trust them, and wish some arrangement could be made on this score, ere it be found that, after having gone through a laborious course of study and accomplishment, they have spent their time (not in vain, for the advantages will be of the most solid description, but) in laying an expensive and solid foundation, upon which they must rear a flimsy and comparatively contemptible superstructure.

If these crude hints shall have the effect of exciting any who are disposed and able to point out a method of precau-

* Vide Medical Evidence on the Gardner Peerage, edited by R. Lyall, M.D., &c.; and the medical evidence given on scores of trials and coroners' inquests.

tion against the possible occurrence of a most serious evil, we shall feel particular pleasure in allotting a reasonable portion of our pages to the promulgating so important a matter—a matter into which we have purposely avoided entering, as we do trust some well-accomplished ally will speedily be brought into the field.

VI.

OF THE DIVISION OF LABOUR IN MEDICAL PRACTICE.

Remarks on the Present State of the Medical Profession; shewing chiefly the Necessity for the Division of Labour in its Practice. By LEONARD STEWART, M.D., Licentiate of the Royal College of Physicians; Fellow of the Royal Medical Society of Edinburgh, and Secretary for Foreign Correspondence to the Medical Society of London. HATCHARD and SON. 1826.

WE regret that Dr. Stewart has not entered more fully and minutely into his subject than the limits within which he has restricted himself allow. There are few whose qualifications enable them to do greater justice to its various relations; and it would have given us pleasure to have seen them thoroughly traced, more especially at the present time, when the attention of the profession is so particularly directed to many points involved in the one which he has chosen to discuss. We admit, that to fulfil this intention would have required much time, and a much more extended space than he, perhaps, considered the subject to deserve, or it prudent to bestow. We have no right to question the propriety of his decision; and as an acknowledgment of our obligations for having directed our attention to the matter, we proceed without farther preface to follow him in his discussion of it.

The first paragraph which arrests our attention is the following; and we direct attention to it the more particularly, as it is the only place where a very important part of his subject is even hinted at.

'Wishing, then, to place the question of the division of labour in medical practice upon its natural basis, it will be proper to argue as if no such restraints existed as chartered companies or colleges. For even those who are opposed to them in principle, must be ready to admit, that, as a matter of course, all such institutions would, sooner or later, be overwhelmed and swept away, if they really opposed the strong tide of public utility.'—P. 6.

It is not, perhaps, a difficult point to decide whether chartered scientific companies or colleges are injurious or beneficial to the public, according to the present state of their

management. That they have not tended to the advancement of science, as respects this country, we are prepared to prove; and that they have even indirectly retarded its progress, we most firmly believe. Their tendency is more generally to promote individual aggrandisement, at the expense of the whole body of members, and of the public generally. These are positions which can readily be supported by undeniable facts. To these facts we shall soon have occasion to refer: it is sufficient for our present purpose, that we state that they exist. If, then, professional companies or colleges retard the progress and diffusion of science—if they tend to aggrandise the few at the expense of the many, and of the public,—we consider that they actually do oppose the current of public utility, and should at least have those causes removed from their constitution which are productive of so injurious effects.

The first argument the author adduces in support of the division of labour in medicine, is this:—

'We see that in schools, and those other sources of instruction whence knowledge is supposed to flow, instead of a mingled stream, it is poured from divided channels. Professors are appointed, not to deal out a medley of learning, but to analyse the varied mass of information, and distribute it in parts. And although, perhaps, there have not been wanting instances where men of great mental powers have been as well fitted for one chair in a medical college as for another; yet, as a general rule, there would be no error in looking for a more accurate acquaintance with anatomy in the person whose business it was to teach it, than in the professor of chemistry. We should not be unreasonable, if, when desirous of information concerning the relation in which the profession stands to the laws of our country, we applied to a lecturer on medical jurisprudence—and not to a teacher of botany.'—P. 8.

Now all this is very true; but then we contend, that the man who attempts to teach anatomy, or the practice of medicine, and who is unacquainted with the other branches of science, as chemistry and botany, will do so imperfectly. It is only after he has acquired an adequate knowledge of the whole range of professional science, that he can with advantage devote his attention to a single department only. His previous knowledge of all the departments of science in any way related with the one he choses to practice, serves as the most important aid to his success, as well as to its advancement by his means. A single branch of science may be cultivated, it is true, without much dependence upon any of the other branches related with it; but then it will remain a barren shoot, and will never be found capable of bearing fruit like those connected with their parent trunks.

It is chiefly in the arts, and where manual dexterity is required for the perfection of particular departments of medical practice, that the division of labour becomes useful. The mechanic, who is most adroit at making the eyes of needles, may be, and is, indeed, the least capable of inventing instruments or machinery for the purpose. Our external organs acquire increased activity from being exclusively employed; and when one or two only of them are thus exercised, activity amounts to dexterity, whilst it is attended with greater precision. We cannot, however, thus exclusively cultivate a mental faculty with advantage in the profession of physic. To act correctly in any one of its departments requires an activity of intellect which is not limited to one or two faculties only. Indeed all our faculties are required to be exerted in so many difficult positions, in which they must hold intercourse with so many distinct subjects, each of which contributes its share to certain general inferences, either by furnishing useful data, apt analogies, collateral evidence, fortunate suggestions, and even by intimating important associations, that the more fully they are stored with well-arranged ideas, derived from the study of mutually dependent sciences, the more fully will they be provided with resources in practice, and these resources will, moreover, be applied with the greater energy and precision.

The author's argument respecting the advantages derived from a number of individuals contributing to an encyclopædia, or dictionary of science and learning, is no more valid than the foregoing; for it only illustrates what we have already advanced, viz. the necessity of becoming previously acquainted with all the branches of science related with the one which is selected for particular investigation. The more implicitly that this is attended to, the more fully and correctly will the subject thus selected be investigated.

'It remains then to redeem our pledge of shewing, that in practice also, when any thing like excellence is sought, duties too various should not be undertaken by the same person.

'And, in the first place, it will be necessary to explain what we understand by abstract or dogmatic, and practical or experimental medicine. By the first, we mean all that is quite independent of the personal agency of the practitioner, which, whether called anatomy, physiology, chemistry, botany, or by any other name,—whether recorded in books, or merely retained in the memory, is so much fixed knowledge, and can be communicated unimpaired to others. This is what we have all along called the scientific part of medicine; and it is important to distinguish it from the practical part, which is—what is actually done by the medical man to aid his patient, and which (be he a physician, a surgeon, or an accoucheur)

it is wrong to call a science. It is decidedly an experimental art; the art, say, of applying the medical sciences—the art of healing.

'There is this constant and essential difference between science and art, that in the one there are either certain fixed axioms, forming the basis of immense masses of knowledge, or some leading principles to which may be referred innumerable dispersed facts; and these, when a little arranged, are readily formed into a system. Now nothing is more easily learned than a system; and, consequently, there are many persons who go not themselves into the labyrinths of science, but yet have a key to them; who do not partake in the toils and difficulties of plodding men, but await the result of their labours, and in this way gain a general acquaintance with all the known branches of human knowledge; and would be ready for as many more, should they be invented. Thus, with regard to science, we often see the illustration of the old proverb—"One man builds a house, and another man gets it, and lives in it." But in art, each one must build for himself. Experience, discrimination, presence of mind, fertility of resources—all these are personal qualifications, and cannot be transferred. That practical skill, that exquisite *tact*, which decides so much in a crisis full of danger and of doubt, is above all law; and, like equity, is a discretionary power, having no established rules or fixed precepts.

'Another marked distinction between science and art, must suggest itself to any one who gives the subject a moment's consideration;—it is this: that the former, being in its nature more definite and permanent, forms a fund to which subsequent additions can be continually made; but the latter belongs to the individual, and frequently perishes with its owner. A man who cultivates any science, can take it up where his predecessor had left it; but in art he must begin at the beginning: the one can be increased by aggregation; the other must be generated. All this may be easily illustrated by directing our attention to the great progress made by the moderns in chemistry or in astronomy. This is, besides, a knowledge so diffused, that it would enable a school-boy now to *poze* all the sages of antiquity: but consider, on the other hand, the art of sculpture, or the art of prognosticating disease; it may be doubted whether we have advanced one step!'

To say that the practice of medicine in any of its branches 'is decidedly an experimental art,' is not quite the fact. It is, no doubt, the case under various circumstances; but even then it is rational experiment. It is the practical application of inferences derived from science; and, even under circumstances the most difficult, it is guided by that species of reasoning which often leads to truth in the pure sciences, namely, analogy. But it is not analogy alone, or any single species of evidence, which guides the rational practitioner. He investigates a number of circumstances, and amongst them is enabled, by the lights which flash upon his mind

from the different branches of knowledge with which he has previously made himself acquainted, to discover dissimilarity where the superficial and more ignorant observer sees the closest analogy,—almost identity; to detect the operation of modifying causes, where others expect similar results; to prognosticate events, for which others are altogether unprepared, and of which, in many cases, they would be entirely ignorant; and thus he is enabled to produce effects for which he is more indebted to his science than his art. For, independently of the aids which he may have acquired from anatomy, physiology, botany, chemistry, or the more purely scientific departments of medicine, in bringing about felicitous occurrences, it appears to us that he may have been equally indebted to those treasures of practical information which are accumulated in the writings of those who have gone before him, and which, to our minds, seem to be equally entitled to the appellation of science with the branches of knowledge already specified. What are the practical precepts, the pathological facts, the therapeutical indications, and the innumerable relations of circumstances, occurrences, and causes—of forms, modifications, conditions, and transformations of diseases, with all their related agents, and methods devised, either effectually, or without avail, for their removal, but contributions to our knowledge? And when verified by the observations and experiments of many subsequent inquirers, having no intercourse with each other, and influenced by no desire of deception, what are such acquisitions, particularly when backed by our own experience, but the knowledge of facts or of phenomena, which will uniformly take place, the circumstances under which they occur being the same? And what, we would further ask, is the knowledge of facts or phenomena, if it be not science?

Our esteemed author observes, that ' in art each one must build for himself. Experience, discrimination, presence of mind, fertility of resources—all these are personal qualifications, and cannot be transferred. That practical skill, that exquisite *tact*, which decides so much in a crisis full of danger and of doubt, is above all law; and, like equity, is a discretionary power, having no established rules or fixed precepts.' Now, granting this to be true to a certain extent, we contend that it is not the whole truth. In art, each one must build for himself, but in many arts he must build upon the foundation which had previously been laid for him; and, often, if he wish to build with advantage, he must be content with adding to the structure that has been reared by his predecessors. Such is the case with those branches of medicine

which are more closely related with art. We admit, to a certain degree also, that 'experience, discrimination, presence of mind, fertility of resources, are personal qualifications, and cannot be transferred.' But the results of experience, and the modifying causes of these results, and many of the circumstances which have occasioned a departure from the more uniform phenomena presented by certain states of disease, and by various active agents, may be recorded, and hence, to a great extent, transferred; and we find that they actually have been recorded in all civilised ages, although with different degrees of precision. They constitute the accumulated treasures of professional knowledge, and serve both as the compass by which the physician directs his course, and the beacons which enable him to avoid the less obvious sources of danger. When studied and properly digested, they are as much a part of his science as the information furnished by anatomy and physiology; and it is as much from them that he acquires fertility of resources, discrimination, and presence of mind, as from those branches of knowledge to which the word science has been more strictly applied.

'That practical skill, that exquisite *tact*, which decides so much in a crisis full of danger and of doubt,' is *not*, altogether, as our author would have it, 'above all law, and, like equity, a discretionary power, having no established rules or fixed precepts.' There are few cases of either danger or of doubt, however extreme in degree, where the physician should altogether neglect to act upon the evidence recorded upon the subject, guided indeed by his experience, and the lights furnished him by the different departments of science, more especially those which particularly illustrate the operations of the animal economy, and advance our knowledge of its laws.

Having noticed the few points on which we differ from our author, we terminate our review of his *brochure* with the following inferences with which it concludes: at the same time we recommend it to the perusal of our readers.

'We will recapitulate our reasons for thinking that all the various branches of the profession of medicine should not be practised by one and the same person.

'1. Because the pursuit of the medical sciences requires a great share of close and abstracted attention.

'2. Because art of all kinds is a thing of an engrossing nature; and, therefore, much time and practice are necessary for gaining skill and experience in any one of the many occupations which make up the whole art of healing.

'3. Because, from the great difference which is found to exist in the talents and capacities of men, all are not equally fitted for the same duties.

'And, lastly, we may add, that there is no necessity for altering the existing state of things. There is nothing compulsory or artificial in what we have defended; and, therefore, it would be flying in the face of nature and of reason to attempt a revolution. Nevertheless, if, after all, it can be shewn that a mere *lady-like* acquaintance with the sciences connected with the healing art is sufficient, and if the many conflicting facts which continually puzzle simple people shall, at any time, be all reconciled by some safe and lucid system, then we, as well as others, will be gainers by the change. Medicine will no longer be what some have thought it, an arduous profession; and a world of doubt, and of anxiety, and of responsibility, will be for ever removed from many feeling minds.

'But even now there is always a resource for a physician who wishes to *generalise* his ideas. He can go to the back settlements of America. There he will find a state of society but little removed from the simplicity of the golden age, and manners undebased by refinement: there too, in addition to the full exercise of his profession, in all its various branches, he may preside on the bench, or he may become a colonel in the army, or he may keep a tavern, or perhaps unite all these functions. But to a surgeon of like sentiments, although the same advantages are open to him, we despair of offering any consolation equivalent to the regret which he must continually feel, while calling to mind the division of labour that took place when the ancient college of Barber-Surgeons was dissolved!'

PART II.

COLLECTIONS OF MEDICAL FACTS, WITH OBSERVATIONS.

Section I.—Original Papers.

I. *On Conception and Superfœtation.* By John Stearns, M.D., of New York, late President of the State Medical Society.

[Communicated by the author.]

Every thing relating to the reproduction of man is interesting and important. A few remarks upon this subject, in connexion with the exploded doctrine of superfœtation, will constitute the theme of this communication. Scarcely a doubt was entertained by the ancients, of the possibility of a second conception by an impregnated uterus. But although many cases have occurred in the history of medicine to fortify this doctrine, it has for a long time been considered as physically impossible. The perfect closure of the os uteri immediately after conception, which renders it impervious to the semen in a subsequent *coitus*, has been urged as an insuperable

objection; and so conclusive was it considered, that scarcely an effort has since been made to revive the former opinion; a proof of the paramount influence of theory over facts. Convinced, however, by some strong cases of the reality of superfœtation, Dr. Dewees attempted to prove its possible occurrence, and to obviate all existing difficulties and objections, by assuming a different theory of conception. He considers the seminal fluid to be absorbed in the vagina, and conveyed thence directly to the ovarium, by appropriate vessels denominated *seminal absorbents*. In confirmation of this opinion, he cites several cases in which the vagina was so obstructed, or the parts so deformed, as to prevent the transmission of the semen into the cavity of the uterus; and that even in these, and other similar cases, conception had actually taken place.

If then *coitus* occur while a fœtus occupies the uterus, and the absorbed semen meet with an ovum capable of being influenced by it, that ovum will be impregnated, the ordinary changes will take place in the ovarium, the ovum will escape into the Fallopian tube, and thence be conveyed to the uterus, where it will meet a feeble resistance from the membranes which already line the uterus: this resistance will soon be overcome, and the new ovum will effect a lodgement by the side of the other, with its own peculiar membranes, water and placenta. This summary exhibits a general view of the theory of superfœtation upon the principle of absorption. But as it entirely rests upon the assumed basis of undiscovered vessels, I deem its admission incompatible with the maxims of sound philosophy. For the same reason, I am compelled to reject the theory of the absorption of the semen by the veins, its mixture with the circulating mass, and subsequent deposition upon the ovarium.

After a careful review of all the systems projected for the reproduction of man, no one appears to be so perfectly consonant to reason, to the simple operations of nature, and to accurate observation, as the one which was adopted by the ancients, and sanctioned by some of the most distinguished moderns. Uninfluenced by preconceived theory, every one would naturally consider the uterus as designed for the immediate reception of the semen and ovum, and the vagina as the plain and direct path for the course of the former, and the Fallopian tube for the latter; nor would they ever suspect that the semen was to be diverted from this natural passage into the devious course of the circulation, or transmitted, by any extraordinary process, through undiscovered vessels directly to the ovarium. Such complicated explanations are at variance with the uniform simplicity of nature's laws, and that sound maxim which interdicts the use of more causes to explain a phenomenon than are actually necessary. That conception cannot take place in cases of obstructed vagina, or of other deformities which prevent the perfect apposition of the penis and os uteri, except upon the principle of absortion, is an assumption entirely gratuitous. Although conception may be rendered more certain by such apposition, I do by no means consider it indispensably necessary, for reasons now to be explained.

and which I trust will be found exempt from those difficulties which gave origin to the theories of absorption.

The fundamental principles of conception may be considered as contained in the following propositions:—

1st. The semen passes directly from the vagina into the cavity of the uterus.

2d. The female ovum passes directly from the ovarium through the Fallopian tube into the same cavity.

3d. The ovum receives its first impregnation in the uterus, and not in the ovarium.

Hippocrates, Galen, and most of the ancients, and Haller, Richerand, Blumenbach, and other distinguished moderns, are among the advocates of the first proposition. Richerand observes, that conception is most certain immediately after menstruation, as the os uteri then dilates more easily to receive the male semen. But this proposition acquires the strongest confirmation, from the repeated discovery of semen in the uterus immediately after *coitus*.

Ruysch also discovered it in the Fallopian tube: and although some of the advocates for absorption think he was deceived, we have more reason to believe the demonstration of this accurate and indefatigable anatomist, than the mere assertions of those who have a favourite theory to sustain. As the truth of the first proposition rests upon the basis of actual demonstration, the highest of all testimony, and is clearly elucidated by subsequent explanations, it is needless to adduce weaker evidence, or the multiplication of other proof.

Although the direct passage of the ovum through the Fallopian tube, and its first impregnation in the uterus, are not susceptible of equal demonstration with the first proposition, we may, however, confidently appeal to the ancients, to many distinguished physiologists of later times, and to the clear and satisfactory explanation of conception upon this principle, for the truth and consistency of the two last propositions. Blumenbach's theory of *nisus formativus*, is founded upon the same hypothesis. The occasional discovery of male semen, and of a fœtus, in the Fallopian tube, or extra-uterine, does not invalidate this opinion, but may be considered as entirely accidental, unnatural, and dependent on the operation of the same power which naturally impels the passage of the semen and ovum into the cavity of the uterus, and which I shall now proceed to explain.

It has already been remarked, that an apposite union of the penis and os uteri, is not indispensably necessary to insure conception.

If then a power can be demonstrated which exerts a synchronous impulse to the male semen and female ovum, by which both are equally impelled from their respective points of departure, the former from the vagina through the os uteri, and the latter from the ovarium through the Fallopian tube, till both simultaneously arrive at the fundus uteri, for the purpose of conception, I trust that the usual objections of deformity, obstructed vagina, and inaptitude of parts, will be perfectly obviated.

In its natural condition, the uterus has no sensible cavity, its parietes being every where in close contact. But in *coitu* the parietes dilate and expand, thereby producing a cavity proportioned to the violence of the orgasm, and a vacuum proportioned to the extent of that cavity. This vacuum will be most perfect at the height of the orgasm, and its greatest power will then be exerted to attract the semen from its location in the vagina, to its destination in the uterus. This vacuum will be continued by the perfect closure of the contracted vagina, till the process is sufficiently matured, when the succeeding relaxation will admit the external air, to give additional impetus to any portion that may be impeded by intervening obstruction. If, therefore, any preternatural obstruction, deformity, or inaptitude of parts, prevent the approximation of organs by which the semen is deposited in the vagina, remote from the os uteri, and the excitement be sufficient to produce the orgasm and expansion, the operation of this principle will impel the semen into the uterus, and produce conception. The same cause will also procure the transmission of the seminal fluid through the aperture, in what has been denominated an imperforated hymen, which admits the usual passage of the menstrual discharge. It must, however, be remarked, that, in all these cases, the os uteri, by the same convulsive orgasm, descends into the vagina, eager to meet and absorb the seminal fluid: and I have no doubt that where obstructions exist, in cases of successful conception, a sufficient opening for its transmission, may always be discovered.

That the same principle of attraction impels the ovum from the ovarium, through the Fallopian tubes, to the uterus, I infer from the following considerations.

The Fallopian tubes are equally and simultaneously excited with the uterus. Their sides expand, become rigid, and their cavities are enlarged. Their fimbriated extremities dilate and closely embrace the ovaria, thereby constituting an uninterrupted vacuum from the os uteri to the ovum, which is thus attracted from its location in the ovarium, and impelled by the continued operation of this principle through the tube to its destination in the uterus, where it meets with and receives its first impregnation from the seminal fluid.

That the arrival of the semen and ovum at their point of union in the uterus is simultaneous, is probable from the equal distance of their respective points of departure from the fundus uteri, the distance of the latter from the ovarium and os uteri being precisely the same.

As conception by this theory requires a perfect closure of the vagina, a suitable orgasm, and a simultaneous meeting of the semen and ovum in the uterus, it must be obvious that where either fails, sterility must ensue. The cause of this failure may be attributed to constitutional apathy, to disease, or to an unnatural abuse of the organs, by which the vagina will become relaxed, or the uterus unsusceptible of the necessary excitement.

I trust it is unnecessary to quote authorities to prove the changes

which I have described, and which are familiarly known to every physiologist. I cannot, however, refrain from extracting the following remarks from Blumenbach in corroboration of the preceding theory.

'The uterus becoming turgid, by a species of inflammatory orgasm, drinks in the seminal fluid, and at the same time effects the discharge of a fluid peculiar to itself. The Fallopian tubes at the same time become rigid, embrace the ovaria with their fimbriated extremities, which thus burst the ovum, and absorb its albuminoid fluid, which is then conveyed by the tubes to the cavity of the uterus. Women, who are indifferent to this stage of the orgasm, have often perceived these changes to take place in themselves, and have thus been made certain of the time of their conception.'

Richerand also says, 'the uterus attracts the semen by a real aspiration.'

This 'drinking in of the seminal fluid,' according to Blumenbach, or, 'its attraction by a real aspiration,' according to Richerand, can be explained upon no principle but the one which I have already advanced; and, although many writers ascribe to the uterus precisely the same operation, I have never seen any satisfactory explanation of the power which impels the seminal fluid into the uterus.

If the preceding remarks justify the conclusion that the semen and ovum enter directly into the uterus, we must necessarily infer that the latter receives its first impregnation in that cavity, and not in the ovarium. This opinion acquires confirmation from some distinguished writers of antiquity, and also from its analogy to that simplicity which uniformly pervades the works of nature. The power which I have assumed, to give impulse to the semen and ovum, is precisely the same that impels the air into the lungs, and the blood into the ventricles of the heart, and why not the former into the uterus? These positions are plain, simple, perfectly intelligible, and exempt from mystery or intricacy of reasoning, and obviously conformable to the general laws and designs of nature, and if impartially investigated, will be found to have strong claims to the sanction of physiologists.

I cannot consider the discovery of the seminal fluid, or a fœtus in the tube, or in the cavity of the abdomen, as sufficient to establish the hypothesis that they have acquired this location by meeting some accident or impediment on their return from the ovarium. The more probable opinion is, that, in its passage from the ovarium, the ovum has been retarded by some deficiency in the impellent power, or by some obstruction in the tube, while the semen has been propelled by more than ordinary force, beyond its destination in the uterus, into the dilated mouth of the Fallopian tube, where it has met and impregnated the ovum.

All such occurrences are contingent aberrations of nature, and as unfit to form the basis of a theory, as to attempt to prove that club feet or four legs are natural to children.

From this summary view of conception, it will be perceived that

the following changes are deemed indispensably requisite for its success:—

1st. An excitement must be produced sufficient to expand and dilate the uterine organs.

2d. The vagina must be perfectly closed during the momentary dilatation of the os uteri for the transmission of the seminal fluid.

3d. A perfect closure of the os uteri must take place previous to its removal from the vagina.

4th. If the closure of the vagina be removed before conception be completed, it must be continued in the os uteri till the semen has reached its ultimate destination, impregnated the ovum, and the latter has acquired a firm attachment to the uterus.

Although the os uteri often continues closed to a late period of gestation, yet it is not absolutely necessary after the process of conception has been completed, and we consequently find cases in which it has been dilated without any injurious effects, and even menstruation regularly performed.

After this preliminary view of conception, we are prepared to resume the subject of superfœtation; and although under ordinary circumstances, I cannot believe in the possibility of its occurrence, yet so strong is the evidence adduced in its support, that scarcely a doubt remains that it has sometimes taken place. Such cases are indeed extraordinary, and can be explained only on the principle of a double uterus, or a longitudinal septum that divides the uterus into two distinct cavities. That such instances do sometimes occur, is abundantly proved by the records of medicine, one of which is described by Mr. Pole, in the 4th volume of the Memoirs of the Medical Society of London. ' A septum of considerable thickness,' says Mr. Pole, ' ran between the organs, which formed two distinct and complete vaginæ, as well as two uterine cavities.' Dr. Tiedman communicates a similar case, the preparation of which is in the Museum of Heidlebergh: he says, ' the vagina and uterus were both double, the latter of which was distended from impregnation. The left uterus was in the condition, as it usually is, after delivery, the person from whom the preparation was taken having died on the nineteenth day after parturition. The right uterus had all the appearances which those who have never born children usually possess.' In the same communication he alludes to two similar cases which he had met with on former occasions.

According to the preceding theory of conception, it must be obvious that although one of those cavities in a double uterus be occupied with a fœtus, yet the orgasm may be excited, and a vacuum produced in the other sufficient for all the purposes of a second conception, analogous to what takes place in brutes. Their uteri are divided into different cells. The ovum does not pass into the uterus, nor does the os uteri close so soon as in the human subject. A bitch will consequently admit of a variety of dogs while she is in *season*, and will bring forth puppies of each different species. Each cell becomes the receptacle of its appropriate conception, and similar to what occurs in the human uterus, is probably closed at

the same instant for the exclusion of the external air, and the preservation of the vacuum within. Thus each cell performs separately all the functions of a complete uterus, till conception has been perfected in each, and the os uteri finally closed upon the whole.

Dr. Dewees observes, in explaining his theory of conception, that superfœtation is not only probable, but that it is surprising it does not more frequently take place. Upon his principles, I perfectly concur in his opinion, that it ought to be a common occurrence; but on the principles which I have advanced, it must be as rare as the existence of a double uterus.

After this exposition of superfœtation, I shall refer to a few instances to prove that it has actually taken place; and should it hereafter occur to the observation of any practitioner, it would be very desirable to ascertain by dissection, after the death of the mother, the true condition of her uterus.

A variety of cases of superfœtation may be found in the writings of Harvey, and in the records of ancient medicine; but the cases recorded by Dr. Dewees in the first volume of the Philadelphia Medical Museum, which occurred in his own practice, are related with such minute and extraordinary coincidents, as scarcely to admit of a doubt that the two fœtuses were the offspring of two distinct conceptions, and of two different fathers.

This opinion is still more strongly fortified by the circumstances of a case stated in the 23d volume of the New York Medical Repository, by Dr. Norton. The prominent facts are, that a coloured single woman was delivered of a fœtus with the features, character, and colour of a negro, apparently in the eighth month of pregnancy; and in a few hours after of another fœtus, with the regular features, character, and colour of a white child, apparently in the fourth month of pregnancy, both of which exhibited signs of life. As I can attest from personal observation to the accuracy of this statement, I have no doubt from all the circumstances of the case, that this was a decided case of superfœtation.

II. *Case of Gun-Shot Wound, in which Tetanus was cured by the Caustic Issue, applied to the Spine.* By David M. Reese, M.D., Baltimore.

[Communicated by the author.]

On the 17th January, 1825, H. Jinks received a load of buck-shot in his back, two of which entered his spine, and from the total paralysis and other symptoms which followed, must have passed into, or pressed upon the spinal marrow. When I saw him, he had been carried home, a distance of about five hundred yards, and was lying in a chill so violent as to be somewhat threatening. By the appropriate means, the natural warmth of the body was restored, and an examination made of the state of the wounds. Several shot were removed; but two were distinctly traced to the bodies

of the dorsal vertebræ, near the attachment of the seventh and eighth ribs. He complained of violent pain in the right hypochondriac region, and declared that his legs were gone. On raising his feet, it was plain that the inferior extremities were paralytic. Emollient applications having been made to the wounds before I arrived, their continuance was permitted until the next morning, by which time it became necessary to perform venesection, and empty the bladder by the catheter. This latter operation had to be repeated twice and sometimes thrice a day, in consequence of the great abdominal pain whenever any distention of the bladder was permitted to take place. I now attempted to open the bowels, for which purpose I at first used calomel and gamboge combined, accompanied by enemata of the most stimulating description. Having varied the cathartics until I convinced myself that nothing could be expected from those in common use, since no evacuation from the bowels had been effected during the six days after the accident, and finding no mitigation of the paralysis, I asked for an additional surgeon, when Professor Pattison was invited in consultation. He approved of the efforts to evacuate the bowels, and directed a continuance of the oil of croton, which had been liberally used before, a drop having been given every two hours, without effect. Finding, on our visit the next day, that all the efforts were still unavailing, and spasmodic symptoms having come on, we determined upon the use of the elaterium—a grain of the common extract of the shops was prescribed every two hours. By this means, a partial evacuation was obtained; but the following night our patient was seized with *tetanus* in the horrid form of opisthotonos, which threatened an immediate termination to our hopes and his life together. The tincture of opium was now administered in drachm doses every half hour during the night, and the following morning, being the eighth day after the accident, it was determined, upon consultation, that, in addition to the opium, we should try the effect of the extensive application of the potass put to the whole length of the spine, this practice having been recommended in similar cases. At the suggestion of Professor Pattison, the prussic acid was obtained, and given in doses of half a drop every hour. At the time this practice was commenced, I confess I entertained little hopes of a favourable result. Our patient's body was contracted posteriorly to an absolute semicircle; his feet distorted, the toes being drawn inward to an almost incredible extent; and at the same time he was suffering most exquisitely from convulsive contractions of the limbs, which extorted from him shrieks of the most appalling and distressing kind. And yet in four hours after this treatment was commenced, by the application of the caustic issue to the spine, all the symptoms were mitigated, he fell into a placid sleep, from which he awoke in six hours, more perfectly free from all the tetanic symptoms, relieved from all pain, the bowels free, and nothing remaining to discourage us but the palsy of the lower extremities: and even in this respect there was an improvement, since he could

feel the slightest touch to the feet, although he had no power to move them, proving that the nerves of sensation and those of volition have a different origin. This rapid improvement, and the subsequent favourable termination of this case, has induced me to give this brief abstract of the treatment to the public, with a hope that it may induce a further trial of its effects in tetanus, since it teaches us not to abandon a patient in this disease, however hopeless be its aspect, this boy having so far recovered as to walk with the assistance of a stick, and having every reasonable prospect of an entire restoration to his health.

Section II.—Abstracts of Practical Facts, British and Foreign, with Remarks.

I. *Aneurism of the Aorta, &c.—Fatal Case.*

Case.*—In the month of May or June last year, (1825), a man, aged thirty-four, by trade a brick-maker, of temperate habits, tranquil disposition, apparently in good health, and married, became affected, without any known existing cause, with a small tumour in the left ham,† accompanied by pains in the knee, which for a time were mistaken for, and of course mistreated, as rheumatic, in one of our public hospitals.

On leaving the hospital, and discovering in some measure the cause of the pains, &c., he returned to his trade as a brick-maker, and continued at it until about the middle of the month of October, when the increased size of the tumour, the severity of the pain, and the inability of extending or resting his body firmly on the limb, compelled him to give up work, and apply for professional assistance.

As the nature of his disease was now very manifest (for the tumour, which lay in the hollow between the ham-strings, was large, firm, pulsating, and rather elastic), and as there was nothing in the state or circumstances of the patient to forbid such a proceeding, the common operation for popliteal aneurism was performed upon him in his own house, by the reporter, (Mr. Arnott,) on the 28th of the same month (October).

The operation was performed, we are told, upon the patient as he lay in bed, and a single ligature (of silk) was employed, which was passed round the artery before it penetrated beneath the sartorius muscle. No undue disturbance, therefore, was given to the parts at the time of the operation, and the subsequent progress of the case was entirely favourable; so that by the beginning of December,

* From a communication by Mr. J. M. Arnott, surgeon, given in Lon. Med. Journ. for April, p. 271.

† The bones of this leg had, however, it appears, been fractured some years before.

the ligature had come away, the wound had closed up, the tumour had diminished to half its former size, and the patient had already begun to make some use of the limb.

About six weeks after this period, that is, on the 18th January (1826), this man who had, it appears, been for some time going about, but had not yet returned to his usual employment, DIED suddenly whilst sitting at his own fire-side; and, as it would seem, without having experienced any previous distress, or intimation of danger.*

The body was examined, probably on the succeeding day; and the following is the report of the appearances met with, as given by Mr. Arnott:—

Examination, &c.—'On opening the body, the pericardium was found to be distended with blood, separated, however, into coagulum and serum. On removing this, the heart itself was examined, which led to the discovery of a small *aneurismal swelling* of that portion of the aorta which is included within the pericardium, and where it is still covered by fat, continuous with that of the heart. This swelling was not very prominent, and was similar in size, and somewhat in shape, to that of half of a small walnut.

'A spot, the size of a split pea, on the surface of the swelling, was of a dark colour, owing to the thinness of the parietes at this place; and in the centre of this spot was a minute aperture, barely sufficient to admit the point of the blow-pipe, through which the blood had proceeded, which filling the cavity of the pericardium, and oppressing the action of the heart, had produced the patient's immediate death.†

'The limb, which had been the subject of operation, was next examined, and the artery removed from the groin to below what remained of the aneurismal tumour.

'The ligature had been thrown around the vessel an inch and a half below the origin of the profunda. Its situation was indicated by an indentation; and on stretching the tube, the two portions of artery were seen to recede a little at this place from each other, leaving a narrow space between them, which was seen to be transparent, and where the continuity of the two was only kept up by means of cellular membrane.

'The obliterated portion of the artery was not quite an inch in extent; that of the upper extremity of the vessel measuring five-eighths of an inch in length, that of the lower a little more than two-eighths. The ends of both were firmly united and consolidated. The plug in the upper portion terminated superiorly, precisely

* He had been sitting with a friend who had quitted the room for a few minutes, we are told, ('not more than three minutes'), and on his return found him dead.

† This explanation is not, we may observe, very satisfactory: through an opening so small the blood must have escaped into the pericardium very slowly and gradually, whilst the death of the patient was sudden and instantaneous.

on a level with a small branch going off from the trunk of the vessel.

'Below the obliterated portion, the artery preserved its natural size, and was quite pervious all the way down to the aneurism; and at one place where it was opened was found to contain fluid blood. Opposite to the aneurism, the artery again became impervious, and for the extent of upwards of an inch.

'What remained of the aneurismal sac was of the size of a hen's egg: it formed an abrupt tumour on the vessel. The contents were solid, densely laminated coagula of blood; the section presenting lamellæ of uniform colour and consistence.'

II. *Metastasis of Gout.—Fatal Case, &c.*

Case.*—The subject of the present case was an officer in the army, about fifty-two years of age, of a robust and plethoric habit, cholero-sanguine temperament, florid complexion, and fond of good living; a propensity which, as a military man, he probably had it much in his power to indulge.

This gentleman had, as it would appear from his own account, been subject early in life to severe attacks of rheumatism, both in its acute and chronic form, which almost imperceptibly about seven years before his death (that is, about 1818), became changed into, or superseded, as it were, by slight autumnal attacks of regular gout.

For these he was in the habit of employing some *nostrum*, to which he was partial, by the use of which, as it is said, one of his usual attacks was repelled in the month of October, 1823. Whether or not any similar effect had ever before been thus produced, we are not told; but the subsidence or repulsion of the gouty symptoms, or gouty action, on this occasion, was immediately followed, it appears, by an acute and severe attack of thoracic and epigastric disease.†

This attack, of which the most prominent symptoms were, acute pain at the præcordia, severe vomiting, great anxiety, difficulty of breathing, palpitation, syncope, &c., was subdued in about a week, by copious bleedings, and other suitable means; but the disease was not extinguished, nor its effects entirely removed; for, twelve months afterwards, (that is, in the autumn of 1824,) we find our patient labouring under the following symptoms:—

A constant dry, irritable cough, with copious expectoration of a thick viscid phlegm; a sighing, suffocating respiration, rendering it necessary for him to be always erect to breathe freely; loathing of food, and partial loss of appetite, without, however, any well-defined febrile symptoms; pulse full, but elastic, and easily com-

* Drawn up from a communication by Mr. A. Browne, surgeon of the 2d Dragoon Guards, as given in the Lon. Med. Journ. for March, p. 200.

† Although the patient lived for upwards of eighteen months after this period, he never experienced, we are told, the slightest return of his former gouty symptoms.

pressed, at ninety-two, with intermissions at every tenth or twelfth stroke; vertigo on any unusual exertion, with violent palpitation and increased dyspnœa on ascending stairs; a constant obtuse pain in the left breast, increased to acuteness by a recumbent position; and a frequent, painful sense of constriction across the whole of the chest, extending to, and around each deltoid muscle; the external form of the thorax unaltered, but a general soreness prevailing all over it, so as to render percussion inadmissible; the action of the heart visibly laborious, and extending over a space six or seven inches in diameter; the arterial canal at the same time corresponding or vibrating with it, and this even to the most remote branches.

For some months after this period the condition of the unfortunate gentleman seems to have undergone but little change; in the January following, however, (Jan. 1825,) he was induced to remove himself from Norwich, where the head-quarters of his regiment lay, and to place himself at Ipswich, where he hoped to find a more congenial atmosphere: there he remained until the month of April following, when he returned to head-quarters, and manifestly much altered for the worse; for his body was now emaciated, and his appetite quite gone; and, in addition to all his former sufferings, he had to endure severe and almost continual attacks of incubus and headach.* In this state he continued, we are told, until the morning of the 20th of May, when after shaving and dressing himself as usual, he complained of general tremors and unusual weakness, which compelled him to return to bed, where he immediately after quietly expired.

Examination of the body forty hours after death.—The external form of the chest was now found materially altered, and considerable emphysema, with some ecchymosis, was discovered extending along the *left* side, from the axilla to the hypochondrium.

On removing the integuments, the muscles of the trunk presented a soft, flabby, ash-coloured appearance; and on being detached, they were readily mashed or divided by simple pressure between the finger and thumb. The ribs also were found quite loose at their articulations with the vertebræ, so that each required to be supported before it could be cut through with the saw.

On raising the sternum, &c., the lungs appeared unusually distended with blood and air, and started above the surface of the thorax, as far at least as firm and extensive adhesions to the pleura costalis and pericardium, on both sides, would permit. On being removed from the body and cut into, a dark bloody mucus, intermixed with a thin purulent matter, escaped from their substance, which throughout its entire extent, moreover, was found studded with tubercles and concretions.

The pleura costalis and pericardium were preternaturally thick,

* It may be proper to mention, as a circumstance connected perhaps with this change in the state of the patient, that he fell whilst at Ipswich into the hands of a private practitioner, under whose care *mercury* seems to have been freely employed.

and also emphysematous, and their internal surfaces throughout, were of a deep violet colour, the result apparently of chronic infiltration rather than of recent inflammatory action. The diaphragm also was in a similar state, and the cavity of the pericardium contained more than six ounces of bloody serum.

The heart itself was enormous, being double its natural size, and occupying a third of the whole cavity of the chest; but its substance was pale, and soft, and flaccid, and attenuated, particularly on the right side, the walls of which in some parts were nearly transparent. The opening between the right auricle and ventricle was unusually large; and the internal surface of each, and of the membranes lining the venæ cavæ, and pulmonary vessels, was of a deep violet colour, similar to that already mentioned, but somewhat darker. The aorta also partook of the same dusky hue, and its arch was covered for about three inches with honey-combed or ulcerated spots, some of which, we are told, had nearly penetrated through its coats, and given rise to the bloody effusion into the pericardium already noticed.

Abdomen.—The stomach was found smaller than natural, and with its substance thickened throughout its whole extent. The villous coat was of a dark chocolate colour, and the longitudinal plaits or rugæ, near the pylorus, were considerably raised or thickened, and had their interstices filled with a caseous matter, resembling indurated or coagulated lymph.

The other viscera in this cavity are reported to have exhibited no morbid appearance, and those of the head were not examined. This latter circumstance is to be regretted, as it would have been satisfactory to know whether the vertigo, the headach, and the incubus, by which the patient was tormented during his latter days, were or were not connected with any organic changes within the cranium—a question which must now for ever remain a matter of mere conjecture.

III. *Ictus Solaris*—(*Coup de Soleil*).—*Case, &c.*

Case.*—On the 24th August, 1825, between three and four o'clock in the afternoon, at which time the temperature of the air was very high, and the solar rays very powerful, the reporter of this case states that he was summoned to attend one of the farriers of his regiment, who was said to have suddenly dropped down, apparently dead.†

* Abstracted from a communication by Mr. Andrew Browne, surgeon of the 2d Dragoon Guards, which is given in the Lon. Med. Journ. for March, p. 192. It does not appear to whom this communication was addressed by Mr. Browne; but it seems to have been an official report.

† During the unusual and excessive heats which prevailed (in this country?) in the months of June, July, and August, (1825,) frequent instances occurred, Mr. Browne states, of men being suddenly attacked with severe headach, vertigo, and occasional irritability of stomach, after undue exposure to the sun's rays. No serious inconvenience, however, appears to have

On inquiry, it appeared that this man had been engaged in drinking beer (but not to excess, we are told), and in leaping and running races with his comrades for about two hours; that, during this time, he had had no clothes on but his shirt and drawers; that his head in particular, therefore, had been exposed uncovered to the rays of an unusually hot sun; and that in the middle of his last race he had suddenly dropped down, as if shot through the head.*

The man had not been removed from the place where he had fallen, and the surgeon on hastening to the spot found him extended upon the earth, and in the following condition :—

There was neither sense nor motion of any kind present, and the limbs when moved by others retained any position in which they were placed: the respiration was free and natural; the pulse peculiarly full and firm, though not rapid; the countenance flushed; the skin, though previously dashed with cold water, much warmer than natural; the eyes turgid, with the pupils fixed, insensible, and much dilated; the jaws firmly closed, except occasionally, when some of the contents of the stomach were partially ejected; and the sphincters relaxed, the fæces and urine having just been passed involuntarily.

As these symptoms indicated strongly that the brain was the organ chiefly affected, and as the man was young, (about twenty-five years of age,) stout, plethoric, and muscular, ' large bleedings from the arm, temporal arteries, and jugular veins, were forthwith had recourse to;' the use of saline glysters, refrigerants, cool air, and a constant erect position, was enjoined; and the shower-bath (*cold*, we presume,) was directed to be employed every fourth hour.

Notwithstanding the immediate institution of these measures, however, and their ' bold continuation,' six days elapsed before any sign of consciousness even was manifested by the patient, who, on the 30th of the month, for the first time since the attack, indicated by a slight movement of the *right* hand to the chest and head, that he was beginning to be alive to his own situation, and experienced some uneasiness in those parts. At the same time it was discovered, that a perfect paralysis of the *left* side had taken place, the eye even on that side being found insensible to the rays of light, whilst the mouth was considerably distorted towards the right.†

resulted from these attacks, except in the particular case which forms the subject of the present article.

* Mr. Browne states, that at this time ' *the* ATMOSPHERE *must have been heated to* 120° *of Fah.*' This, however, must be a mistake on his part; for the ATMOSPHERE *never in any part of the earth* acquires that temperature, from the direct rays of the sun at least, and where free ventilation exists.

† It does not appear at what period the paralysis of this side took place, if we may so express ourselves; perhaps, however, it would be more proper to consider *both* sides as paralysed *ab initio*, and to say, that sensibility and motion were in the first instance restored to the *right*. The paralysis of the

Blisters, drastic purgatives, frictions, and electricity, were now prescribed, and were, we are told, in conjunction with the shower-bath, steadily and unceasingly employed, and with daily increasing advantage, until the 2d of October following, when the man was dismissed from the hospital, and in a state sufficiently recovered to be able to attend to his business.

'He has since,' Mr. Browne adds, 'resumed his duty in the forge; and although he *still* feels some deficiency of strength in the *affected* side (*left* side?) when at hard work, yet it is *now* scarcely perceptible either in walking, or in performing light duties, so that his recovery is complete beyond my most sanguine expectations.' *

IV. *The Spleen Unusually Small.—Fatal Case of Fever, &c.*

Case.†—A woman, aged upwards of sixty, was admitted into the house of recovery at Manchester, on the 14th September, 1825, from the work-house, where she had been ill, it appeared, for about a fortnight previously.

Her complaints, according to her own account, had commenced with a coldness and shivering, which had been followed by heat. To these, in all probability, other symptoms of fever had succeeded, for on admission the skin was still hot and dry, the abdomen tense and painful, the bowels confined, the urine scanty and high coloured, the pulse feeble, and only eighty-six in the minute.

The most distressing symptoms, however, under which the patient laboured at this time, were the result, as it would appear, of the recent undue exhibition of mercury; for the tongue was found swollen, the throat sore, the gums red, painful, and ulcerated, the fetor from the mouth excessive, and the salivation profuse.

To these symptoms, a low delirium was in a few days added; and death on the sixth day after her admission into the house. Thirty-eight hours after this event, the body was examined, and the following are the principal morbid appearances stated to have been found.

Appearances, &c.—Head.—The brain and membranes apparently natural; some vascular turgescence, however, was observed, in the pia mater, and in the ventricles about two ounces of serum.

Mouth and fauces.—The tongue red, ulcerated, and tumefied; the velum pendulum palati, and posterior part of the fauces, very

left side, viewed in this light, would then appear as a part of the original disease still lingering behind, and not a new or additional infliction, as Mr. Browne seems to have considered it.

* As there is no *date* to the communication of Mr. Browne, as given by our contemporary, we cannot tell to what particular period of time the statement contained in the above paragraph refers. This is an important omission; and the silence which is observed with respect to the *place* where the occurrences detailed in this article took place is another; we can merely conjecture, from collateral circumstances, that it was somewhere in England.

† Drawn from a communication by Dr. Bardsley, of Manchester, inserted in the Edin. Journ. of Med. Science for April, p. 259.

florid; the gums red, and deeply ulcerated; the salivary glands much enlarged.

Thorax.—The heart and pericardium natural; but in both pulmonary cavities strong marks of disease appeared, *viz.* in the right, an effusion of serous fluid (about six ounces) and loose shreds of coagulated lymph; and in the left, firm and extensive adhesions. The right lung itself, however, was sound; but the left was hepatised at its inferior part, and exhibited in its upper two cicatrices of a fibro-cartaliginous character.

Abdomen.—No traces of recent disease in this cavity, nor indeed of any other, if the *diminutive size of the spleen* be not considered as such: of this size some correct notion may perhaps be found, when it is mentioned that the length of this organ was only two inches and a half, and its weight only one ounce and a quarter (*avoird.?*).

Observations.—This case is given by the reporter as one of death from excessive salivation. This is not just, however: the case was manifestly one of low fever, treated no doubt very improperly and injuriously, but still terminating (fatally indeed), as such cases very frequently do, about the twenty-first day.

Of the morbid appearances found in the head and thorax, it is not necessary to say much. The first alluded to are common, it is well known, in protracted cases of fever terminating fatally; and were in this particular instance no doubt connected with the disease of which the patient died:* the second (those in the thorax) were manifestly of long standing, and may have, or rather let us say, must have aggravated, but did not properly belong to the fatal disease.

The chief interest of the case, in our opinion, arises from the state of the SPLEEN—an organ which is often indeed found much larger than natural; but which is very rarely, we believe, met with much smaller than the ordinary size.† Whether in the present case, however, the substance of this viscus had been wasted by disease, or whether its diminutive size is to be attributed to an original formation, are questions which we will not take upon us to answer; for we are not, it must be confessed, inclined to attach much weight, in a pathological point of view, to statements like the following: viz. 'that its structure (after death) was perfectly natural, and that the patient (during life) had never exhibited any symptom of splenic disease.'

* We allude here, of course, to the vascular turgescence and serous effusion observed in the brain.

† Dr. Bardsley says, he is not acquainted with any recorded case in which the spleen was found of so reduced a size as in the present instance. Haller, indeed, he observes, mentions one in which it weighed no more than two ounces (Elementa Physiologiæ, p. 395); and the present Professor Monro, of Edinburgh, informed him, he says, some time ago, that he, Dr. M., had once accidentally met with a spleen almost as small (as in Dr. Bardsley's case) in a subject brought for anatomical demonstration.

V. *Tetanus* — *Singular mode of treating this Disease at the Tonga Islands.*

Tetanus, we are told, is a complaint very frequently met with in the Tonga Islands,* where it arises, most generally, from wounds and other injuries received in battle.

By the inhabitants of these islands the disease is termed *gita;* and they have remarked, that it more frequently follows punctured than incised wounds; and wounds of the extremities, particularly of the hands and feet, more than those of other parts.

Among the principal *exciting* causes they particularly enumerate sudden alarms, the stimulus of venereal desire, and the common operations of washing and shaving, and cutting the hair and nails. In cases, therefore, where there is reason to apprehend an attack of this disease, the patient is carefully watched, females are rigorously excluded from his presence, and the above operations are entirely dispensed with, and this often even for months.

When, notwithstanding all their care, the disease does occur, their mode of treating it is very singular, and, at the same time, more successful than any in use among us, if credit can be given to the accounts we have received of it.

This mode consists in producing a considerable degree of irritation in the urethra, and a discharge of blood from that part, which is generally effected by introducing a reed of a proper size, for some distance into the passage. Sometimes, however, (as in the more violent cases,) a double thread is passed down to the perinæum over the end of the reed, and there cut out, so as to convert the entire of the passage into one long seton. When this is the case, one extremity of the double thread hangs, of course, from the natural opening of the urethra, and the other from that made in the perinæum; and the thread being occasionally moved to and fro in the passage, great pain and irritation, and an abundant discharge of blood, are thus easily produced at pleasure.

Our author states, that he twice had himself an opportunity of seeing this latter operation performed for the cure of tetanus, and each time with success.

In both cases the disease supervened upon a wound in the foot, made by an arrow not barbed; in both, the symptoms came on suddenly, and within three or four days after the wounds were received; and in both, the spasms are stated to have been extremely violent, and to have extended over the whole body; in neither, however, was the jaw *permanently* locked.

In each case the operation was performed, we are told, as soon as the nature of the disease became distinctly marked; and in both it was followed by speedy and permanent relief. In one of the cases, the thread was withdrawn (the symptoms having all subsided) on the second or third day; in the other on the fourth or fifth. In

* A cluster of islands in the South Pacific Ocean, called Friendly Islands by Captain Cook.

both cases considerable pain and swelling of the penis came on after the operation; but these symptoms yielded without difficulty, in the course of a few days; and the opening in the perinæum also healed up in each without any trouble.

Observations.—Although the work to which we are indebted for the particulars given in the preceding detail * has been for some years before the public, yet we are not aware of the singular practice here described having been hitherto noticed in any publication strictly professional. We have been induced, therefore, to draw up this short article in the hope of exciting some attention on the part of our brethren to the subject; for the opinions and practices of a people whose medical knowledge is derived entirely, it may be said, from observation, are not in a case of this kind to be despised.

Every fact, indeed, calculated to enlarge, in any manner, our knowledge with respect to the treatment of a disease so generally fatal as traumatic tetanus, is deserving of attention; and persons, therefore, who may not be inclined to adopt exactly the Tonga mode of proceeding in this disease, may yet find in it matter for useful reflection, and derive from it hints, perhaps, for a better mode of practice than any at present in use amongst us.

We may add, that there is no good reason to doubt the accuracy of the account given by Mr. Mariner on this subject; for although not a professional man, he was yet, from various circumstances, well qualified to profit by the opportunities for observation which his situation afforded him.

VI. *Obstructed Vagina, with Retention of the Menstrual Discharge, and great Constitutional Disturbance, &c.—Case, &c.*

Case †.—A strong, healthy girl, aged about fifteen, became affected, (in April 1823,) without any manifest cause, with languor, lassitude, disinclination to exercise, impaired appetite, and perpetual thirst.

After these symptoms had continued for several months, (until the November following,) and, as it would appear, with little intermission, she was attacked with severe pains in the back, and hypogastric region, which lasted only, as it would seem, for two or three days, and were accompanied, or immediately followed, by some disturbance of the bowels, increased tension of the hypogastrium, and œdema of the lower extremities.

At the expiration of another month (that is in December), she was attacked in a similar manner, and again, after an equal interval of time, about the 18th of January, 1824.‡

* Mariner's Account of the Tonga Islands, edited by Dr. Martin, 2 vols. 8vo. London, 1818.—Vide vol. 2, p. 241.

† From a communication by Dr. W. Campbell of Edinburgh, given in the Edinburgh Journal of Medical Science, for April, p. 389.

‡ The symptoms detailed in our first paragraph seem, from the original report, to have continued up to this time almost uninterruptedly: those particularly mentioned in the second, constituted, on the contrary, an acute periodical attack.

During the preceding course of the patient's illness no professional aid, deserving of notice, seems to have been sought for; but on this, the third periodical attack, her sufferings became so severe as to demand immediate relief, and Dr. Campbell (the reporter of the case) was in consequence called to her assistance.

By him she was found complaining of severe pains along the course of the sacrum, and in the hypogastric and both iliac regions. On examination, it appeared that the hypogastric region was hot and tense, and tender on pressure; that the bowels had been lately much relaxed, but were now constipated; and that the girl had never exhibited any appearance of the menstrual discharge. There was at this time, however, no headach, nor general heat, nor acceleration of the pulse; no particular or unusual affection of the mammæ, nor any circumscribed tumor in the hypogastrium to be felt.

It became necessary, therefore, (for the sufferings of the patient are said to have been at this time excruciating,) to examine more minutely into the case, and an attempt was in consequence made to introduce the finger into the vagina, for the purpose of ascertaining the state of that part. Within about half an inch of the external orifice the *hymen* was found, constituting a membranous septum with an aperture in the centre. Through this aperture the fore-finger was introduced (*insinuated*) for about half an inch more, when its progress was stopped by another membranous septum, strong, tense, and impervious, and presenting to the finger an elastic, convex surface, like a protruding ovum.

Mr. Lizars, the well-known anatomist and surgeon, being present at this examination, it was determined at once to puncture this membrane,* which operation, therefore, was immediately performed by him with a common lancet, to the great and almost instant relief of the patient, who quickly discharged through the opening about two pounds (pints?) of fluid matter, viscid, grumous, and of a dark purple colour.

As a discharge of similar matter continued for several days, it was not thought necessary to introduce any thing into the vagina for the purpose of keeping the passage open. In consequence of this neglect or omission, the divided membrane, as it is called, became reunited,† and, on the 24th of the following month (February), the patient was again attacked with a return of all her former symptoms.‡

It again became necessary, therefore, to have recourse to the operation of dividing the impervious septum, which was again accomplished by Mr. Lizars, and again with good effect. The

* Dr. Campbell's first visit was on the 18th January, but it was only on the following day, when he saw the patient in company with Mr. Lizars, that the true nature of the case was, it appears, ascertained.

† A similar reunion has often, we may observe, in all probability, taken place, in cases where the vagina has been found impervious or obstructed at the time of parturition.

‡ That is, we presume, the symptoms mentioned in our second paragraph, for they alone seem to have constituted the periodical attack.

quantity of fluid matter however discharged this time was not so great as on the former occasion,* (as might indeed have been expected,) but the quality was the same, and the relief obtained equally marked. After this, proper precautions being adopted, a permanent opening was established,† through which the menstrual discharge has since, we are told, been regularly and uninterruptedly discharged.

VII. *Sulphate of Rhubarb.—Mode of preparing this Article, &c.*

In a late number of Silliman's Journal of Science (*American*), a formula is given for the preparation of this article, of which the following is a correct abstract.

Let six pounds of Chinese rhubarb, coarsely bruised, be boiled for half an hour in six gallons of water, acidulated with two and a half fluid-ounces of sulphuric acid, and let the decoction be strained. Repeat this process twice over with the residuum, and mix the three decoctions together; to which mixture then add, by small portions, a quantity of fresh powdered lime, constantly stirring the fluid, at the same time, so as to facilitate the action of the ingredients on each other.

When the mixture has become slightly alkaline, a red, flocculent precipitate will be deposited, which is to be separated by passing the fluid through a linen cloth. This precipitate, dried and reduced to powder, is to be digested for some hours in three gallons of alcohol, at 36°, then separate the clear solution, distil off three-fourths of the alcohol, and to the remaining fluid add a quantity of sulphuric acid, sufficient exactly to neutralize it. Evaporate this mixture to dryness, and preserve the residuum, which is the *sulphate of rhubarb* sought for.

This article, we are told, is of a brownish-red colour, with brilliant spots intermingled, of a pungent, styptic taste, and soluble in water; it retains also, it is said, the odour, and possesses, in a concentrated form, all the purgative virtues of the original drug. Should this latter statement be found correct, it may prove a useful addition to the Materia Medica, provided the expense and trouble of preparing it be not so great as to limit its employment very much.

We may add, that the original article is manifestly deficient in several particulars, though drawn up with an affectation of exactness and attention to practical details.

VIII. *On the Temperature of Fresh Eggs.*

There has long existed, among the vulgar, a curious and delicate mode of ascertaining the vitality, or, as it is termed, the *freshness* of

* The quantity discharged at the time of the second operation is stated to have been about a pound. This could not well have been the result of a few days' accumulation; and cannot, therefore, perhaps with propriety be considered as formed solely of the proper menstrual secretion.

† We cannot help thinking, however, that something less offensive to delicacy than *a small wax-candle*, might have been introduced into the vagina of this girl, for the purpose of keeping it pervious.

an egg; namely, the application of the tip of the tongue to the ends of the egg, between which, if the egg be still *fresh*, a difference in temperature may thus, it is alleged, be distinguished; the *greater* end being always, as it is said, found warmer than the other.*

Whether there was any truth in the opinion upon which this practice was founded, or whether any reliance was to be placed upon the practice itself as a test, were questions, however, which the learned never thought of investigating. With them the whole was a *vulgar error*; and, like other opinions and practices similarly designated, it was by them neglected and despised.

From the following report, however, of the results of some late experiments on this subject (made, as we are told, ' with a very delicate thermometer, and with considerable care,') there is reason to believe that, in this instance, as in some others also, the vulgar have not been in error; long-continued experience and familiar use having, on this, as on many other occasions, bestowed upon them a knowledge of facts, which reasoning and experiment might never, perhaps, have disclosed to the learned.

Results, &c. of some experiments on the temperature of the different ends of *fresh* eggs.†

Note.—In conducting the experiments, of which the results are here given, the ball of the thermometer (which is said to have been very small) was cautiously introduced as soon as the shell at either end was broken, and immersed, but not deeply, in the *albumen*.

The eggs employed were those of the common hen, and the temperature of the atmosphere was noted at the same time with that of the eggs.

TABLE.

	Temperature of the			Difference.
	Air.	Eggs.		
		Small End.	Large End.	
Experiment, 1	52· F.	58·50	59·	0·50
—— 2		56·50	58·	1·50
—— 3	‡	58·50	60·	1·50
—— 4	52·	57·75	58·50	0·75
—— 5	52·	58·50	59·	0·50
—— 6	54·	58·50	59·50	1·
—— 7	73·	85·	88·	3·

* That very minute differences of temperature may thus be detected is well known to lapidaries, amongst whom this is one of the tests by which natural gems are distinguished from artificial ones.

† These experiments were instituted and conducted by Mr. John Murray, F.S.A. F.L.S. M.W.S., from whose report, as published in the Edin. Phil. Journal for January, (p. 57,) we have drawn up the Table given in the text.

‡ The temperature of the *air* at the time of the second and third experi-

Observations.—The regular difference in temperature between the two ends of the same egg, as indicated in the preceding table, is attributed by Mr. Murray to the approximity of the *cicatricula* to the greater end, near which, as he observes, on breaking the shell, it may be discovered floating in the albumen.

Whether this be the true reason of the phenomenon or not, further observation, however, will be required to determine; meanwhile we may remark, that, in noticing these experiments, we have forborne to strike any *average* of the difference of temperature observed, or to draw any positive conclusions from them; for though undoubtedly interesting, in a general point of view, yet for scientific purposes they are manifestly very defective.

Thus no mention is made in the original, of the *ages* of the eggs employed,* nor of the *season* of the year when those eggs were subjected to experiment; yet until these points are known, or rather, let us say, until the experiments are repeated on eggs of various species and of various ages, at different seasons of the year and in different climates, no satisfactory conclusions of a general nature can be arrived at on the subject. We repeat, therefore, we consider these experiments of Mr. Murray's as calculated rather to furnish grounds for further inquiry, than as being at all conclusive in themselves.

IX. *On the Temperature of Man.—Experiments, &c.*

A long and interesting article on the "Temperature of Man and other animals" is given in two late numbers of the Edinburgh Philosophical Journal, from the pen of Dr. John Davy.†

This article consists of observations and experiments made by the author.

1st. On the variable temperature of man, that is, on the changes or variations which take place in the temperature of individuals in consequence of passing from a warmer to a colder region, or the reverse.

2dly. On the temperature of different races of men inhabiting the same places; and,

3dly. On the temperature of various animals of the brute creation, including quadrupeds, birds, fishes, &c. &c.

Of the observations, &c. here referred to, those relating to the first of the preceding heads are by far the most interesting and important to medical men. To the details connected with this part of the subject, therefore, we mean on the present occasion to confine

ments is not specified; but it seems to have been the same as in the first and fourth.

* The *age* of the egg has reference to the period of incubation, or to the time which has elapsed since the egg was deposited by the hen. By *fresh* eggs, of course, are meant those in which little or no change has taken place since that period.

† In the Number for October 1825, p. 300, and that for January 1826, p. 38.

ourselves. Instead, however, of laying these details before our readers in their original form, we have with much care and some little trouble embodied the results of the principal experiments in two TABLES,* to which we have annexed such remarks and explanations as the case seemed particularly to require.

By these means, all the facts connected with the subject are brought immediately, and at one view, under the eye of the reader, whereby he is enabled to examine and compare them together, and appreciate their relative and united values in a much more satisfactory manner than if they had been presented to him in the loose and desultory form which the author has thought proper to adopt in the original communication.

Experiments, &c.—1*st Series.*—The experiments, the results of which are given in the first of the following tables, were made on board ship, and in different latitudes, *at sea*, during a voyage from England to Ceylon, in 1816.

The individuals who were the subjects of them (gentlemen, passengers on board) were, at the time of each experiment, assembled under an awning on deck, where the thermometer also was placed, from which the temperature of the air was taken at the same time.

The time chosen for the experiments was always about noon, and the individuals in question were, on each occasion, the same, and always in good health, calm, and composed; and the temperature of each was ascertained by placing a delicate thermometer under the tongue, near the root, every precaution being, at the same time, taken to ensure accuracy.

2*d Series.*—The second table, on the other hand, contains the results of a series of experiments made at different places *on shore*, namely, at Kandy and Trincomalie, in the island of Ceylon, in the year .†

The individuals who were the subjects of these experiments were on each occasion also the same; all natives of the island, in the service of Dr. Davy himself, and in good health.‡

Of each the temperature was uniformly ascertained under the tongue, as on the former occasions, and also in the axilla; the latter results, however, we have not noticed in the tables, for reasons mentioned below.§

* In *two* tables; one set of experiments having been made at sea, the other on shore.

† The *year* in which these experiments were made is not specified by Dr. Davy; nor can we, from the context, discover whether his *monthly* dates refer to the same year as the preceding (1816), or to some subsequent one.

‡ One we are told was a servant, the five others palanquin bearers.

§ We have not noticed these results on the present occasion; 1st, because no corresponding observations are recorded with respect to the persons experimented upon at sea; and, 2dly, because they relate more particularly to an inquiry entirely distinct from the present, and very interesting in itself; namely, the difference of temperature in different parts of the body of the same individual at the same moment of time. We shall probably, however, return to this subject on some other occasion.

Of the places at which the experiments were made, it may be proper to mention, that the first, *Kandy*, is situated near the centre of the island (lat. 7° 17′ W.), and at an elevation of about fifteen hundred feet above the level of the sea; that it is surrounded by hills and mountains, covered with wood, abounding in springs, and often enveloped in clouds; and that the mean annual temperature is about 73°. 5′. of Fah.

Trincomalie, on the contrary, is situated on the coast (lat. 8°. 34′. N.), far from any range of mountains, and in a district subject to long-continued drought. As might be expected, therefore, its mean annual temperature is found to be much higher than that of Kandy,—Dr. Davy says, by about ten degrees of Fah.

TABLE I.

Persons.	Ages.	1st Experiment.	2d Experiment.	3d Experiment.	4th Experiment.
		Air, 78·	Air, 79·50	Air, 80·	Air, 60·
No. 1	17	99·	99·	100·	
2	20	98·	99·50	100·	98·75
3	24	99·	100·	99·50	98·50
4	25	98·75	98·50	99·75	98·25
5	25	99·	99·	99·50	98·
6	28	99·50	99·50	99·50	
7	28	98·75	99·	99·50	98·25
Averages		98·85	99·21	99·67	98·55

TABLE II.

Persons.	Ages.	5th Experiment.	6th Experiment.	7th Experiment.	8th Experiment.
		Air, 69·	Air, 83·	Air, 82·	Air, 84·?
No. 1	20	98·	99·	101·	98·
2	20	98·	99·50	99·	
3	24	98·	99·50	100·	
4	35	98·	99·	102·	98·50
5	35	98·	99·75	99·	98.
6	40	99·	99·	98·50	98.
Averages		98·16	99·29	99·91	98·12

EXPLANATORY REMARKS ON THE PRECEDING TABLES.

1*st Exp.*—March 10, (1816,) lat. 9° 42′ N. Weather fine; an

agreeable breeze blowing; temperature of the air, 78°; sensations of heat not unpleasantly warm.

2*d Exp.*—March 21, lat. 12′ N. Sky clear; a fresh breeze blowing; temperature of the air, 79° 50′; sensations of heat not unpleasantly warm.

3*d Exp.*—April 4, lat. 23° 44′ S. Weather fine; gentle breeze blowing; temperature of the air, 80°; sensations of heat rather warmer than agreeable.

N. B. At the time of this experiment the temperatures of six other persons were also taken, which are recorded by Dr. Davy; these, however, we have not introduced, as having no proper reference either to the preceding or subsequent experiments.

4*th Exp.*—May 5, lat. 35° 22′ S. Weather damp; temperature of the air, 60°; sensations of heat, almost cold.

N. B. The average in this experiment cannot with strict propriety be admitted into comparison with the preceding; it being, as the reader may observe, the mean of *five* only instead of *seven* results.

5*th Exp.*—Sept. 15, (1816?) at Kandy; hour, 8 A. M.; temperature of the air, 69°; individuals cool and fasting.

N. B. Dr. Davy, accompanied by the six individuals here alluded to, left Kandy on the following day for Trincomalie.

6*th Exp.*—October 3, at Trincomalie; hour, 9 A.M.; temperature of the air, 83°; individuals fasting, and not fatigued.

N. B. The parties had arrived at Trincomalie on the preceding day, from Kandy.

7*th Exp.*—October 19, at Trincomalie, also; hour, half-past 11, A.M.; temperature of the air, 82°; individuals warm, but not disagreeably so; had breakfasted about two hours before.

N. B. The parties had now been for upwards of sixteen days at Trincomalie, from which they departed on the following day, to return to Kandy with Dr. Davy.

8*th Exp.*—Oct. 28, at Kandy; hour, half-past 11 A.M.; temperature of the air, 84°.

N. B. No reliance, we may observe, can be placed, for the purposes of comparison, upon the results of this experiment:

1st. Because the parties had only arrived at Kandy on the preceding day, after a rapid and harrassing journey, from the effects of which, we are told, they had not perhaps, at the time of the experiment, quite recovered.

2dly. Because the temperature of the air had suddenly risen, as it appears, about the time of the experiment, to an unusual height. (At 7 A.M. the same morning it had been as low as 69°); and

3dly. Because the average here is vitiated, as in the 4th experiment, by the absence of two of the party.

Notwithstanding these objections, the experiment is, we may observe, entitled to a certain degree of consideration, and therefore we did not think it proper to reject it altogether.

Averages.—Some of the averages in these tables are not, it may be observed, rigidly exact, in consequence of *decimals* being employed in expressing the fractional parts. They are all however,

we believe, as near the truth as two decimal cyphers can carry them, and none exceed, though some fall a little short of the mean.

By using vulgar fractions, indeed, the little inaccuracy here noticed might have been entirely avoided;* but, for the purposes of comparison, the decimals will be found much more convenient, and sufficiently exact for all practical uses as employed in the tables.

Persons.—In the original communication, the subjects of experiment are arranged fortuitously, as it would appear; in our tables they are, on the contrary, arranged according to their respective ages, so as to afford an opportunity for convenient comparison in that respect *inter se*. This circumstance must not be overlooked in comparing the tables here given with the original details, as the same personal numbers do not in both refer to the same individual, with two or three exceptions.

X. *Animal Magnetism.*

We are seriously threatened with an invasion of animal magnetism from the shores of our Gallic neighbours, where it is apparently becoming very fashionable. Acupuncture and all the new alkalis have already fled before it: M. Broussais and his physiological system are fast giving place to it: Gall and Spurzheim are forgotten: and we are told that men of the greatest good sense and sincerity have become the partisans of this ancient quackery, which has in one shape or other deluded several generations of credulous men. In support of the observations made on this subject in our last number (page 460), it is to be added that the most expert magnetisers have been very unsuccessful in their experiments on lunatics, whose minds were of course less under the controul of art; and that the most careful trial of the power, or rather of the existence, of what is called animal magnetism, has been made in the clinical institution at Berlin, of which the result has been, that, under the direction of men of science and judgment, *not one patient*, whose disease was clearly established, derived any benefit from the vaunted process. In a few instances the patients were temporarily relieved, but unquestionably from the mere operation of the mind over the body, of which all physicians have seen examples. We think too highly of the good sense of the British public, and of the honesty of British practitioners, to have any great dread of the practice being imported; but as there are doubtless many individuals, even in England, who will believe the most preposterous assertions of quackery, and as our profession is not wholly without men who have no hope of being *honestly* distinguished, we think medical men would do well to look into what was said and done with respect to this curious subject about forty years ago, so as to be prepared upon it.

* Thus, the average of the results of the first experiment, (Table I.), instead of being expressed by the numbers 98° 85′, which fall a little short of the mean, might have been exactly indicated in vulgar fractions by $98\frac{5}{7}$, and so of the others.

To those who, without any want of principle, are in danger of being led away by a lively imagination, we would address ourselves in the language of M. Dupau:

'The prudent physician should not inconsiderately adopt into his practice those dangerous means of fascination which quacks have so often abused. If *he* magnetises his patient, it must be by the confidence with which he inspires him; by the consolation which he gives him; by the hopes which he holds out to him. But to borrow the wand of the enchanter, to avail himself of the charms of sorcery, to profane the holy ceremonies of religion in order to strike the imagination and influence the nervous system of his patient, or to inflict convulsions, extasies, and somnambulism upon him, is to offend public morals and to abuse the rights of a physician over the health of his fellow-creatures.'

XI. *Efficacy of the Root of the* ARTEMISIA VULGARIS *in* EPILEPSY.

SEVERAL cases, illustrative of the efficacy of the root artemisia vulgaris in epilepsy, have been related in Hufeland's Journal; and two cases are inserted in the January number, in which benefit was derived from it, one a case of convulsions in a child, the other a case of chorea.

The child was six months old, nursed by a healthy mother, and had been subject to convulsions, without any known cause, for two months. The attacks came on five or six times a day; were ushered in with a piercing cry, after which the eye-balls were so forcibly drawn upwards that the transparent cornea was invisible; the limbs were then affected with clonic spasm for the space of ten minutes, which state was succeeded by an extreme relaxation, as if the whole muscular system was paralysed. The child would then fall into a profound sleep, which generally continued about an hour and a half. An emetic; laxatives continued for a week; zinc, given with extract of hyoscyamus, and afterwards with musk, produced no effect. Five grains of the powdered root of the artemisia vulgaris were then mixed with an equal portion of sugar, and divided into twelve doses, of which four were given during the day. At the end of three days the mother of the child thought the attacks seemed less violent; and the child had only had three fits on the third day, which had never before been the case from the commencement of the disease. In three days more the effects of the medicine were more evident; the fits only came on thrice a day, and their duration and severity was diminished. At the end of a fortnight the paroxysms were very slight, and they soon afterwards altogether ceased. By way of precaution, two doses were given daily for some weeks, and the child has now been more than a year in perfect health.

The subject of the case of chorea was a girl of ten years of age, of a scrofulous constitution, and who had been affected with glandular enlargements and chronic ophthalmia. The latter affection

having spontaneously disappeared for some months, she became, by insensible degrees, the subject of decided chorea. The complaint being suspected to arise from worms, various anthelmintics were given, as well as several doses of calomel and jalap; but no worms were discharged, and the patient became worse. Narcotics were then tried: the powdered root of belladonna, as far as half a grain every three hours, which produced dryness of the throat, but had no effect on the chorea. Zinc, valerian, and the ammoniated sulphate of copper, were given without advantage. Ten grains of the artemisia vulgaris were then administered with a little sugar every three hours, until a drachm was taken in the course of the day: blisters were, at the same time, applied to the calves of the legs, and a slight discharge kept up. After a few days there was a decided amendment; the amendment continued; and in a short time the girl became entirely free from complaint.

XII. *Humoral Pathology.*

M. Segalas reports the following results of several experiments made by him on dogs, with alcohol, and with the alcoholic extract of nux vomica, in order to solve the question of the *blood* being ever the seat of disease:—

1. Concentrated alcohol produces a chemical action on the blood during life.

2. Diluted alcohol, injected into the veins or bronchi, causes immediate drunkenness; but more slowly if directed to other parts.

3. That the effects of alcohol not introduced into the veins are, as to intensity and quickness, in direct relation with the absorbing faculty of the part where it is introduced, and quite independent of the nerves there distributed, particularly of those of the stomach.

4. That these effects are accelerated and augmented, or retarded and diminished by all circumstances which favour or impede the passage of the alcohol into the blood.

5. That drunkenness is dissipated in proportion as the alcohol leaves the blood, and more or less quickly as circumstances are more or less favourable to exhalation.

6. That the intensity of the effect of alcohol is not in proportion to the quantity which has been placed in contact with the organs, but with the quantity of this liquor which is actually in the blood.

7. Lastly, that profound drunkenness, and death from drunkenness, are coincident with a manifest alteration of the blood, and with less marked changes in the solid parts.

With respect to the alcoholic extract of nux vomica, M. Segalas found the following results:—

1. That this substance acts almost immediately after its entrance into the blood, and produces general or partial tetanus, according as it has been mixed with the mass of the blood, or only with a portion of it.

2. That when introduced in other modes than by the sanguinous system, it has no action except through the circulation; that its

effects are independent of the nerves, and in direct relation, as to intensity and quickness, to the absorbing faculty of the part.

3. That the local phenomena of poisoning may be manifested independently of the general enervation (*innervation*), and have an absolute dependance on the local circulation.

4. Lastly, that many phenomena, quite inexplicable by fixed lesion of the nervous system, can only be the consequence of a partial alteration of the blood; and can only be explained by the anomalous action which the altered parts of this fluid exercise on the portions of the nervous system with which they are placed in contact.

M. Segalas promises to investigate, in a second memoir, what diseases are to be considered as having their seat in the blood.

XIII. *Experiments relating to* CUTANEOUS ABSORPTION.

M. COLLARD reports the following experiments, recently made by him with a view to determining this subject. They have the merit of being simple; but we cannot say they possess that of being satisfactory:—

'1. Having immersed his hands, as far as the wrists, in hot water, for two hours and a half, he found that the veins of the hand and fore-arm were swelled, and also the lymphatic ganglions in the axilla.

'2. Having kept his hands for an hour in a vessel filled with water, of which he had ascertained the capacity and surface, he found on withdrawing them that the vessel had lost more water than another placed as exactly as possible in the same circumstances.

'3. A funnel being closed below, and filled with water, M. Collard applied his hand to the upper part, and found that the portion of skin circumscribed by the funnel was gradually drawn inward, as if by the formation of a small vacuum.

'4. This experiment was repeated with a funnel, the neck of which was graduated, and in which a considerable air bubble was left, in order that the slightest absorption might be indicated by a variation in the level of the water; and the effect was correspondent to M. Collard's expectations.

'5. M. Collard took a glass syphon, the shortest extremity of which was widened into a funnel, and having poured mercury into the arch connecting the two branches, filled the funnel-shaped branch with water, and applied the palm of his hand to the surface, keeping it there nearly two hours: he also augmented the pressure of the water by increasing the quantity of mercury in the long branch. In this experiment, he found that the mercury rose towards the palm of his hand, proving, as he thinks, that the hand had absorbed a certain portion of the water.'—(*Arch. Gén. Fevr.*)

XIV. *Of Dr. Goelis's Practice in some* DISEASES OF CHILDREN.

(Continued from p. 458 of our last Number.)

'*Thrombus Neonatorum.*—Dr. Goelis is adverse to opening the sanguineous tumours upon the heads of new-born children, because in his experience they have generally died.' In this result, however, Dr. Brosius does not concur; neither have we ourselves ever seen any evil ensue from opening them. At the same time, we believe it to be utterly unnecessary, as they generally disappear spontaneously. We usually, however, apply a lotion, with muriate of ammonia; but we are not prepared to say that any real benefit is derived from it.—EDITORS.

'*Febris Cœrulea.*—This is a disease of a peculiar nature, not to be confounded with the morbus cœruleus, which is the consequence of disease of the heart. This is its description:—

'It attacks children from four till twelve months old,—none older; and these for the most part of the poorer class, who live upon coarse food, and dwell in dirty and damp habitations. The disease comes on in paroxysms. Children become suddenly blue, respiration difficult, and the pulse small, hard, and wiry. These attacks endure for some time, disappear, and return again. Soon the paroxysms become more frequent, and at length pass into each other. The skin is frequently covered with a clammy perspiration. Death takes place suddenly. On examination of the body, the blood vessels are very distended.

'Dr. Goelis considers this disease as of a spasmodic nature, and recommends preparations of opium, together, however, with purgatives of calomel and rhubarb.

'*Convulsions.*—The convulsions of infants are for the most part the consequence of inflammatory action of the brain; and Goelis never admits of stimulating remedies, as these only render, according to his experience, the convulsions more frequent. Calomel is one of his principal medicines.

'*Scarlatina.*—When the eruption in this disease does not follow the proper course, Goelis recommends bathing the body with tepid water as very advantageous; while, on the other hand, sudorifics, in the commencement of the disease, he has always found injurious.

'*Morbilli—Measles.*—When the measles occur during vaccination, they both run their course undisturbed by each other.

'*Tinea Capitis.*—The treatment of this disease is tolerably well known now in England; but Dr. Goelis asserts it to be of scrofulous origin; and Dr. Brosius remarks, that 'when the dried crust of tinea, finely powdered, is rubbed by any one upon the moist skin, true scrofula ensues.'

'*Scabies.*—There is a species of scabies, or rather a psora cutanea, which is not contagious. It frequently appears after vaccination.'—(*Journal der Practishen Heilkunde, Von Hufeland und Ozer, April* 1825.)

XV. *Of Twin Births.*

M. Duges, in the Revue Médicale for March 1826, has given some interesting observations respecting 'accouchemens multifares,' which we can only translate by circumlocution, viz. the production of twins, or more at a birth. He commences by assigning the term accouchement for the whole phenomenon, and parturition for the action which gives birth to an infant. In this division of terms, we shall follow him for its convenience.

'From a review of registers at Paris, out of 37,441 accouchements there have been 36,992 parturitions; 444 twins; 5 triplets.

'*Sexes.*—Out of fifty-four twin cases, taken at hazard, five have given a boy and a girl; thirteen, two girls; and twenty-six, two boys; this last proportion, which is one-half of the whole, seems to be the most common. In two triplets, observed by M. La Chapelle, in one there were three girls; and in the other, two girls and a boy.

'*Volume and Weight.*—Twins are generally smaller than infants which are alone in the womb. The average weight of twins is four pounds each, and the extremes are three pounds and eight pounds, so that the same total weight remains. Triplets have rarely a less weight than twins, provided they are not born prematurely.

'*Dispositions of the Envelopes.*—Sometimes the twins are contained in one membranous envelop only, and are bathed in the same waters; but this is a very rare case. Madame La Chapelle has never observed it; and both twins and triplets delivered by her have been each in a separate sac, and divided by an union of the two chorions and the two ammios. The epichorion is simple, and surrounded by both sacs. In some cases, the chorion does not make a part of the division; and there is but one for both fœtuses. Dr. Duges himself, however, has never met with this disposition of the membranes. The placenta is more frequently single than otherwise; the proportion has been almost as three to two. Moreover, we meet with every variation of union, from single contact to complete union, without even a line of separation being visible; so that sometimes there is an anastomosis of the vessels of one fœtus with those of the other; and sometimes the anastomosis does not exist. When it is present, it is not by means of the capillary system; for, in the same placenta, even the capillaries of one cotyledon do not communicate with those of the other. The anastomosis is always effected by large vessels, such as ramify on the fœtal surface of the placenta.

'*Position.*—In comparing the position of twins, out of fifty-four accouchements, in thirty-six the infants have presented the same part to the mouth of the uterus, as the head, the buttocks, &c.; eighteen presented different parts, as one the head, another the shoulder, &c. In this last case, it was not always the first-

born which exhibited the most favourable position.'—(*Revue Médicale, Mars* 1826.)

XVI. *Efficacy of the* HYDRIODATE OF POTASH *in* CANCEROUS AFFECTIONS.

M. GRAEFE, jun., of Berlin, relates that a female patient was admitted into the hospital, aged fifty, affected for a year past with cutaneous cancer, of which it is to be regretted, that no description is given, further than that it extended from the upper part of the left mamma as far as the nipple, and that it had destroyed the integuments in its course. Ordinary methods having been tried without advantage, M. Graefe caused an ointment to be applied to it, consisting of rose ointment (axunge, with an admixture of pale roses, infused into it, coloured with anchusa tinctoria), ℥ij.; hydriodate of potash, ʒj. The ulcer soon put on a better aspect, and the callosity of the edges was lessened. When cicatrisation commenced, the proportion of the hydriodate was doubled, and a complete cure was obtained in nine weeks. M. Graefe says, he has employed this salt with equal success in carcinomatous ulceration of the lips.—(*Rev. Méd.*)

SECTION III.—INTELLIGENCE RELATING TO THE MEDICAL SCIENCES.

I. *An Account of the Present State of Medicine in Italy.* By FR. W. OPPENHEIM, M.D.

(Concluded from p. 472 of our last Number.)

'2. *Ospedale di St. Bonaficio*, destined for the reception of lunatics, incurables, and those afflicted with cutaneous complaints, is capable of containing 1,000 patients. The lunatics are here much better treated than at Pisa or Genoa; they are never chained, but are subjected to much milder modes of coercion, such as the strait-waistcoat: dark rooms having the walls lined with padding, to prevent the patients from injuring themselves, are used for the confinement of persons during the accession of the maniacal paroxysm. There is no care taken to provide amusements or employment for the patients, and on the whole, their *moral treatment* is entirely neglected; so that, Dr. O. justly remarks, it ought to be called an asylum, not an hospital, for lunatics, the latter name implying the application of proper curative means; the consequence of this neglect is, that a cure is scarcely ever heard of.

'*Foundling Hospital.*—A well-managed institution, which receives annually from 1,500 to 1,800 infants. They are well taken care of, and remain one year in the house, after which they are sent to the

country. The bedsteads are of iron, and each contains four separate divisions, in which are placed four children's beds. This arrangement facilitates the attendance of the nurses upon the children.

'The diseases observed among the foundlings are not numerous. Inflammation or blenorrhœa of the eyes is uncommon; a circumstance probably owing to the exclusion of a glaring light from the wards, and to their cleanliness and proper ventilation. Jaundice and induration of the cellular membrane are quite unknown here. A great number of children *are said* to fall a sacrifice to syphilis: when brought into the house, they are apparently healthy; but in the course of a few weeks, or even days, they become pale and thin, cry or rather *whimper* much, get an appearance of old age in the face, and often become covered about the genitals, anus, &c., with pustules and small ulcers. They grow cachectic, and finally die in a state of marasmus. The exhibition of mercury in this affection is found to be quite useless. I myself concur in the opinion of Dr. Breschet, of Paris, who has observed a similar complaint among the infants in 'L'Hospital des Enfans Trouvés,' but does not conceive it to depend upon syphilitic taint. His observations render it probable that it arises from an insidious inflammation of the abdominal viscera, a view of the subject confirmed by the diminution in its mortality, since a mode of practice founded on this view has been adopted.

'A small lying-in hospital, containing six beds, erected for the instruction of the Tuscan midwives, is connected with the Foundling Hospital. In order to obtain a license to practise midwifery, the females must attend three courses of lectures on that subject, besides which, they must reside eighteen months in the institution. The anatomy of the female pelvis is taught, by means of beautiful wax models, which can be taken to pieces.

'Puerperal fever is rare at Florence. On an average, twins occur 5 times in the 100. The cæsarean operation has been performed twice there, and in both cases was unsuccessful. The midwifery practice seems on the whole judicious, and the accoucheurs are not addicted to the unnecessary use of instruments in delivery. Professor Bigeschi speaks highly of the ergot, as a means of forwarding the progress of labour in tedious cases.

'I must not omit mentioning the celebrated Florentine waxworks, which exceed the Vienna collection, not only in number, but in execution and anatomical accuracy. What has been added lately, is inferior to the old collection, especially in the colouring. I shall never forget my astonishment at seeing a representation of the distribution of the fifth pair of nerves. It left nothing to be wished for, and had every branch described by *a Bock* or *a Meckel*. In fact, on examining it, you could not determine which was the more to be admired,—the anatomist who made the dissection, or the artist who made the model. The late Professor Ucelli, who was not only an able anatomist, but an expert artist, enriched this collection with many beautiful specimens in comparative anatomy, well worthy of a minute examination. The imitations of plants,

fruits, &c. are not less elegantly executed; but this part of the collection loses its value, from the circumstance that the objects represented are indigenous in Italy! and we do not find any imitations of rare or tropical plants.

'I did not observe so great a number of blind people in any Italian city as in Florence. Every good begging station in this city is occupied by a blind beggar, and those stations descend, by hereditary right, from one generation to another. How great the profits of these beggars must be, appears from the answers of a young man, when asked, how it happened that he could afford to marry,—'*Thank God, I have a blind father, therefore as long as he lives I can never want.*' In general, these blind beggars are attended by stout young men, so that the proper order of things is reversed, for he who can neither see nor work, supports him who can do both!

'Here I cannot omit adverting to another custom prevalent not only in Florence, but in the other Italian cities, and which must necessarily exercise an injurious influence on the state of the medical profession. The apothecary's shop is the physician's rendezvous, for his messages are left, not at his own house, but at the shop of the apothecary whom he patronises, or who patronises him.

'The Italian does not understand the comfort of the expression 'at home,' like us Germans, but spends all his leisure hours in the open air, in the street, and engaged in the '*Dolce far niente.*' The first thing the Italian practitioner does in the morning is to hurry to his apothecary's shop for the purpose of learning what orders have been left for him. Meetings are held by physicians, and appointments made at the shop of the apothecary, and there the young physician, who is looking for practice, *must* loiter away his days: I say *must*, for if he does not do so, he will not succeed. Every stranger who is in want of a physician sends for one to the apothecary; and every one who has no family physician does the same. The *understanding* relative to their mutual interest, which arises from this singular connexion between these branches of the profession, must prove injurious to the patient, at least so far as it increases the probability of his being made to swallow medicine, more with the view of increasing the bill than of restoring his health. This custom evidently degrades the physician, by making him a sort of creature of the apothecary, and likewise occasions a most serious loss of time, just at that period of life when his time is most valuable.

'*The Papal Dominion.*—There are two medical schools in the dominions of the Pope, viz. one at Bologna, and one at Rome.

'*Rome.*—The University at Rome is named '*Della Sapienza,*' and has fourteen medical professorships. This university has no museum whatsoever. The medical clinic is in the '*Ospedale di St. Spirito,*' where practical anatomy is also taught. The surgical clinic is in the hospital at '*St. Giacomo in Angustia.*' There is no institution for the instruction of accoucheurs. The internal arrangement of the Roman hospitals is so peculiar, that it deserves

particular notice. They are altogether ecclesiastical institutions, formed according to the notions of churchmen, and destined to serve rather as asylums for the administration of spiritual consolation than for the cure of diseases. Accordingly, the physicians and surgeons are persons but of secondary importance in a Roman hospital, while the priests and confessors enjoy the chief authority! They alone are the resident officers; to them the admission of a new patient is first communicated; and they administer the first remedies,—confession and the sacrament. Chance must decide upon the remaining part of the cure; for, after having taken care of the soul, they concern not themselves about the cure of the body! The hospitals are small, but on the whole rather clean. The bedsteads are generally made of iron, some with, and some without curtains. Some of these hospitals are situated in the most unhealthy parts of the city. They are nine in number, and altogether contain about 2000 beds. In some, there are separate wards for consumptive patients; for the opinion that consumption is contagious, is universal in Italy. In the lunatic asylum are 400 patients, on whom the whip and the chain are not spared! Some of the hospitals cannot be visited by strangers, except permission has been granted by the Pope, a favour of which his holiness seems to be very sparing. All the convalescents from the different hospitals are brought to that of the Holy Trinity, for the purpose of enjoying the benefit of a nutritious diet. Dr. Oppenheim finds fault with this arrangement; and we agree with him in thinking, that the convalescents might be well fed in the different hospitals, without going to the trouble of removing them to this general convalescent hospital, where, after all, they are only permitted to remain three days!

'The diseases of every nation are necessarily much influenced by the customs and domestic habits of the people, and the nature of the climate. He who has not been an eyewitness of it, cannot form any idea of the uncleanliness prevalent in the south of Italy. The stranger, on his first arrival at Rome, is amazed at seeing whole groups of people, '*gruppi dei otiosi*,' consisting of fathers, mothers, children, and friends of the family, all employed in performing for each other an office which we shall not name. Suffice it to say, they use their fingers for purposes elsewhere performed with combs! This custom is so general, that it has, as a matter of course, occupied the pencil of the artist; and in the magnificent collection of pictures at Florence, is one in which Venus is seen thus elegantly employed on the head of Cupid! So much are the inhabitants accustomed to sleep two in one bed, that when two strangers arrive at a country inn, and require two beds, their demand is considered unreasonable. The peasants of Rome and Naples look upon washing and cleansing the skin as quite unnecessary; and the upper ranks are not less negligent of the bath, than the ancient Romans were attached to its use. The great number of church holidays serves, indeed, in a certain degree, to keep the city from utter filth, for the streets through which the religious processions are to pass must be previously swept.

'In so warm a climate, this utter neglect of cleanliness necessarily produces an abundance of cutaneous complaints; and accordingly, the hospital '*Della St. Maria*,' containing 400 beds, is insufficient for the accommodation of patients so afflicted. *Tinea capitis* is treated in this hospital in the following singular manner. The head is first smeared with butter, for the purpose of softening the scabs. When the scabs are removed, the head is shaved, and all the roots of the hair pulled out with a broad tweezers. The next step is to make forty or fifty incisions in the scalp with a razor. The free flow of blood from these incisions is favoured by making the child sneeze. The head is finally washed with cold water, and then rubbed with rancid oil. This *cutting* and *plucking* is repeated every four or five days, as fast as the hair begins to appear. This *cure*, which they commend for being *simple* and *radical*, lasts generally for six or eight months; and in obstinate cases, for one or two years!

'Vaccination is again much neglected under the present Pope, and of course small-pox is on the increase. There were about seventy small-pox patients in the hospital at the time of Dr. Oppenheim's visit. We shall not enter into the sources of the '*aria cattiva*,' which renders Rome so unhealthy; but merely remark, for the benefit of such of our readers as may intend to visit that city, that its influence is most severely felt during the months of June, July, August, and September. The miasma produces, besides common agues, a very fatal species of fever, which is termed the malignant ague. 'The patient becomes at once weary and weak, complaining of heaviness of his limbs, heat of skin, dull headach, and confusion of ideas, &c. The looks are wild, the face oftener pale than red; and, even when it is flushed, a yellowish white tinge is perceptible near the angles of the mouth. The belly is often tender to the touch, and the right hypochondrium swollen. The patient is sometimes costive, but not unfrequently diarrhœa is present from the beginning. Enough has been related to place it beyond doubt, that this fever, at its commencement, is of a gastric character, and is attended with an inflammatory affection of the liver. After the above symptoms have continued for some time, the fit commences with a violent rigour, which is followed in an inconceivably short space of time with a general and excessive disturbance of the whole nervous system, picking the bed-clothes; *subsultus tendinum*, the most violent delirum, and a low muttering sort of raving, succeed each other rapidly, and without any apparent regularity. In short, the disease at one moment wears the aspect of a fever attended with excitement, and at the next has all the characters of typhus in its latter stages; and these two forms alternating with each other, seem, if it were possible, combined in the same patient. After the fit, the patient feels a greater degree of depression than before. Vomiting often comes on at the height, or towards the end of the paroxysm. The second fit commences five or six hours after the first; and the third begins after an intermission of about the same duration, unless indeed, which not unfrequently happens, death has already closed the scene. *The third fit*

is always fatal! Peruvian bark exhibited in the largest possible doses, is the '*sacra ancora*,' on which the Roman physicians place all their hopes. During the fit, blisters and sinapisms are applied to the extremities, while the head is assiduously cooled by means of cloths dipped in cold water. The instant the first fit has ceased, bark is given, and that with the greatest possible diligence, as they do not know the moment a second fit may commence. It is always a favourable symptom that the 'patient bears the bark well; but it too often happens that the stomach immediately rejects it. When this is not the case, four, or even six ounces of bark are exhibited in the course of the day. The second fit is then so much diminished in violence, that its accession causes but little disturbance, and the patient is saved. The progress of this disease is most rapid in strong, robust, and plethoric habits. Relapses also frequently occur. In 1825, the proportion of recoveries to deaths was as 85 to 15; in other years it has been as 80 to 20. All other remedies have proved ineffectual in this fatal disorder. Venesection, emetics, opium, &c. seemed only to hasten its fatal termination, so that the physicians now place no dependence upon any thing except bark, which is used in immense quantities at Rome. The quantity used in the *Ospedale St. Spirito* often amounts daily to 40 or 50 lbs.'

'The latter statement of our author, we cannot help observing, accords ill with his previous sweeping censure, concerning the inattention prevalent in the Roman hospitals, with regard to *the bodily complaints of the patients.*

'Some successful trials had been made at Rome with the sulphate of quinine, both in this fatal, and in the common forms of ague. When there are symptoms of a deranged state of the alimentary canal, the Romans place no reliance on emetics, but cleanse the *primæ viæ* with one drop of croton oil, previously to exhibiting the bark.

'The following rules are laid down by the Roman physicians, for strangers who remain at Rome during the sickly season;—They must get up at six o'clock, and having made a light breakfast on biscuits, coffee, &c. they may go about their business until after eleven. At one o'clock they dine, and ought to sleep for a few hours after dinner. It is reckoned dangerous to be out at noon, sunrise, or sunset. Two hours after sunset, a walk is recommended, after which a light supper may be taken. At twelve, they ought to go to bed, and should sleep with but little bed-clothes. The windows of the bed-room should be kept shut during the night. Strangers are likewise recommended to indulge in cool drinks, and to be very abstemious with regard to wine, which ought to be diluted with water.

'*Phthisis* is not common at Rome, and its introduction has been attributed to the English! for it is universally believed to be contagious. When a consumptive patient dies, his clothes, furniture, and bed, are always burned. There exists too a papal bull prohibiting the sale of such articles. Scrofula is not uncommon at Rome, and calculous complaints are of rather frequent occurrence.

Professor Sisco, who has performed the operation of lithotomy on more than fifty patients, follows the method recommended by Cheselden, *i. e.* the lateral operation; his success has been considerable, and he objects in strong language to the recto-vesical operation of Vacca. The Roman surgeons boast of great success in strangulated hernia. *Sisco* never tries to heal the wound by the first intention, because he considers the cure by suppuration as the only radical one, as it produces a complete solidification of the parts, and thus prevents the necessity of afterwards wearing a truss.

'Aneurisms are not common in Rome; their cure is generally attempted according to Vansalva's method. The Roman surgeons *have hitherto never ventured to tie the artery in this disease, but always proceed at once to amputation when Vansalva's method fails!* and yet Rome is scarcely three days' journey from the residence of Scarpa!

'In syphilis, mercury is now used both externally and internally. *Buboes* are never permitted to burst spontaneously; they are always opened with the lancet.

'The doctrine of contra-stimulus has fewer advocates in Rome than in any other Italian city.

'*Bologna* has 60,000 inhabitants, a university, two civil hospitals, an orphan house, and a work-house. *Spedali della Vita* contains about 500 beds. The wards are spacious, well ventilated, and clean. Professors Comelli and Tommasini superintend the medical clinic, and Professor Venturoli the surgical. It is unnecessary for me to detail the medical practice in vogue here, as it is generally known, and the doctrines of contra-stimulus are already sufficiently familiar to the medical world, through the medium of a journal published in Bologna, under the title, '*Giornali della nuova Dottrina Medica Italiana.*' Without discussing the merits or demerits of this doctrine, I may, however, remark, that the very large doses of medicines which its advocates are in the habit of exhibiting, have universally the effect of rendering the system so difficult to be acted on, that the doses must be constantly increased, in order to produce any effects. Thus I saw a man under treatment for abominal disease, on whose bowels half a drachm of jalap, and four ounces of castor oil, had not the least effect, until their action was assisted by a purgative enema! We pass by the other hospitals, as affording nothing worthy of remark, except that their internal economy seems better regulated, than that of other Italian hospitals.

'The university reckons about 600 students. It is large and beautifully built, and contains not only a good museum of natural history, but a tolerable anatomical collection. The preparations with which it has been enriched by the present professor of anatomy, Mandini, are very fine, as are also those made by Professor Quadri, who formerly taught here, but now resides at Naples. In the wax works, I was much struck by the beauty of the pieces representing the muscles; they are the works of Lelli and Madame Fenarolini. The library contains about 150,000 volumes. The

librarian, Professor Mezzofanti, is distinguished in the literary world by his uncommon talent for languages. The Botanical Garden is the best I saw in Italy.*

'*The Kingdom of Naples.*—A glance at the state of general literature in Naples will best explain the state of medical science in that city. All foreign books, even those which have received the sanction of the Roman censors, are subjected to the revision of the Neapolitan censors. If, after a scrupulous examination, nothing is detected unfavourable to the king or church, the publication of the book is permitted, and a tax of four carolines on each volume must be paid by the publisher. This sum is exorbitant, when we consider the cheapness of Italian books. So heavy a tax is likewise imposed on public prints, that it amounts to a prohibition of all foreign journals. These regulations render the advancement of science so slow in Naples, that what has long since become obsolete in other countries, is there considered as a literary novelty. The Neapolitan physicians find it therefore impossible to keep up with the modern improvements in medicine, and consequently their practice is formed on antiquated models. Luckily for the inhabitants, the climate is so mild, that they seldom stand in need of medical aid, and may in general leave their complaints to the cure of the *vis medicatrix naturæ*. Little can be expected from an university in such a country, even though it boasts of such men as Vulpes, Quadri, and Lanza. The hospital accommodation, too, at Naples is quite disproportioned to the number of the inhabitants, which amounts to 450,000.

'Dr. Oppenheim then proceeds at some length to describe the Lunatic Asylum at Aversa, a little town, situated eight miles from Naples, on the road to Capua. This institution excels, indeed, all others in Italy; but still falls far short of similar institutions in England and Germany. The only peculiarity we think worth relating, arises from the habits and genius of the Neapolitan people. In English mad-houses, much reliance is placed in affording means of employing or amusing the convalescents. With this view, we provide the lower classes with the means of following their ordinary trades and occupations, while we offer to the rich the recreation of cultivating a garden, or reading in a library. At Aversa, what are the objects of amusement? Billiard tables, music, various petty national games, puppet-shows of all descriptions, and a variety of toys!!

'We would almost believe its inmates to be boys, not men. But men it seems they are, at least in Naples, where even the upper classes spend the whole day in the coffee-houses, or at the theatre, while the lower orders visit the puppet-show at seven o'clock in the morning, after which they dance the '*Tarantala*,' and play the *Morra*. This systematic trifling and habitual idleness afford a sufficient excuse for the indignation of the priest described in Kelly's *Memoirs*, who, having dispersed a crowd of lazaroni

* 'Over the door of the Botanical Garden at Pisa was formerly inscribed, '*Hic Argus, sed non Briareus esto.*'

assembled around a puppet-show, held up the crucifix, with which he had dealt his blows, and cried, 'Ecco il vero Polcinello,'—an exclamation which at first appears ridiculous, if not impious, but really conveys a most degrading idea of the people whom he addressed.

'The *Lombard State* forms at present a province of Austria, and the constitution of the two universities it possesses is modelled entirely according to the plan of that of Vienna. A certain course of study, which lasts for five years, is laid down, and no deviation from this plan is permitted. The disadvantages of a restrictive plan of study, which assimilates a university to a great school, are too obvious to require comment; and we cannot, therefore, help regretting with Dr. O., that it should have been lately introduced into France. Our regret is increased by observing, that this plan does not include a branch of medical study to which we owe our chief progress in anatomy and physiology, and to whose aid we are to look for important additions to pathology,—we mean comparative anatomy. When, says Dr. O., we find so important an omission, we must indulge in gloomy anticipations concerning the future progress of science in a state which was formerly so distinguished in comparative anatomy, and produced such men as Spallanzani, Valsava, Lancisi, &c.

'*Padua*, a town with 20,000 inhabitants, has one spacious hospital capable of holding 300 patients. The wards are clean, and well ventilated, and the beds are placed at a sufficient distance from each other. The clinical wards contain 24 beds. The medical department is superintended by Professor Brera; the surgical by Professor Ruggieri. The university reckons about 700 students. The building is very beautiful, and originally a palace, planned by Palladio. The cabinet of natural history is tolerable. Fabricius ab Aquapendente, Proper Alpinus, Morgagni, and other celebrated men, once ornamented this school. Brera, the present professor of the practice of physic, is a zealous advocate of the system of contra-stimulus, and of course propagates this doctrine among his pupils. It has, however, found fewer advocates among the private practitioners at Padua, than among those at Bologna.

'*Pavia* has 22,000 inhabitants. The Town Hospital is well situated, and very roomy, and contains 400 beds. It is better calculated for the purposes of an hospital than any other institution in Italy, having been originally built for the accommodation of the sick, and not like the rest, for a monastery or a palace. There are four clinical wards, viz. one for medicine, one for surgery, one for diseases of the eye, and one, (as the catalogue has it) 'per la istruzione di maestri in chirurgia e flebotomia.' Connected with the hospital is a small institution for lying-in women. The university is attended by about 400 students. The building is large, and the architecture fine. No university in Italy can boast of such rich cabinets of natural philosophy, chemistry, natural history, and anatomy. The latter, commenced by Rezia, received many valuable additions from the celebrated Scarpa, lately a professor at Pavia. Burserius, Tissot, and the two Franks, formerly taught at Pavia.

Tabular View of the Medical Sciences taught at the chief Italian Universities, and of the Professors by whom they are taught.

	Genoa.	Pisa.	Rome.	Bologna.	Padua.	Pavia.
Anatomy	Mozzini	Catellachi	Lupi	Mandini	Caldani	Panizza
Physiology	Ditto	Ditto	Bomba	Medici	Gallini	Rusconi
Therapia Generalis ..	Batto	Morelli	Cetti		Giaccomini	
———Specialis ..	Ditto	—	Valentini	Tommasini	Brera	Chiappa
Materia Medica	Mongiardini	Bianchi			Della Decima	
Medicina Forensis ..	Ditto		Falconi		Fanzago	Salvadori
Surgery	Garibaldi	Vacca-Berlinghieri	Trasmondi	Venturali	Ruggieri	Borda
Clinical Medicine ..	G. Scassi	Morelli	Matheis	Tommasini	Brera	Hildenbrand
Clinical Surgery	Giudetti		Sisco	Venturoli	Dall' Oste	Cairoli
Botany.....	—	Savi	Donarelli	Bertoloni	Bonato	Rocca
Chemistry	—	Bianchi	Morecchini	Salvigni	Melandri	Manabelli
Natural History	—	Savi Junr.	—	Ranzani	Renieri	Mangili
——— Philosophy..	—	Lichi	Barlocci	—	—	Configliachi
Institutes of Medicine	—	Barzelatti	—	—	—	
———— Surgery	—		—	—	Fabini	Cairioli
Pathology	—	Studiani	Fulchi	Ordonari	Della Decima	Chiappa
Midwifery	—		Asdrubali		Lamprecht	Bongiovanni

II. *The Art of Advertising.*

One or two of our correspondents have requested our attention to certain instances of a peculiarly delicate kind of puffing on the part of living authors, whose professional respectability either does not require, or cannot be benefited by so great a sacrifice of gentlemanly feeling. More than one physician has been reported to us as having either changed the titles of his works, in order to catch the public ear, or translated the scientific appellation of a first edition into something more intelligible to the vulgar in a second, or as having contrived to insinuate that his publication was not exclusively addressed to the professional reader, &c. &c. &c.

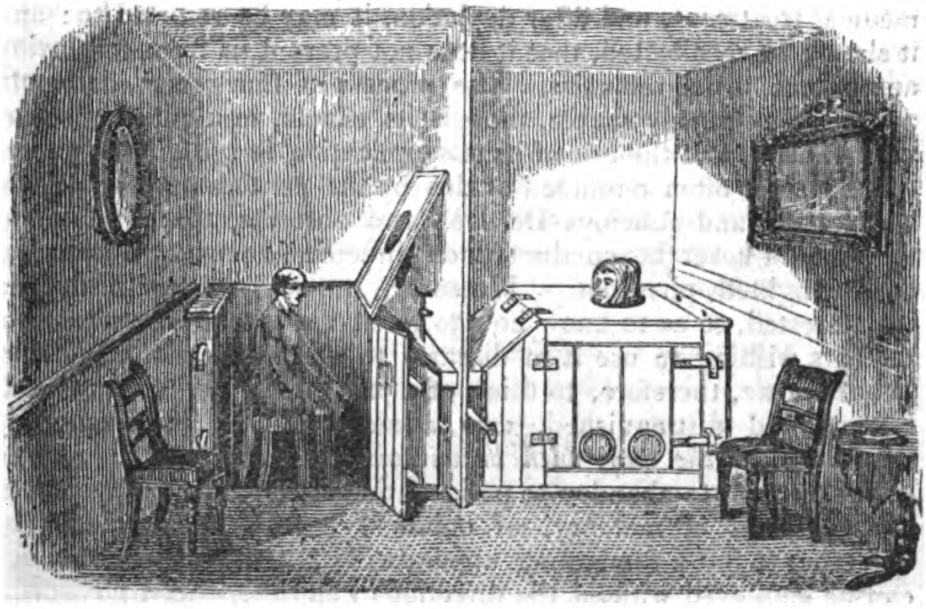
It is impossible for any of our correspondents to view many of these examples with more contempt, or some with more regret, than we do: but the history of quackery, and every day's experience, shew how vain it is to preach against any gainful arts which appeal to the over-abundant folly and ignorance of mankind. Nor should honest men care any thing about the temporary success of such manœuvres, which have ever been, and will ever be practised, by men who live but to eat, and drink, and get rich, and die, and be forgotten. To the truly respectable part of the profession, they always appear both degrading and ludicrous; by the enlightened part of the public, they are looked upon as pitiable proofs of the condition of a liberal profession; and as regards those who resort to such methods of attracting a little attention and a few fees, we are always disposed to view the *indication* as rather a lamentable one. If the offender is a young practitioner, we are always sure that he is trying to get on by means which he will find, too late, are of little avail; and if he is a practitioner already well established, we consider it an unquestionable manifestation of a practice which has by some accident suddenly reached an undue elevation, and is beginning to decline. And here, as usual, prudence is providentially engaged as the ally of virtue, and a departure from rectitude brings no solid reward; for the competitors in the career of boasting and dishonesty will always be more numerous and daring than in that of talent and exertion.

III. *On Fumigations of Sulphur, Chlorine, or other Mineral Gases.*

[By a Correspondent.]

This practice, as a therapeutic agent, has long been firmly established in various parts of the continent. The virtues of other popular remedies undergo many vacillations before they are recognised as valuable, and not unfrequently, from want of merit, judgment in the administration, or purity of the medicine, obtain various degrees of confidence with the profession, or deservedly cease to be considered valuable. Fumigations, on the contrary, at their introduction to the notice of the medical world, underwent, perhaps, the most inquisitive and patient ordeal that any other remedy ever did. Committees of medical men of known talents were formed, in different countries, to observe and report on the

effects; and numerous cases of various maladies were sought for and selected to put these remedies completely to the test. It is only needful to add, that these committees were formed by Penel, Duchanoy, Pelletan, Dumeril, Dupuytren, Leroux, Laporte, Ruffin, Olivier, Petit Radel, Thillaye, De Carro, Horn, Assalini, &c. &c. &c., all bearing testimony of the value of this mode of treatment, as a remedial agent; firstly, valuable of itself, in many cases; and, secondly, infinitely more so from the increased vigour that is given to the functions of the body whilst in the bath, enabling medicines to perform their offices which before were insufficient, in consequence of the atony or diminished powers of the constitution. With these facts before us, it seems somewhat strange that Mr. Green is the only medical man that has exclusively embraced the administration of these remedies for his practice in this metropolis. Their introduction to this country by a set of medical pretenders is surely no reason why valuable remedies should not be brought into general use, and the more praise is consequently due to Mr. Green for the complete manner in which he has formed his establishment, and conducted it so much to the satisfaction of those professional men who choose to resort to this practice as an adjunct to their usual mode of treating diseases. Of the manner of employing, and operation of these remedies, for the information of those who have not acquainted themselves with the subject, it is perhaps necessary to say a few words in explanation, and in order to convey a more clear idea, we have given a representation of the baths. In the first, a patient is merely shewn



preparing to take the bath; in the second, the patient is seen taking the bath with the face only excluded. The patient, thus seated, is submitted to an agreeable increased temperature, which in eight or ten minutes gradually quickens the circulation; but there being no surrounding weight on the surface of the body, the minute capillary

vessels are consequently in activity, and the pulse is always soft: in this state the patient remains five, eight, or ten minutes, or longer, as the case or his feelings may require. A patient thus submitted, is merely taking a bath of warm air; but when sulphur, or other medicine, is placed on the hot iron plate below the bath, slow combustion takes place, and the gas arises and surrounds the patient. It should now be borne in mind, that the patient is under considerable excitement from the temperature he has been sitting in, and from the rarefied medium, not surrounded by aqueous vapour, or the weight of water, and that the absorbent and exhalents are forced into action, and this whilst the patient is enveloped in the medicated gas. The process being considered, the advantages will be evident that must accrue in the treatment of many diseases by the judicious use of this process, aided too by the administration of internal medicines, particularly in glandular obstructions. In skin complaints the remedy is brought into immediate contact with the disease. In rheumatism and gout, particularly in atonic gout, its advantages are manifest. In most chronic diseases of old people, arising from weakened circulation, or obstructed perspiration, great benefit is likewise derived from it: and in all those diseases which are difficult to class, and for want of a better term are called anomalous, it fully deserves a trial. In obstinate intermittents, and in those diseases consequent on obstructed perspiration, the practitioner may resort to it with confidence. Indeed, to so many diseases is this remedy advisable, that it is a difficult matter to particularise the complaints in which it may not be, in some stage or other, useful. Even in some of the phlegmasiæ, with proper medical treatment, and after depletion, it may be resorted to: and it should be recollected, that it does not prevent us from employing any of our usual remedies. The process of fumigation, it would appear, is extremely simple, though its effects, in a curative sense, are powerful, and the evil of its misapplication is great; and we are consequently often reminded of this by the continental physicians. The learned and judicious Dr. De Carro observes, that 'a fumigatory should never be conducted or directed except by a judicious and enlighted physician. Moreover, he ought to be firm and disinterested, so as to know how to resist the frequent instances of patients wishing to use it in diseases to which it is not applicable. What are we, therefore, to think of a practitioner, in other respects learned and distinguished, *who would hire out his fumigating apparatus by the day, with or without his assistance!!* As well might he wish to abandon to patients themselves the employment of blood-letting, of mercury, of opium!!' And he concludes by enforcing that 'a fumigating apparatus is not an instrument which can be employed without the direction of an experienced physician; and we should take the greatest care of comparing it with a bathing-tub, which one might use according to one's pleasure, or under the superintendance of a director of baths.'*

* De Carro, Op. cit. p. 68.

IV. *Remarkable Case of* RUPTURE *of the* UTERUS, *and of the Safe Delivery of the Woman by the Cæsarian Operation.* By Dr. LUDWIG FRANK, at Parma.

ANGELA GROSSI, æt. 44. native of Parma, and the mother of five children, was taken in labour of her sixth child at the beginning of the ninth month of pregnancy, August the 9th, 1817. A midwife was called, who afforded her the necessary help; but as the patient was standing up, she was suddenly seized with vomiting and faintness, and was therefore immediately conveyed to bed by the midwife and attendants. At the instant she was laid on the bed, she felt something give way in the abdomen, and then, to use her own expression, it appeared to her as if there were two children in the womb. Under these circumstances, a surgeon was sent for, who recommended to her rest, as he conceived the sensations of the woman arose from the motions of the fœtus during the act of vomiting. But the midwife, finding that the abdomen was more and more distended, that the vomiting continued, and the breathing was difficult and interrupted, sent for Dr. Joseph Rossi, professor of midwifery. Professor Rossi, on a minute examination, decided that the uterus was ruptured; and after consulting with his father, Dr. Francis Rossi, and other practitioners in the town, he, in common with his colleagues, decided that the Cæsarean operation was absolutely indicated in the present case. The operation was performed two hours after the rupture of the uterus is supposed to have taken place, by Professor Cecconi, in the presence of the two Drs. Rossi, Professor Pizetti, and others. The incision was made on the left side of the abdomen, just in the spot where the feet of the child could be felt. After the incision was made, the feet immediately presented themselves to view; and the living child, together with the placenta, were then removed. Forty days after the operation, the patient was perfectly restored, and able to walk out. Her menses some time after this appeared; and in the space of three years from this period, the same woman was delivered of a seven months' child, which lived fourteen days. Over the spot where the incision was made in the abdomen, a cicatrix of the size of an apple remained, which, although it could never be completely healed, caused the patient very little inconvenience.

This case Dr. Frank considers in some respects very remarkable, and he has therefore determined on sending the details to the Medico-Chirurgical Society at Marseilles. He is at present only acquainted with two similar difficult cases, both of which occurred to the celebrated surgeon, M. Lamnbron, in Orleans. In the one case he performed the operation eighteen hours, and in the second two hours after the rupture of the uterus.—Vide Art. *Rupture de l'Uterus*, in the *Dictionnaire des Sciences Médicales*, tom. xlix. p. 249. (*Salzburger Medic. Zeiting. Feb.* 1825.)

V. *Transfusion of Blood.*

A VERY ingenious apparatus for this operation has been constructed by Mr. Scott, Surgeon, of Newington Causeway, by which trans-

fusion of blood is rendered extremely simple. The pipe which passes into the vein is somewhat spear-pointed, and enters readily into the opening made by the lancet; the necessity, therefore, of laying bare the vein, as hitherto practised, is thereby obviated, which we consider an important circumstance. The propelling force is given with Read's patent syringe, into which the blood is conveyed by a metallic stem that issues from the bottom of the syringe, and, rising vertically, terminates in an expanded or funnel-shaped mouth, which receives the blood as it flows from the arm of the person who supplies it. The syringe being furnished with valves, admits of any quantity being injected that may be considered necessary, without removing the apparatus to re-supply it, thereby occasioning neither loss of time, nor opportunity for coagulation of the blood. We have seen the apparatus, and think it very eligible for the operation.

VI. *Non-mercurial Treatment of Syphilis.*

In a late number of Gräafe's and Walther's Journal,* we find an article by Dr. Otto, of Copenhagen, on syphilis, particularly the treatment of it without mercury, and the prevalence of this practice in England, in which Dr. O. has drawn the following conclusions.

1. That the cure of syphilis, without mercury, has been asserted by so many authorities, that the fact can no longer be doubted. If, then, the disease could formerly be cured without mercury, it may certainly now be much easier, as it has lost much of its violence and obstinacy.

2. Syphilis can undoubtedly be radically cured in this manner; but then the cure is of longer duration, and the diet requires considerable restriction.

3. The secondary symptoms, and a return of the complaint, are certainly more frequent; but the symptoms are not so difficult of removal, and the treatment has a much more speedy effect.

4. As the treatment without mercury requires a longer time, it appears more practicable in hospital than in private practice; and, on the other hand, the patient can be better watched in a hospital, which, on account of the diet, is of great importance.

5. As ulcers on the genitals are often not syphilitic, and the use of mercury is contra-indicated from a predisposition to scrofula or phthisis existing in the individual, it is consolatory to learn, from the results of experience, that this medicine is not always necessary, and that a radical cure, by more simple and innocent means, can sometimes be effected. Where, however, the physician is anxious to avoid the possible evils which mercury is capable of producing, and also avoid loss of time, there remains a middle way, namely, to employ mercury — whose specific action can scarcely be denied — in moderate doses.

It is gratifying to see the prejudices respecting the use of mercury gradually diminishing, especially in the north of Europe, where they are the strongest. In the south of Germany, the

* B. vii. H. 2.

change which has of late taken place in the minds of several surgeons there is so considerable, that the non-mercurial plan of treating syphilis has in several places been carried into execution. We cannot omit noticing here a work which has lately appeared at Stuttgart and Tubingen, by Dr. Huber,* in which the non-mercurial plan is advocated.

VII. *Medical Jurisprudence.*

We copy the following paragraph from the newspapers:—'An inquest was lately held at Southampton, on the body of a child which had been under the care of a *druggist*, who, according to act of Parliament, was not entitled to practise. It appeared the child had died of general debility. The coroner in charging the jury, strongly commented on the impropriety of a druggist, whose education could not qualify him to do so, prescribing for diseases, the nature of which he did not understand; and observed, that he should in future consider it his duty, as coroner, to institute judicial inquiry where any one died who had not proper medical assistance. The verdict returned was, 'That the deceased died by the visitation of God; *but that its death was hastened by the want of earlier and proper medical advice.*''

We imagine this notice of the coroner's will make the Southampton druggists a little more cautious. The *practice* of druggists is carried on, in many parts of the country, to a very improper extent, and ought to be checked. The druggists have nothing to complain of, and might do very well without defrauding the apothecary.

VIII. *Neuralgia.*

A patient, afflicted with neuralgia of the sinciput, the consequence of a contusion, was cured, under the care of M. Lisfranc, by the removal of the portion of the integuments covering the painful part. M. Gimelle says, that in many cases a simple incision down to the bone, left to suppurate, has been sufficient.—(*Nouv. Biblioth. Méd., Mars* 1826.)

IX. *Defective Conformation of the Uterus.*

MM. Moreau and Gardien lately met with the following peculiarity in an otherwise well-formed uterus: there was a passage from the right Fallopian tube through the thickness of the uterus, opening into the cavity of its neck. This accidental formation may, it is considered, account for instances of the produce of conception being found in the middle of the tissue of the uterus.

X. *Mania.*

At a meeting of the French Institute in the latter end of February, M. Pinel, the son, we believe, of the celebrated Pinel, read the first part of a work, of which he is the author, on the subject of the *physical causes* of mental alienation. We have not yet seen the work, nor are we aware that it has yet been published; but we

* Bemerkungen über die Geschichte und Behandlung der Venerischen Krankheiten von Dr. V. A. Huber, 1825, in 8vo.

hope, if it is at all worthy of the name of the author, it will not be withheld. The general conclusion of the work is stated to be, that mania, melancholia, and dementia, should be regarded as three periods of one and the same disease.

XI. *On the Use of Piperin in Fevers.*

Louis Frank, Wolf, and several other German physicians, have, it is well known, spoken highly of pepper in the cure of intermittents. Dr. Gordini, of Leghorn, has lately published an account of his success with piperin in cases of periodical fever, in which the most active febrifuge medicines, and particularly the sulphate of quinine, had been employed without effect. The piperin was given in the dose of seven or eight grains, in powder or pills.—(*Nouv. Biblioth. Méd., Mars* 1826.)

Clinical Report of the most prevalent Diseases during the preceding Month.

May has been a remarkably dry and fine month. The wind has blown almost continually from the east and north-east, and been very warm. Fires have been generally suspended for ten days or a fortnight. Some heavy rain fell upon the 25th.

The extreme distress in the mercantile world, together with the heat of the weather, appear to have given rise to a more than usual proportion of affections of the head. Few cases of actual apoplexy have fallen under our notice, but very many have presented themselves complaining of headach, giddiness, noise in the ears, with a full pulse, &c. It is scarcely necessary to add, that antiphlogistic treatment has been pursued, and in almost every case with benefit.

Asthenia, that state of the digestive organs and sensorium to which Dr. Bateman assigned this name, and which he referred to bad and deficient nutriment, has also been more frequent. The number of those who, in manufacturing districts cannot obtain meat daily, as they have been accustomed to do, is indeed fearfully increased; at present, however, the only apparent consequence, in a medical view, is the increase of cases of asthenia.

Towards the latter part of the month, pulmonary complaints, which had almost disappeared, became again more general and severe, and were more frequently attended with an œdematous state of the extremities. This perhaps may be attributed to the heat.

Measles have been very general, and, where properly treated, mild. Among the poor, however, as usual, they have been very fatal, and their sequelæ much more important than in the upper classes. Among individual cases, we have seen an instance of neuralgia, which appeared to us worthy of notice from the pains not being confined to the face. It occupied the pes anserinus for the most part, and was most excessively severe, and continued in this situation for several months. Within the last fortnight, similar pains have seized upon the knee of the same side. The general health was, at the same time, much deranged. The carbonate of iron, with purgatives, has already been beneficial.

An opportunity has been offered to us, also, of examining the body of a man who had long been subject to the symptoms of angina pectoris, and who died suddenly. There was no organic disease whatever throughout the body. The heart was perfectly empty, and the interior lining of the ventricles even bleached. None of the cavities of the heart contained any blood.

Slight fever has prevailed to a considerable extent during this month.

MONTHLY RECORD OF WORKS RECEIVED FOR REVIEW.

1. Practical Observations on the Convulsions of Children. By John North, Surgeon-Accoucheur, Member of the Royal College of Surgeons. 8vo. Pp. xii. 282. Burgess and Hill, London. 1826.

We can recommend this work to the notice of our readers. It will come before us in a more particular manner on an early occasion.

2. A Treatise on the Physiology and Diseases of the Ear; containing a Comparative View of its Structure and Functions, and of its Various Diseases, arranged according to the Anatomy of the Organ, or as they affect the External, the Intermediate, and the Internal Ear. Fourth Edition, with considerable Additions and Improvements. By John Harrison Curtis, Esq., Aurist to His Majesty, Surgeon to the Royal Dispensary for the Diseases of the Ear, Lecturer on the Diseases of the Ear, &c. &c. 8vo. Pp. xxxvi. 236. Underwoods, London. 1826.

The number of editions through which Mr. Curtis's work has passed, is a sufficient proof of its value. We perceive he has enriched the present edition with those facts and observations connected with his subject, which have recently been published in this country and on the continent. The cases which illustrate the work are instructive.

3. An Exposition of the State of the Medical Profession in the British Dominions; and of the Injurious Effects of the Monopoly, by Usurpation, of the Royal College of Physicians in London. 8vo. Pp. 380. Longman, London. 1826.

This work has the following motto:—"All men possessed of uncontrolled discretionary power, leading to the aggrandisement and profit of their own body, have always abused it; and I see no particular sanctity in our own times, that is at all likely, by a miraculous operation, to overrule the course of nature."—BURKE. The work is very neatly inscribed to the Right Hon. Robert Peel. It will be reviewed in our next number.

4. An Inquiry concerning that Disturbed State of the Vital Functions usually denominated Constitutional Irritation. By Benjamin Travers, F.R.S. Senior Surgeon to St. Thomas's Hospital, President of the Hunterian Society of London, Honorary Member of the Royal Medical Society of Edinburgh, and of the Medico-Chirurgical Society of Aberdeen, &c. &c. &c. 8vo. Pp. x. 556. Longman, 1826.

5. Practical Observations in Surgery, more particularly as regards the Naval and Military Service. Illustrated by Cases, and various Official Documents. Second edition, considerably enlarged. By Alexander Copland Hutchison, late Surgeon to the Royal Naval Hospital at Deal; Member of the Medical and Chirurgical Society of London; Corresponding Member of la Société Médicale d'Emulation of Paris; Senior Surgeon to the Westminster General Dispensary; Surgeon to his Majesty's Dock-yard Sheerness; and to his Royal Highness the Duke of Clarence, &c. 8vo. Pp. xvi. 430. Underwoods, London. 1826.

6. A correct Report of the Speeches delivered by Mr. Lawrence, as Chairman at two Meetings of Members of the Royal College of Surgeons, held at the Freemason's Tavern. With an Appendix, containing the Reso-

lutions agreed to at the first Meeting; and some illustrative Documents. Published at the request of the Committee appointed at the first meeting. 8vo. Pp. 135. Callow and Wilson, London. 1826.

7. Medical and Surgical Cases selected during a Practice of Thirty-nine Years. By Edward Sutleffe, Queen Street, London. Vol. II. Printed for the Author. 8vo. Pp. 456. Hamilton and Co. London. 1825.

"In every work regard the writer's end."

8. The Surgeon-Dentist's Anatomical and Physiological Manual. By G. Waite, Member of the Royal College of Surgeons. 8vo. Pp. 220. Callow and Wilson, London. 1826.

9. The Medical Evidence relative to the Duration of Pregnancy, as given in the Gardner Peerage Cause before the House of Lords; with Introductory Remarks and Notes. By Robert Lyall, M.D., F.L.S., &c. &c. &c. 8vo. Burgess and Hill. 1826.

10. An Essay on Cupping, &c. &c. By Charles Kennedy, Surgeon. 8vo. Pp. 68. With a Plate. Jackson, London. 1826.

11. An Engraved Plate of the Eye. By J. Stewart, from a Drawing by A. G. Rowlands, after the Plates of Zinn and Soemmering, and used at Mr. H. Mayo's Lecture-Room, Berwick Street. Burgess and Hill.

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——— Cassiæ	5	0
——— Caryophilli	4	6
——— Cajuputi	4	0
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——— Ipecacuanhæ	4	0
——— Opii	8	0
Unguentum Hydrargyri fortius	3	8
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THE METEOROLOGICAL JOURNAL,

From the 19th of APRIL, 1826, to the 20th of MAY, 1826.

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			9 A. M.	Max.	Min.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	9 A. M.	2 P. M.	10 P. M.
20			55	61	42	29 74	29 54	66	68	ENE	SW	Fine	Fine	Fine
21			60	63	52	29 54	29 54	61	63	SSW	ENE	——	——	Fair
22	●		61	65	41	29 50	29 62	65	68	SSE	WNW	——	——	Rain
23			50	56	38	29 65	29 72	71	61	WNW	WNW	Clo.	Fair	Fine
24			45	56	39	29 76	29 82	65	61	NNW	NNW	Fine	Fine	Fair
25			44	55	42	29 88	29 73	65	63	WNW	W	——	Rain	Rain
26			50	53	40	29 56	29 53	59	59	NNW	ENE	Fair	Fair	Ovcst
27		25,	43	52	34	29 35	29 62	75	75	SSE	NNW	Rain	Rain	Fair
28			40	49	32	29 75	29 84	66	63	NW	NNW	Fair	Fine	Fine
29	☾		43	52	33	29 88	29 98	65	64	N	N	Clo.	Fair	Fair
30			45	53	39	30 01	30 12	67	65	N	NNE	Fair	Fine	Fine
1			45	54	36	30 15	30 08	63	69	N	N	——	——	——
2		10,	46	60	43	30 00	29 92	71	64	N	SE	——	——	——
3			48	49	40	29 91	29 97	76	66	NE	NNE	——	Rain	——
4			47	48	41	29 94	29 94	65	68	NNE	N	——	Fair	Fair
5			47	52	40	29 90	29 98	72	69	NNE	N to E	Clo.	——	——
6		5,	43	48	39	29 90	29 93	68	76	NNW	NNE	——	Rain	——
7	○		49	52	42	29 93	29 93	70	80	NE v.	NNE	Fine	Fine	Fine
8			52	60	39	29 93	29 94	70	61	ENE	NE	——	——	——
9			51	60	45	29 94	29 93	61	60	NE	SE	——	——	——
10			57	63	49	29 95	29 93	60	60	NE	ESE	——	——	Fair
11			51	60	43	29 96	30 05	65	64	E	E	sRain	——	——
12			51	54	43	30 10	30 16	65	63	NNE	NE	Fine	——	——
13		51,	47	56	39	30 15	30 04	63	68	ENE	E	——	——	——
14	☽		53	58	41	29 98	29 98	67	65	E	E	——	——	Fine
15			54	57	42	29 99	30 00	63	68	NNE	SE	——	——	——
16			49	64	51	29 99	29 95	78	64	ESE	WSW	——	——	——
17			64	68	56	29 98	30 00	60	66	NW	NNW	——	——	Fair
18			62	70	51	30 00	29 87	72	65	W	SW	——	Rain	——
19		17,	61	68	51	29 78	29 62	66	60	SW	ESE	——	Fine	Rain

The quantity of rain fallen in the month of April was ·76 of an inch.

NOTICES TO CORRESPONDENTS.

The Readers of the Medical Repository may perceive, from this Number, that it is our intention to extend our monthly limits to at least six whole sheets, or 96 pages, and to print the greater part of the work in a closer and more uniform type than formerly, which will be equal to a still farther extension of the limits of the work.

Several Communications are received, and are under consideration.

Literary Notices, &c. cannot be inserted in the body of the work, unless with a very few exceptions, which will rest with the Editors.

Correspondents, and authors of works, or of papers in other Journals, who may wish to have their productions noticed, may send them under cover (post paid) to the Editors, 1 Bolstrode Street, Cavendish Square, or to the Publishers', Fleet Street.

The Index to the preceding Volume will be delivered with the next Number.

*** Communications, and Works for Review, are requested to be addressed (post-paid) to the Editors, to the care of Messrs. T. and G. Underwood, 32 Fleet Street.

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