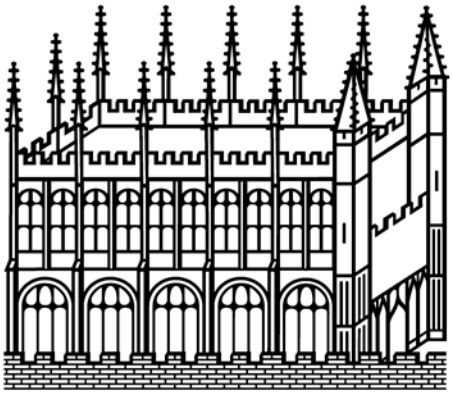


Bodleian Libraries

UNIVERSITY OF OXFORD

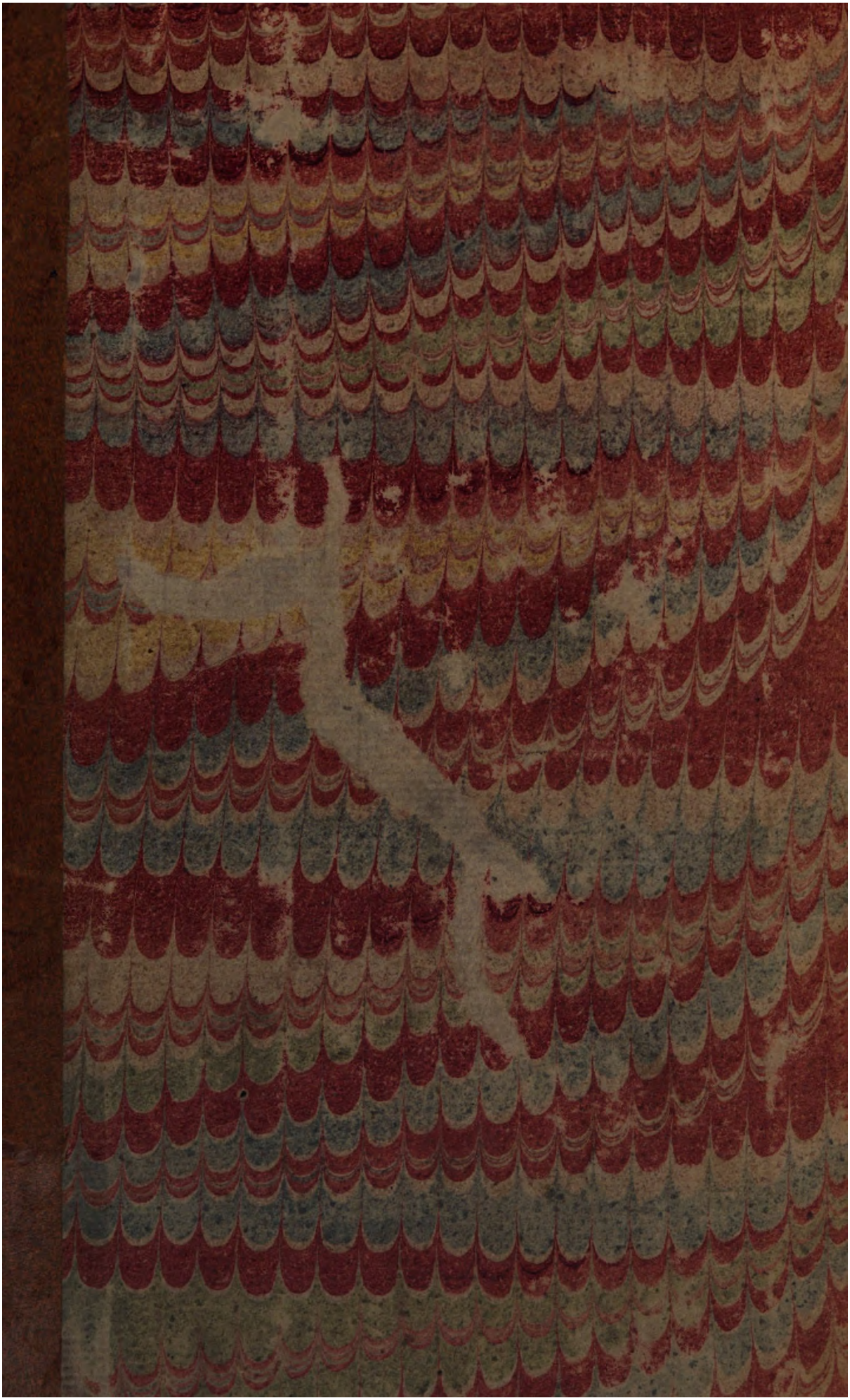
This book is part of the collection held by the Bodleian Libraries and scanned by Google, Inc. for the Google Books Library Project.

For more information see:

http://www.bodleian.ox.ac.uk/dbooks



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 2.0 UK: England & Wales (CC BY-NC-SA 2.0) licence.



Per 7.D

P. R.

R.

Soc. 15084 e. 82/8

MEDICAL COMMENTARIES,

FOR THE YEARS 1781-82:

EXHIBITING

A CONCISE VIEW OF THE LATEST AND MOST IMPORTANT DISCOVERIES IN MEDICINE AND MEDICAL PHILOSOPHY.

COLLECTED AND PUBLISHED

BY

ANDREW DUNCAN, M.D.

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, EDINBURGH; AND MEMBER OF THE ROYAL SOCIETIES OF MEDICINE, OF PARIS, COPENHAGEN, EDINBURGH, &c.

Neglecta reducit, ſparſa colligit, utilia ſelegit, neceſſaria oſtendit, ſic utile. BAGLIVI.

VOLUME EIGHTH.

LONDON:

PRINTED FOR CHARLES DILLY, IN THE POULTRY.

M,DCC,LXXXIII.


BIBLIOTHECA BODLEIANA
BODL. LIB.

ADVERTISEMENT.

WHEN the firſt Part of this Volume was publiſhed, ſeveral circumſtances led me to be apprehenſive that I ſhould not be able to finiſh the remaining Parts with all the regularity I could have wiſhed. But I little imagined, that the interruption would have been unavoidably protracted for ſo long a time. After the delay which neceſſarily took place, I have thought it better to publiſh the whole remainder of the Volume at once, than in three ſeparate Parts. And I now propoſe, that, in place of Quarterly Numbers, this Publication ſhall hereafter be continued under the form of an Annual Volume. But it may in future happen, that from the want either of time or materials, I ſhall not be able to accompliſh my intentions even on this plan. In that event I ſhall probably, as on the preſent occaſion, publiſh in one Volume materials collected during two or even more years. To enable me, however, to conduct this Publication in future with that regularity which is to be wiſhed for, I beg leave to take this opportunity of ſoliciting the

Aſſiſtance of all who are zealous for the Improvement of Medicine, and for the Extenſion of uſeful Knowledge, but particularly of thoſe whoſe Remarks have formerly enriched this Work. The continuance of that aſſiſtance will be conſidered as a particular favour by their moſt obedient Servant,

ANDREW DUNCAN.

Edinburgh, May 12. 1783.

CONTENTS

OF

VOLUME EIGHTH.

PART I. SECT I. *Account of New Books.*

I. *Diſſertatio de utilitate electriſationis in arte medica, ſeu in curandis morbis. Auctore* Joanne Bohadſch. Page 7

II. *Specimen inaugurale medicum, ſiſtens experimenta quædam, quibus conſtitit, eas partes eſſe ſenſu præditas, quibus Hallerus, cum aliis quibuſdam, omnem ſentiendi facultatem cum irritabilitate denegat. Auctore* Ignatio Radniczky. 16

III. *Obſervations on the different methods of treating the venereal diſeaſe. By* William Deaſe, *Surgeon to the united Hoſpitals of St Nicholas and St Catharine,* Dublin. 25

IV. Henr. Fridr. Delii, *Prof. Erlang.* &c. *Diſſertatio de taraxaco, præſertim aquæ ejuſdem per fermentationem paratæ, eximio uſu.* 35

V. *Obſervations on the cure of the gonorrhœa. By* Samuel-Foart Simmons, M. D. F. R. S. *&c.* 42

VI. *A treatiſe of midwifery, comprehending the whole management of female complaints, and the treatment of children in early infancy; to which are added, preſcriptions for women and children, and directions for preparing variety of food and drinks adapted to the circumſtances of lying-in women.* *By* Alexander Hamilton, *Profeſſor of Midwifery in the Univerſity of Edinburgh, and Member of the Royal College of Surgeons.* Page 52

VII. *An account of a method for preſerving water at ſea from putrefaction, and of reſtoring to the water its original pleaſantneſs and purity, by a cheap and eaſy proceſs: To which is added, a mode of impregnating water in large quantities with fixed air, for medicinal uſes, on board ſhips and in hoſpitals; and likewiſe a proceſs for the preparation of artificial yeaſt.* *By* Thomas Henry, F. R. S. *&c.* 63

SECT. II. *Medical Obſervations.*

I. *The hiſtory of a caſe, in which worms in the noſe, productive of alarming ſymptoms, were ſucceſsfully removed by the uſe of tobacco.* *By* Mr Thomas Kilgour, *Surgeon in* Jamaica. 75

II. *Account of a new method of treating dropſy.* *By* Mr John Ring, *Surgeon, New Street, Hanover Square,* London. *Communicated in a letter to* Dr Duncan. 83

III. *An*

III. *An obſervation on opening the abdomen and thorax of a young Lady, who died after a very ſhort illneſs; communicated to* Dr Duncan *by* Mr Richard Paxton, *Surgeon at Maldon in Eſſex.* Page 90

SECT. III. *Medical News.*

1. *Remarks reſpecting the operation of cutting the ſymphyſis pubis,* 95
2. *Account of the ſucceſsful treatment of hydrocephalus internus, by means of the vapour-bath.* 106
3. *Account of new Swediſh medical journals.* 109
4. *Account of Dr* Gaubius. 111
5. ——— *of Dr* Lieutaud. 112
6. ——— *of Mr* Andrew Blackall. 113
7. *New members admitted into the College of Phyſicians and Surgeons in Edinburgh.* 114

SECT. IV. *Liſt of New Books.* 115

PART II. SECT. I. *Account of New Books.*

I. *Les avantages de l'inoculation, & la meilleure methode de l'adminiſtrer.* Ouvrage traduit de la diſſertation Latine, couronnée par l'Academie Royale des Sciences, Inſcriptions & Belles-Lettres de Toulouſe; & compoſée par M. *P. Camper*, Docteur en Mede-

cine, Profeſſeur d'Anatomie, de Chirurgie, & de Medecine, dans l'univerſité de *Groningue*; des Academies de Paris, de Londres, de Harlem, *&c.* Page 129

II. *Obſervations, medical and political, on the ſmall pox, and the advantages and diſadvantages of general inoculation, eſpecially in cities: And on the mortality of mankind at every age in city and country,* &c. *By* W. Black, M. D. 141

III. *A treatiſe on ſympathy, in two parts.* Part I. *On the nature of ſympathy in general, and of antipathy and the force of imagination.* II. *On febrile ſympathy and conſent, and on the balance and connection of extreme veſſels. By* Seguin-Henry Jackſon, *Member of the Royal College of Phyſicians,* London; *and of the Royal Medical Society,* Edinburgh; *and Phyſician to the* Weſtminſter General Diſpenſary. 150

IV. Jo. Wences Nachtigal, *Diſſertatio de ſubmerſis.* Vid. *Faſciculus quartus operum minorum medicorum,* Franciſci Xav de Waſſerberg. 162

V. *Obſervations on the ſuperior efficacy of the red Peruvian bark, in the cure of agues, and other fevers, interſperſed with occaſional remarks on the treatment of other diſeaſes by the ſame remedy. By* William Saunders, M. D. *Member of the Royal College of Phyſicians in* London, *and Phyſician to* Guy's *Hoſpital.* 167

VI. *An account of ſome experiments on mercury, ſilver and gold, made at Guildford in May* 1782, *in the laboratory*

boratory of James Price, M. D. F. R. S. *To which is prefixed, An abridgment of* Boyle's *account of the degradation of gold.* Page 176

VII. *An account of the jail-fever, or typhus carcerum, as it appeared at* Carliſle *in the year* 1781. *By* John Heiſham, M. D. 190

VIII. Antonii Brugmans *Magnetiſmus, ſeu de affinitatibus magneticis obſervationes academicæ.* 202

SECT. II. *Medical Obſervations.*

I. *Obſervations on regimen and preparation under inoculation, and on the treatment of the natural ſmall pox, in the Weſt Indies. To which are added, Strictures on the Suttonian practice; in a letter to Dr* Andrew Duncan. *By* James-Makittrick Adair, *Fellow of the Royal College of Phyſicians at* Edinburgh. 211

II. *Facts and obſervations on different medical ſubjects. By Mr* R. M'Cauſland, *Surgeon to the King's or 8th Regiment of Foot.* 247

III. *A curious caſe of a very remarkable and ſurpriſing recovery in a private ſoldier of the ſecond battalion, 73d regiment, ſerving in Gibraltar,* 1781,—*attended with a fracture of the cranium, requiring the trephine,—a compound fracture of the lower extremity, requiring amputation,—and ſeveral other wounds. By Mr* Andrew Cairncroſs, *Surgeon to the ſecond battalion, 73d Regiment.* 296

IV. *Obſer-*

IV. *Obſervations on canine madneſs. By Dr* Houlſton *of* Liverpool. *Communicated to Dr* Duncan. P. 304

V. *Hiſtory of a caſe of rheumatiſm, cured by electricity. By Dr* Simon Lanphier, *Phyſician, Waterford.* 314

VI. *The hiſtory of a caſe, where the pharynx was wounded through the muſcles and membranes which connect the larynx and os hyoides, without proving fatal. By the late* Dennis Ryan, M. D. *Communicated in a letter to* Samuel-Foart Simmons, M. D. F. R. S. *Phyſician in* London, *and by him to Dr* Duncan. 319

VII. *Account of the ſucceſsful operation of the trepan on the left temple, with the extraction of a ſplinter of ſtone, penetrating the dura mater. By Mr* George Borthwick, *Surgeon, 14th Regiment Light Dragoons.* 322

VIII. *The hiſtory of a caſe of hydrocephalus, ſucceſsfully treated by the uſe of mercury. By Dr* Alexander Eaſon, *Phyſician, Mancheſter.* 325

IX. *Hiſtories of two caſes: The diſcharge of a large calcareous concretion, and the extraction of the bones of a fœtus by the rectum. By Dr* Samuel Fitzgerald, *Phyſician at Mullingar.* 329

X. *The hiſtory of a caſe of hydrocephalus ſucceſsfully treated by mercury. By Dr* Thomas Aery, *Phyſician,* Whitehaven. 332

XI. *Obſervations and experiments on the effects of different anthelmintics applied to earth-worms; communicated to Dr* Duncan, *in a letter from Dr* Thomas Fowler, *Phyſician at* Stafford. 336

XII. *Obſer-*

XII. *Obſervations on the Plague, quarantines,* &c. *in a letter from Dr* Matthew Guthrie, *Phyſician at* St Peterſburgh, *to Dr* Duncan. Page 345

SECT. III. *Medical News.*

1. *Remarkable inſtance of convulſive affections in two young ladies, being induced from a very uncommon cauſe; in a letter from Dr* Fitzpatrick *of* Dublin *to Dr* Duncan. 364
2. *Reſult of a number of experiments made on the air contained in the Buxton waters; in a letter from Dr* Pearſon, *Phyſician at* Doncaſter, *to Dr* Duncan. 367
3. *Remarkable particulars reſpecting an old woman; communicated in a letter to Dr* Duncan *from Dr* Biſſet *of* Knayton. 370
4. *Account of a new tranſlation of the genera and ſpecies plantarum of* Sir Charles Linnæus. 377
5. *Account of an intended tranſlation of Mr* Lavoiſier's *phyſical and chemical eſſays.* 384
6. *Account of Dr* Monro's *obſervations on the ſtructure and functions of the nervous ſyſtem.* 384
7. *Account of ſome intended publications at* Paris. 389
8. ——— *of new anatomical tables of the blood-veſſels, by Mr* Bell *at* Edinburgh. 390
9. *Account of new editions of the elements of the practice of midwifery, by Dr* Hamilton; *of the firſt lines of the practice of medicine, by Dr* Cullen; *and of the pharmacopœia*

pharmacopœia of the Royal College of Phyſicians at Edinburgh. Page 392
10. *Obſervations on the freezing of mercury in Hudſon's Bay.* 392
11. *Account of a plan for general inoculation at* Liverpool. 393
12. *Account of a new botanical work, by Profeſſor* Pallas, *under the auſpices of the Empreſs of* Ruſſia. 403
13. *Account of prize-queſtions, at Edinburgh, Paris, Harlem,* &c. 409
14. *Account of a new edition of the new diſpenſatory, originally publiſhed by Dr* Lewis. 415
15. *Account of the death of Sir* John Pringle. 416
16. ——— *Dr* Dawſon. 417
17. ——— *Dr* Solander. 418
18. ——— *Dr* Ryan. 420
19. ——— *Dr* Drummond. 420
20. ——— *Dr* Young. 423
21. ——— *Dr* Dugud Leſlie. 425
22. ——— *Dr* Hunter. 426
23. ——— *Mr* Pattiſſon. 410

SECT. IV. *Liſt of New Books.* 434

MEDICAL COMMENTARIES.

EXHIBITING

A conciſe VIEW of the lateſt and moſt important DISCOVERIES in MEDICINE and MEDICAL PHILOSOPHY.

COLLECTED AND PUBLISHED

BY

ANDREW DUNCAN, M. D.

Phyſician to the Public Diſpenſary, and Teacher of Medicine in EDINBURGH, Member of the Royal Societies of Medicine, of PARIS, COPENHAGEN, EDINBURGH, &c.

Neglecta reducit, ſparſa colligit, utilia ſelegit, neceſſaria oſtendit, ſic utile. BAGLIVI.

PART I.

For the Year 1781.

THE SECOND EDITION.

LONDON:

PRINTED FOR CHARLES DILLY;
IN THE POULTRY.

M,DCC,LXXXV.

TO THE

READERS of the *Medical Commentaries.*

GENTLEMEN,

AT the commencement of the laſt volume of theſe Commentaries, a change was made in the title-page, for reaſons with which I reckoned it unneceſſary to trouble you. When I then, however, aſſumed to myſelf the compilation of a work which had formerly been preſented to the public as coming from the hands of a ſociety, I obſerved that the execution of the taſk I had undertaken would not hereafter be more dependent on my own exertions than it had been formerly. And accordingly, I have not been diſappointed, either in aid from correſpondents at a diſtance, or in permanent aſſiſtance from ſome medical friends at this place. Notwithſtanding this, however, it is now incumbent on me to ſolicit your indulgence for the

irregular manner in which the publication has been conducted during laſt year.

This has in ſome meaſure ariſen from circumſtances which it was impoſſible for me to prevent. But it has alſo, in part proceeded from my poſtponing, on different occaſions, the conduct of this undertaking, to engagements of a more urgent nature, and which did not admit of delay. And although it is my intention to continue this publication with as much regularity as I am able, yet I cannot promiſe that ſimilar cauſes may not hereafter be productive of ſimilar interruptions. May I therefore hope, that you will neither be diſappointed nor offended ſhould ſuch irregularities again occur.

I flatter myſelf, however, that whatever irregularities may take place, will in no degree diminiſh the utility of this work. I am fully ſenſible, that if the materials and opportunities of information which I poſſeſs, were in the hands of any one of greater abilities, and more leiſure, the advantages to be derived from a careful peruſal of theſe Commentaries might be much increaſed. As far, however, as my time or talents can afford ſatisfaction to the liberal and candid mind, they ſhall be exerted with unremitting induſtry. Such exertions

exertions will be a more powerful apology for future imperfections in this work, than any thing elſe that could be urged. And while I employ this argument for ſoliciting your indulgence, I hope it may alſo have ſome weight in procuring your aſſiſtance. When facts occur to you in practice, which, while they convey ufeful information to yourſelves, may alſo be inſtructive to others; the tranſmiſſion of theſe for publication in the Medical Commentaries, will confer a ſingular obligation on

Your moſt obedient Servant,

EDINBURGH,
June 1. 1781.

ANDREW DUNCAN.

MEDICAL COMMENTARIES.

SECT. I.

Account of New Books.

I.

Diſſertatio de utilitate Electriſationis in Arte Medica, ſeu in curandis Morbis. Auctore Joanne Bohadſch. Pragæ & Dreſdæ. 4*to*.

THE treatiſe before us we find divided into four different chapters.

I. De effectu vis electricæ in diverſis corporibus.

II. De theoria morborum in quibus electriſatio potiſſimum adhibenda eſt.

III. De therapeia hemiplegiæ.

IV. De obſervationibus hemiplegicorum per electriſationem curatorum.

In the firſt of theſe, our Author enumerates a great many experiments on the various effects of electricity on different fluids and ſolid bodies; by all of which it appeared evident that electricity, when applied to any ſubſtance for the ſpace of ſeveral hours, has a conſiderable influence in producing a diminution of its weight.

Of theſe experiments we ſhall here preſent our readers with a ſhort view.

Four ounces of river-water being put into a glaſs veſſel of four inches diameter, and being kept in an electrified ſtate for the ſpace of five hours, was in that time found to have loſt eight grains of its weight; whereas, the ſame quantity of water, contained in a veſſel of the ſame ſize, to which electricity was not applied, in the ſame ſpace of time, loſt only three grains of its weight.

The ſame experiment being repeated, with the water contained in a tin, inſtead of a glaſs veſſel, the reſult was found to be exactly ſimilar, with this difference, that the water in the elec-

trified

trified tin veſſel, in the ſame ſpace of time, was found to have loſt ten grains of its weight in place of eight.

In the ſame ſpace of time, and in ſimilar circumſtances, the following articles being kept in an electrified ſtate, were affected as follows:

Four ounces of olive oil,	-	loſt nothing.
of vinegar,	-	three grains.
of water impregnated with nitre,		three grains.
of new milk,	-	four grains.
of urine,	-	nine grains.
of ſpirit of turpentine,		ten grains.
of ſpirit of wine,		ten grains.
of vol. ſp. of ſal amm.		thirteen gr.

The ſame experiments were repeated with the ſame liquids contained in veſſels of leſs diameters, when the quantity of fluid loſt by evaporation was found to diminiſh in proportion to the ſize of the veſſel made uſe of.

A pear weighing about four ounces and a half, being kept in an electrified ſtate for the ſpace of full five hours, loſt ſix grains of its original weight; whereas a pear of exactly the ſame weight, to which no electricity was applied,

ed, did not in that ſpace of time loſe any of its weight.

A piece of dried oak wood being kept in a ſimilar electrified ſtate for the ſame ſpace of time, did not loſe any of its original weight.

A bundle of iron keys, -	loſt nothing.
Two new laid eggs, -	two grains.
A piece of new-baked bread,	three grains.
A piece of raw beef, -	three grains.
A piece of boiled beef, -	four grains.
A piece of moiſt ſponge, -	ſix grains.
A branch of grapes, -	ſeven grains.

From theſe our Author draws the following concluſions:

1. That electricity increaſes the natural evaporation of liquids, unleſs ſuch liquids are poſſeſſed of a very great degree of viſcidity, as is the caſe, he obſerves, with olive oil.

2. That this increaſe in the evaporation of liquids, produced by electricity, is in proportion to their degree of volatility.

3. That electricity in this reſpect acts with greater influence on fluids contained in metallic than on thoſe contained in glaſs veſſels.

4. That this increaſe of evaporation produced by electricity on liquids, is in proportion to the extent

extent of their ſurfaces expoſed to the atmoſphere; and,

5. That electricity has an evident effect in diminiſhing the weight even of ſolid bodies, when ſuch a quantity of moiſture is contained in them as is neceſſary for the purpoſe of evaporation.

Our author now proceeds to ſhew, that electricity being applied for ſome time to veſſels replete with fluids, an increaſed diſcharge of their contents, is thereby always produced; as a proof of which, the following experiment is related.

Let a common egg be perforated at one end, ſo as to diſcharge all its contents, both the white and yolk; and a ſiphon being introduced, ſo as not to touch the bottom of the egg, let it be completely filled with water, and then weighed. The egg is then to be emptied, by making the water paſs through the ſiphon, and by weighing again, it may be known exactly what quantity of water is diſcharged in a given time. The egg is now to be filled again, and on being electrified for ſome hours, the water contained in it will be found to flow with much greater rapidity than when no electricity was applied. This experiment, however, we are informed will not ſucceed,

ſucceed, if inſtruments are uſed of larger capacities than thoſe deſcribed.

That the vegetation of plants is conſiderably increaſed, by the proper application of electricity, has long been known; as a proof of which, the following experiment is related by our Author.

Two veſſels exactly ſimilar being filled with earth, the ſame quantity of muſtard ſeed was ſown in each, and both being placed upon the ſame bench, a quantity of water was now and then ſprinkled upon them. This was done on the 9th of October.

On the 11th, one of the veſſels was electrified at different times for the ſpace of ten hours. In other reſpects the treatment of both continued to be exactly the ſame.

On the 13th, the electrified veſſel puſhed forth three plants of muſtard, but no appearance of vegetation was obſervable in the other. This evening electricity was again applied for the ſpace of three hours to the veſſel formerly electrified.

On the 14th, new plants of muſtard were obſerved in the electrified veſſel, while one only appeared in the other. The former was this day again electrified for the ſpace of five hours.

The

The ſame kind of management was continued till the 19th, when all the ſeed in the electrified pot was found to have produced plants; and theſe at leaſt four times the length of thoſe in the other; while in this laſt too, only three plants were found to have ſprung from all the ſeed that was ſown. We are here told too, that this difference in the proceſs of vegetation could not ariſe from the ſeed in the one pot being good and the other bad; for no choice had been made, and in fact the ſeed in the pot which was not electrified did at laſt all germinate. The ſame experiment we are informed has been repeated on different plants, and uniformly with a ſimilar reſult.

In another ſection of this chapter, various experiments are related, all tending to ſhew, that electricity has a conſiderable influence in promoting the natural perſpiration of animals. Theſe experiments were made with whelps, pigeons, and other animals; and an increaſed degree of perſpiration was always found to be produced by the application of electricity.

In the 2d and 3d chapters of this Work, our Author delivers the theory of hemiplegia; and in the 4th and laſt chapter, ſome caſes are related,

ted, in which the good effects of electricity in the cure of hemiplegia were very evident.

A chairman, 20 years of age, of a tall ſtature and corpulent habit of body, had for ten years been afflicted with hemiplegia. He could not walk even with the aſſiſtance of a crutch, but with great difficulty. The eye of the affected ſide was become altogether uſeleſs; and the eye of the oppoſite ſide was now ſo weak as to put it out of his power to read ſmall printed books. The hand of the paralytic ſide was very feeble in its motions, and had loſt almoſt entirely the ſenſe of feeling; and together with theſe and other ſymptoms of hemiplegia, the patient was much tormented with lumbago.

May 29. He was this day electrified for the ſpace of half an hour, by taking ſparks from the hand and fingers of the arm affected; and likewiſe from the eye of the diſeaſed ſide.

30th. The patient ſlept better than uſual laſt night. He was this day electrified as before; and the weak ſide was ordered to be well rubbed at bed-time with warm cloths.

June 4. The electricity was ſtill continued; one conſtant effect of it, was a conſiderable flow of tears. He now could diſtinguiſh even ſmall objects,

objects, and could walk with much greater eaſe than before.

27th. The electricity was hitherto continued; the patient got gradually better, and is at this time perfectly well. The eye, of which he loſt the uſe many years ago, ſtill continues indeed in the ſame ſtate. Other three caſes are afterwards related by our Author, in which the effects of electricity in the cure of this diſorder were very remarkable; and we ſhall conclude our account of this Work by a ſhort account of one of them.

A young man, 15 years of age, had laboured under a hemiplegia from his infancy; and a great variety of remedies had been had recourſe to, but with no effect. The arm and leg of the left ſide were much emaciated; ſome degree of feeling ſtill remained; but the arm was ſo debilitated, that the hand could neither graſp nor retain any thing.

On the 8th of June, electricity was tried, and was continued almoſt daily till the 20th.

On the 13th, the affected arm was become ſomewhat ſtronger, and prickling pains were felt in it through the night.

On

On the 17th, the arm was become ſtronger, and had even begun to receive an increaſe in bulk.

By the 17th of July he was almoſt well; he could now eaſily carry a weight of 30 pounds; and on the 20th he was diſmiſſed cured.

II.

Specimen Inaugurale Medicum, ſiſtens experimenta quædam, quibus conſtitit, eas partes eſſe ſenſu præditas, quibus Hallerus cum aliis quibuſdam omnem ſentiendi facultatem cum irritabilitate denegat. Auctore Ignatio Radniczky. 4to. Pragæ.

SEVERAL years ago a doctrine was introduced into the world, by the late celebrated Haller and his diſciples, tending to prove, that the tendons, perioſteum, dura mater, and ſome other membranous parts, are all deſtitute of ſenſation. Various anſwers have been publiſhed to this opinion; but as the Work now before us enters more fully upon this inveſtigation than any we have met with, and as the Author's ideas are all ſupported by a ſeries of well conducted experiments, we ſhall therefore give a particular detail of

of ſuch of theſe as appear to be moſt concluſive.

This Work is divided into four ſections: The firſt is entitled, De tendinibus; the ſecond, De perioſteo & pericranio; the third, De dura & pia matre; and the fourth, De pleura & peritonæo.

SECT. I. *De Tendinibus.*

A middle ſized dog was the ſubject of the firſt of theſe experiments; which was performed, we are told, in the preſence of Profeſſor M'Niven, and ſeveral other Members of the Univerſity.

The animal being properly ſecured, the ſkin was cut, in a longitudinal direction, along the courſe of the tendo Achillis. During this inciſion, the dog appeared to be in very great pain; it was obſerved, however, that although he did not complain, either upon puncturing or cutting off a piece of ſkin previouſly ſeparated from the parts below, yet that the pain was conſtantly renewed, on attempting to diſſect a portion of ſkin not yet detached from the contiguous parts.

The tendon with its ſheath being now laid bare, a very ſlight degree of irritation with a

needle, was found to produce a great degree of pain; but leaſt any fallacy might occur from the tendon ſtill remaining covered with its vagina, it was at laſt perfectly denuded, when the ſame degree of irritation was attended with the ſame effect as before. A needle being puſhed into the ſubſtance of the tendon, evidently occaſioned very ſevere pain; and the needle being allowed to remain there for ſome time, it was afterwards found in withdrawing it, that the animal complained ſeverely on its being in the leaſt degree moved. Violent ſigns of pain too, occurred on dividing, even with a cutting inſtrument, a few of the fibres of this tendon.

In the eight experiment on this ſubject, the tendon of one of the muſcles in the leg of a horſe was laid entirely bare; and it was uniformly obſerved, that on puncturing the tendon with a needle, the animal made violent exertions, in order to extricate himſelf from his confinement. The ſame degree of feeling, however, did not ſeem to occur from cutting off a ſlice entirely from any portion of the tendon.

In experiment ninth, the external oblique muſcle of the abdomen in a dog was laid bare; and, on the application of oil of vitriol to the aponeuroſis

aponeuroſis of that muſcle, only a ſlight degree of uneaſineſs ſeemed to enſue; but the animal appeared evidently to ſuffer the moſt violent pain, either from preſſing theſe two parts between two ſharp bodies, or from puncturing them with a lancet.

In the twelfth and laſt experiment of this ſection which we mean to communicate, there is related the caſe of a ſoldier, whoſe hand had been ſo ſeverely cut as to induce over the whole of it a tedious and dangerous ſuppuration; and on the matter being evacuated, ſome of the tendons of the fingers, particularly theſe of the perforans and perforatus muſcles, were laid entirely bare. In this caſe, we are told, the ſenſibility of tendons appeared to be great indeed; for although the patient was of a robuſt conſtitution, yet if by accident, at any of the dreſſings, theſe tendons happened to be touched by the probe, even in a very gentle manner, the moſt violent pain, to ſuch a degree almoſt as to induce fainting, was inſtantaneouſly produced. From theſe, and various other experiments on the ſame ſubject, no doubt, our Author thinks, can remain of tendons being poſſeſſed of a very conſiderable degree of ſenſibility.

SECT. II. *De Perioſteo, atque Pericranio.*

EXPERIMENT I. A middle ſized dog being properly ſecured, the teguments of the thorax were diſſected off, leaving the ribs covered with the perioſteum only. On beginning to ſeparate the perioſteum from the bone, the dog complained ſeverely; he became again quiet on deſiſting from the operation; but a very violent degree of pain ſeemed always to be induced, ſo ſoon as the ſcalpel was again applied to the perioſteum.

EXPERIMENT II. The ſame experiment with the foregoing was put in practice with a horſe, and the reſult was exactly ſimilar, the horſe always exhibiting certain ſigns of his ſuffering ſeverely, as ſoon as any attempt was made upon the perioſteum.

EXPERIMENT III. The pericranium of a dog being denuded of the common teguments, the animal complained ſlightly on any attempt being made to irritate that membrane with a lancet; on touching it with lapis infernalis, a more ſevere degree of pain ſeemed to enſue; but the moſt violent torture was induced by the application of a ſingle drop of oil

of

of vitriol. The pericranium being rubbed with a ſponge immerſed in cold water, likewiſe created a great degree of pain.

EXPERIMENT IV. The perioſteum in the leg of a dog being laid perfectly bare, by diſſecting off the common teguments, muſcles, and tendons, a very violent degree of pain was found to be induced, by endeavouring to ſeparate the perioſteum from the bone. This was likewiſe the caſe by applying butter of antimony to the ſurface of that membrane.

EXPERIMENTS V. and VI. being all that were made upon this ſubject, tended evidently to ſhew, that the perioſteum is poſſeſſed of a very conſiderable degree of ſenſibility. Independently of the reſult of theſe experiments, by which the ſenſibility of the perioſteum appears to be conſiderable, the idea, our Author obſerves, is ſufficiently confirmed, merely by the common and well known effect which inflammation always produces on that membrane; no part of the body when in an inflamed ſtate, being productive of more exquiſite pain than the perioſteum.

SECT. III. *De Dura atque Pia Matre.*

EXPERIMENT I. The ſkin and other teguments being diſſected from the ſide of a dog's head, the trepan was applied, ſo as to lay the dura mater entirely bare. In this ſtate the membrane was gently fretted with the point of a ſcalpel, and ſome degree of pain was thereby produced; but a more evident and more violent degree of it ſucceeded to the application of the vitriolic acid.

EXPERIMENT II. The ſame experiment with the preceding was repeated upon other two dogs; and in both, the moſt violent degree of pain appeared to be produced by the application of the vitriolic acid to the dura mater.

EXPERIMENT III. In a girl ten years of age, whoſe ſkull had been ſo much fractured as to render it neceſſary to take away different portions of it, by which a very conſiderable part of the dura mater was laid quite bare, the moſt violent degree of pain was produced at the different dreſſings, when, either inadvertently or by deſign, that membrane happened to be preſſed upon.

With

With reſpect to the *pia mater*, our Author does not adduce any direct experiments in proof of its ſenſibility; but as the external covering of the brain, the dura mater, is evidently poſſeſſed of a conſiderable degree of ſenſibility, and as the pia mater he ſuppoſes to be equally well furniſhed with nerves, he therefore thinks it extremely probable, that it muſt poſſeſs no ſmall ſhare of ſenſibility.

SECT. IV. *De Pleura & Peritonæo.*

EXPERIMENT I. The pleura of a horſe being laid bare, and the animal being again ſufficiently quiet after the terror occaſioned by the diſſection of the teguments and intercoſtal muſcles, ſuch a degree of pain was produced, merely by touching that membrane with the point of a finger, that the horſe jumped as if he had been convulſed.

EXPERIMENT II. On repeating the ſame experiment upon a dog, the diſtance between the ribs was too inconſiderable to admit of the intercoſtal muſcles being properly ſeparated from the pleura, in order, therefore, to prevent all manner of fallacy from any muſcular fibres remaining un-

divided, the point of a ſcalpel was puſhed into the cavity of the cheſt, and afterwards made to preſs back and rub upon the internal ſurface of the pleura; and even in this manner ſuch a degree of pain was produced, as made it almoſt impoſſible for four people to retain the dog in his place.

EXPERIMENT III. The ſame experiment being repeated upon other two dogs, the reſult was found to be the ſame.

EXPERIMENT IV. The teguments and muſcles of the abdomen in a dog being cut open, by an inciſion along the courſe of the linea alba, the peritonæum was thus laid bare; and as ſoon as the animal had recovered from the fright he had been put into, the peritonæum was ſlightly touched with a piece of timber wet with oil of vitriol. He inſtantly thereafter began to breathe and moan ſo ſtrongly, that a rupture was produced in the peritonæum, at which all the inteſtines were immediately protruded.

EXPERIMENT V. The ſame experiment with the preceding being repeated, not only in a dog, but in other animals, was uniformly found to be attended with a ſimilar reſult.

Our Author however acknowledges, that theſe experiments upon the peritonæum were by no means

means ſo concluſive as thoſe upon the pleura and other parts, before related; for this membrane being ſo very thin and delicate as to burſt very ſoon after the application of the cauſtic, its effects were thereby rendered leſs obvious than they otherwiſe probably might have been. Upon the whole, however, he concludes, that the tendons, perioſteum, pericranium, dura mater, and pleura, appear evidently to poſſeſs a very conſiderable degree of ſenſibility.

III.

Obſervations on the different Methods of Treating the Venereal Diſeaſe. *By* William Deaſe, *Surgeon to the United Hoſpitals of St Nicholas and St Catharine*, Dublin. 8vo. Dublin.

AS the Work now before us is divided into different ſections, we ſhall here give a general account of their contents, and ſhall afterwards ſelect from each of them ſuch parts as appear to be of moſt importance.

The introduction exhibits a view of the opinions of the moſt reſpectable authors on the treatment of the venereal diſeaſe.

SECT.

SECT. I. Contains a general deſcription of the venereal diſeaſe, and its propagation.

SECT. II. Treats of a clap, and the method of curing it.

SECT. III. Of the inflation of the penis, phymoſis, and paraphymoſis.

SECT. IV. Of the ſwelled teſticle.

SECT. V. Of buboes.

SECT. VI. Of the venereal ſtrangury; and

SECT. VIII. Of the confirmed pox.

Mr Deaſe having in the firſt ſection given a general deſcription of the venereal diſeaſe, proceeds in the next ſection to the conſideration of the clap and its treatment. It has been advanced, he ſays, by many reſpectable authors, particularly by Aſtruc, Van Swieten, and Fordyce, that in caſes of clap the running proceeds from an ulceration either in the cells of the urethra, Cowper's glands, proſtate gland, or veſiculæ ſeminales; but our Author is of a very different opinion, for on diſſecting the bodies of ſuch as have actually died with a running upon them, he never found that any of theſe parts were affected in the manner which thoſe authors deſcribe, the diſeaſe appearing to conſiſt ſolely in an abraſion of the natural mucus of the urethra, produced either by

an

an excoriation or inflammatory infection of the membrane lining the paſſage.

The principal difference in claps, he thinks, depends on the degree of inflammation which occurs; and he aſſerts from experience, that thoſe claps which, in the beginning, are attended with a ſmart degree of inflammation, are commonly more eaſily cured than thoſe wherein the inflammatory ſymptoms are more trifling.

In the firſt or inflammatory ſtage of a clap, the treatment here recommended reſts entirely on a plentiful uſe of diluent drinks, which, by increaſing the quantity of urine, anſwers better, we are told, than any injection, for clearing the urethra of the matter collected in it: The patient, at the ſame time, is deſired to bathe or foment the parts affected pretty frequently; he muſt alſo, however, take care to keep his belly eaſy by any of the cooling purgatives. General blood-letting, as adviſed by many in this ſtage of the diſeaſe, has never by our Author been found neceſſary; and he exclaims greatly againſt the uſe of opiates, having uniformly found, that they render patients much worſe after the temporary eaſe which they commonly procure is over.

Our

Our Author is by no means a favourer of thoſe irritating injections, which of late have been ſo commonly recommended in this diſorder; the only injection he adviſes is a mercurial ſolution, wherein crude mercury is ſuſpended in ſome watery medium by means of gum arabic. By the uſe of this injection, at the ſame time that the patient is put upon a gentle courſe of a mild mercurial pill, the diſorder we are told will in general be very much ſhortened; and we need be under no apprehenſions, our Author remarks, of thus prematurely ſuppreſſing the running, or of laying the foundation for calloſities or ſtrictures; for this injection, he ſays, poſſeſſes no aſtringent quality, but ſpecifically as it were heals any excoriation with which the membrane of the urethra may be affected.

For the cure of a gleet, our Author recommends ſea-bathing, chalybeate waters, tonic remedies in general, with abſtinence from exceſſive venery, at the ſame time that a ſuitable regimen is attended to; but when it ſo happens that a gleet or running is kept up by an ulcer in the urethra, we are then deſired to have recourſe to bougies.

In

In the phymoſis, when the patient is young and plethoric, the ſkin hot, and the pulſe quick, blood-letting, our Author thinks, will be adviſable; but he does not recommend the practice in any other circumſtances of the diſorder. He reſts the cure chiefly on fomenting the parts frequently with any common warm fomentation, in which a conſiderable quantity of Goulard's extract of lead has been mixed. Where the pain is ſo violent as to prevent reſt, a paregoric is adviſed at night, and the patient is directed to have three or four ſtools daily. All local mercurial preparations are deſired to be avoided, for even the mercurial ointment rubbed upon the parts, exaſperates amazingly every ſymptom.

In order to prevent any matter from lodging between the prepuce and glans, frequent injections are recommended of lintſeed-tea, and Goulard's extract; and by attending properly to this circumſtance, it very rarely happens, he obſerves, that we need have recourſe to the operation of laying the prepuce open.

In the paraphymoſis, the ſame antiphlogiſtic courſe is recommended as for the phymoſis; the operation of laying the ſtricture completely open, very ſeldom, if ever, becomes neceſſary;

neceſſary; but two ſmall inciſions being made on each ſide of the frænum with a lancet, in ſome caſes, we are told, will do ſervice.

In the treatment of a ſwelled teſticle, a ſpeedy reſolution, our Author remarks, ſhould be our chief object; and as a premature ſuppreſſion of the running is the moſt general cauſe of this complaint, nothing therefore ſhould be neglected that can in any degree contribute to its return.

As the ſudden ſuppreſſion of a running, in caſes of clap, depends moſt frequently on the ſymptoms of inflammation running very high, the moſt effectual remedies for inducing a return of the diſcharge, are blood-letting, gentle laxatives, a ſlender regimen, reſt of body, and a plentiful uſe of diluents.

When treating of buboes, Mr Deaſe obſerves, that from whatever cauſe they proceed, whether from an abſorption of matter in caſes of chancres, or from a premature ſuppreſſion of a venereal running, in every event, if they can be brought to a laudable ſuppuration, it will much facilitate the eaſy expulſion of the virus, and abridge the cure.

In

In ſuch caſes, again, where buboes do not come kindly forward to ſuppuration, and where the glands remain hard and indolent, it contributes much, he ſays, to their diſcuſſion, that mercury be made to paſs immediately through them, which he adviſes to be done by rubbing the thigh and leg of the affected ſide with mercurial ointment.

Our Author now proceeds to the conſideration of the venereal ſtrangury, a ſymptom more to be dreaded, as being attended with more pain and danger than almoſt any other that occurs in this diſorder.

The ſeveral cauſes of this complaint may be reduced, Mr Deaſe obſerves, to the following: Carnoſities or caruncles; conſtrictions in different parts of the urethra, from the callous cicatrices of former ulcers; enlargement of the urethral glands that ſerve to ſeparate the mucus, generally attended with a varicoſe ſtate of the veſſels; callous or fungous ulcers ſeated about the excretory ducts of the proſtate gland, veſiculæ ſeminales, and urethral glands; an enlargement of the verumontanum; and *laſtly*, an enlargement of the proſtate gland itſelf.

After various remarks on theſe different cauſes of the diſeaſe, he proceeds to obſerve, that, for

for the cure of all of them, practitioners unanimouſly have recourſe to the bougie, a variety of forms for which may be found in moſt authors who have treated on this ſubject. But all of them, our Author obſerves, are liable to one capital objection, which is, that unleſs where the obſtacles in the urethra are ſuch as oppoſe but a ſlight reſiſtance, as the bougies do not poſſeſs a ſufficient degree of elaſtic firmneſs to prevent their loſing their form, if we attempt to introduce them beyond any conſiderable obſtacle, they bend. Or if they be inſinuated by force any way through the ſtricture, it is in a tortuous manner, ſo that upon extraction the end appears broken and twiſted like a cork-ſcrew. This, he ſays, is of great diſadvantage, as it excites much unneceſſary pain without anſwering our intention.

To obviate the conſequence of theſe defects, Mr Deaſe has for many years paſt formed his bougies on cat-gut of a proportionable thickneſs. This, he ſays, procures us all the advantages derived from their poſſeſſing a proper degree of firmneſs and flexibility, without any danger either of their breaking or becoming twiſted; and their introduction is at the ſame time attended

tended with leſs pain than that of the common bougies.

With reſpect to the compoſition of the bougie plaiſter, it ought to be adapted to our intention of procuring a ſuppuration, or of healing the parts affected. Bougies, therefore, may be diſtinguiſhed into ſuppurative and epulotic, and the following forms are recommended by our Author.

For the ſuppurative; Two ounces of old diachylon, one ounce of mercurial plaiſter, and half an ounce of crude antimony finely levigated.

For the epulotic; Melted wax, a pound; Goulard's extract of lead, two ounces; or,

Half a pound of yellow wax; olive oil, one pound; red lead, finely levigated, ten ounces; melt over a ſlow fire, and boil them to a proper conſiſtence.

At the ſame time that the patient is put upon a continued and prudent uſe of theſe bougies, Mr Deaſe recommends it as the ſafeſt practice, almoſt in every caſe, to adviſe a courſe of mercury, ſo as to ſecure, with as much certainty as poſſible, a total extinction of the venereal virus.

In the treatment of a confirmed pox, we are deſired by all means to introduce the mercury

intended to be uſed, in the moſt gradual manner; and not to endeavour at once to throw a great quantity of the medicine into the ſyſtem. Such a quantity, however, ought at laſt to be introduced as to keep up a moderate ſpitting, to the extent of two or three pints, or ſo, in the 24 hours; for as mercury, when left to its own natural courſe, always tends to the mouth, and as it muſt, if once introduced to the circulation, find its way out either by the ſkin, bowels, ſalivary glands, or kidneys, our Author thinks, that it is a more eligible method, and he aſſerts it from experience to be ſo, to allow the medicine to produce and keep up a moderate ſalivation, than to endeavour to divert its operations, as is commonly done, to ſome other emunctory.

In ordinary caſes of lues, he recommends friction with mercurial ointment, as the beſt and ſafeſt method of introducing mercury to the ſyſtem; but in pocky cutaneous eruptions; in caſes of warts on the glans; exoſtoſis; and enlargements of the bones, the ſolution of corroſive ſublimate, he ſays, is preferable; and notwithſtanding all that has been ſaid againſt it by Mr Pibrac, and various other authors, Mr Deaſe, from his own experience, recommends it not only

only as an efficacious, but a very ſafe and eaſy remedy.

Several caſes are inſerted at the end of this Treatiſe, all tending to eſtabliſh the various points of practice, in which our Author, in different parts of his Work, has ventured to diſſent from thoſe who have gone before him.

IV.

Henr. Fridr. Delii, Prof. Erlang. *&c. Diſſertatio de Taraxaco, præſertim Aquæ ejuſdem per Fermentationem paratæ, eximio uſu.* 8*vo.* Erlangæ.

VARIOUS ſynonimes have been applied to the plant here taken into conſideration, *viz.* taraxacum, leontodon, dens leonis, hieracium parvum, *&c.* and in Britain it is known by the name of dandelion.

Dandelion is one of the moſt common productions in this, as well as in every other country in Europe, and is accordingly well known to every botaniſt; but, as there are ſeveral varieties of the plant, and as the Author has given a very particular deſcription of that ſpecies of it uſed in his experiments, we therefore think

it right, in order to prevent ambiguity, to copy over this part of the Work.

" Radix fuſca, ut plurimum perpendicularis, " conoidea, digitum plus minusve craſſa, pro " ætate plantæ brevior, longior, in adultis do- " drantalis et ultra, ſucco lacteo amaro turgida, " qui ſuccus recens ſauciata radice, libero aëri " expoſitus, rubet. Per medium ſolidus tranſit " ſic dictus nervus, ſuperne, neque minus in " longitudine ſua media, haud raro ter, quater, " quinquies dividitur et ſubdividitur radix, ita " ut quisque truncus ſua folia protrudat.

" Folia oblonga, humi procumbentia, in adul- " tis obſcurius viridia, immo in annoſioribus " magna ex parte rubeſcentia; in principio e " radice ſurgentia, inferius quaſi amplexicaulia. " Lata magis coſta, intus cava eſt, margo folia- " ceus. Superior et inferior ſuperficies folii " compluribus minoribus, et facile cedentibus, " aculeis, prædita. Leviter lanuginoſa porro " ſunt folia, ad utramque coſtæ marginem uſque " alte inciſa. Quælibet ſic multoties diſſecti " folii particula iterum ſæpiuſcule ab utroque la- " tere inciſa pennatimque fere diviſa eſt, et laci- " niata, in ſagittæ modum deſinens. Folium " itidem ſucco lacteo amaro turget.

" Caulis,

" Caulis, vel ſi mavis, ſcapus aut pedunculus " cingitur in principio radicalibus foliis, ſurget " inter ea e radice primum tenui mollugine ſti- " patus, plerumque unicus, non nodoſus, non " ramoſus ſi exceperis quod interdum duo vel " tres flores inſideant cauli, hinc fiat is ſuperne " bifidus, trifidus. Videmus etiam binos cau- " les ad latera concretos, et ſic parallelatim ſur- " gentes, quibus plantæ faſciatæ, quas Cl. Boeh- " merus peculiari programmate nuper deſcripſit, " augeri poſſent. Cavus et fiſtuloſus ſcapus, et " tenuis, et cylindraceus eſt, externe glaber, " longus; vidimus in pratis ulnarem, et ultra. " Si finditur ſecundum longitudinem, ſponte " partes, elaſtrorum more, convolvuntur, vel in " ſpiras abeunt. Succum, ut radices et folia " lacteum amarum continent. An ſcapi folio- " rumque in nervo ejuſque ramis rubedo, reli- " quis omnibus partibus iiſdem, peculiarem va- " rietatem efficit? vix videtur.

" Calix duplex eſt. Inferior et exterior fere " foliaceus, brevior, tenuior, duodecim, ad vi- " ginti quinque uſque, laciniis conſtans, verſus " inferiora pedunculi reflexus. Superior et in- " terior tredecim vel quatuordecim, in majori- " bus ad viginti quatuor uſque, ſeriebus ſeu la-

" cini oblongis imbricatis, conſtat, primum in-
" vicem concretis, ex antequam effloruerit flos
" ipſe, ſuperne in centro coëuntibus, dein de-
" hiſcentibus ex explicato flore, reflexis; ubi
" defloruerit, iterum arcte pappum ambeunt,
" donec evoluto pappo et maturis ſeminibus
" iterum verſus inferiora reflectantur. Proxime
" inferius thalamum includunt. Lacinias haſce
" calicis internas et ſuperiores minus arte ſqua-
" mas appellaveris, cum ſquamatum in plantis
" ea communiter ſit indoles, ut altera ſquama
" alteram ex parte tegat, *e. g.* in *hieraciis* qui-
" buſdam, *cyanis*, quod ſecus ſe habet in noſtra
" planta.

" Flos ſemifloſculoſus eſt, plurimis ſcilicet ſe-
" mifloſculis flavis, androgynis, denſe in orbem
" poſitis, conſtat. Quilibet *ſemifloſculus* ſ. pe-
" talum monſtrat lingulam aliquam ſuperne trun-
" catam, ter quaterve leviter inciſam, margine
" leviter rubello donatam. Ligula hæc ambit
" in inferiori et fiſtuloſa ſua parte.

" *Stamen* quod ſeparatum, unicum videtur, et
" adhuc proprio involucro, ſecundum longitudi-
" nem *ſtriato*, ſeu vagina incluſum, ſuperne *ca-*
" *pillamentum* bicorne, et polline flavo prolifico
" conſperſum.

" Circum

" Circum *ſtigma* capitatum *pappus* adhuc te-
" ner poſitus eſt.

" *Stilus brevis* cum *germine* recente, piſtilli com-
" plementum conſtituente, continuus.

" *Semina*, quibus, olim embryonibus, ſtamina
" inſidebant, per maturitatem brunnea complu-
" ra, oblonga, ſcabra, e quatuor coſtis cardina-
" libus compoſita, inter quæ ſpatium iterum du-
" obus vel tribus lineolis diſtinctum eſt, ut ſul-
" cos referat. Coſtæ hæ et lineæ, per microſco-
" pium viſæ, et ſuperiore parte ſub pappo velut
" unguiculi inciſæ et echinatæ apparent. Ince-
" dunt ſemina

" *Placentæ*, ſeu thalamo nudo punctato. Su-
" perne ſemine unicuique adſidet.

" *Pappus* in longiorem ſtipitem exporrectus,
" qui ſtipes nihil aliud quam ipſe ſtylus eſt, elon-
" gatus ab ipſo ſemine, pappum ipſum in apice
" ferens, in plura filamenta ſtellatim vel umbel-
" latim diſpoſitum.

" Semina hæc pappoſa natura vento late ubi-
" que ſparguntur. Terræ autem commiſſu, poſt
" octo circiter dies protrudunt duo folia ſemina-
" lia ovata, ſeu

" Cotyledones, prout vocantur. Tertium et
" quartum foliolum, jam in margine non am-

" plius integrum, ſed quinque vel ſeptem acu-
" minibus gaudet. Quintum et ſextum inciſum
" pluries eſt, et jam lancinatum folia ſubſequentia
" profundius, jam et latius inciſa ſunt, donec re-
" liqua per ætatem eam formam adquirant quam
" ſupra deſcripſimus. Altero demum anno plan-
" tula ad perfectionem tendit, floret, ex quo tum
" tempore perennis evadit."

To this accurate deſcription of taraxacum various experiments are added, which were inſtituted with a view of diſcovering the moſt effectual mode of obtaining the medicinal virtues of the plant; and upon the whole, our Author concludes, that the beſt method of exhibiting it as a remedy, is in the form of a vinous diſtilled water obtained in the following manner.

To four pounds weight of the recent herb, properly bruiſed, an equal quantity of beſt Francfort wine was added; and a fermentation being induced, about a pound weight was obtained by diſtillation, of a vinous, ſpirituous, grateful, fragrant water, of ſomewhat a milky tinge.

The proceſs being farther continued, a conſiderable quantity came over, of a weak, limpid fragrant water; but this part of the produce was not ſuppoſed to contain ſo much of the medici-

nal

nal virtues of the plant as the vinous ſpirituous water.

This remedy is here highly extolled by our Author, in every diſorder where ſaponaceous, attenuating, or reſolvent medicines can be of uſe, particularly in aſthmatic diſorders, in coughs proceeding from obſtructions of the glands; and its powers in all hydropic affections, we are told, are very remarkable.

In ſupport of this aſſertion, the caſe of a young lady is particularly related, who, for a conſiderable time, had laboured under an aſcites; which, at the ſame time, was attended with an anaſarcous ſwelling over the whole body. All the uſual remedies having been tried without any advantage, and the diſeaſe daily continuing to advance, no hopes of a recovery were left; but the remedy now under conſideration being at laſt had recourſe to, great quantities of urine were thereby evacuated, the ſwelling ſubſided, and a total recovery was at laſt effected. It was given to the extent of four, ſix, and ſometimes eight ounces in the 24 hours.

Our Author does not pretend, that the diuretic powers of taraxacum is a new diſcovery; for ſo remarkable are its effects in promoting urine, that

that in ſome diſtricts, he obſerves, it is known by the appellation of *lectiminga* or *piſſe en lit.*

V.

Obſervations on the cure of the Gonorrhœa. By Samuel Foart Simmons, M. D. F. R. S. *&c.* London.

AS Dr Simmons here confines himſelf to the conſideration of the gonorrhœa, ſuch ſymptoms only are taken notice of as are ſuppoſed to be mere local affections, and unconnected with any general infection of the ſyſtem.

It has of late been aſſerted, that gonorrhœa and lues venerea are different affections, originating from two diſtinct ſpecies of virus. Our Author, however, is of a very different opinion, and it would be happy for mankind, he obſerves, if the idea was well founded; but unfortunately, every day's experience, in his opinion, ſhews it to be erroneous; for it has been proved, he alleges, that the matter of a chancre introduced into the urethra will generate a gonorrhœa; and that the diſcharge of a gonorrhœa will produce a chancre, bubo, and lues.

Two

Two caſes are here related, in which poxes ſeemed evidently to be induced by the diſcharge in gonorrhœa being ſuppreſſed by the uſe of aſtringent injections; and from which our Author thinks we may ſafely infer, that the matter of a gonorrhœa, abſorbed and carried into the ſyſtem, may generate all the ſymptoms of a confirmed lues: That it may produce this effect, however, he thinks it may perhaps be neceſſary, though it is by no means certain, that it ſhould be taken up from an ulcerated ſurface.

Our Author, after giving a very accurate deſcription of the progreſs of the diſeaſe, and of its uſual ſymptoms, proceeds to treat of the cure.

There are practitioners, he remarks, who, ſuppoſing that the body poſſeſſes powers to expel the virus, and that the diſeaſe has a certain period to run, are for leaving the cure to nature; or at leaſt, content themſelves with aſſiſting her by an antiphlogiſtic regimen, gentle evacuations, and the like.

That in many caſes the diſorder admits of a natural cure, there can be no doubt; the increaſed ſecretion of the mucus carrying off the virus faſter than it is formed, till at length the infection is wholly removed. But it is equally certain,

certain, Dr Simmons obſerves, that in every caſe, by the application of ſuitable remedies to the inflamed parts, we may ſhorten the duration of the complaint, and abridge the ſufferings of the patient, with the ſame certainty and ſafety as we are enabled to remove the effects of an ophthalmia, or any other local inflammation, by proper topical applications: He at the ſame time allows, however, that occaſional blood-letting, a cooling diet, the liberal uſe of diluting liquors, and mild purges, are frequently uſeful, and even neceſſary.

The topical remedies here recommended, conſiſt of different ſorts of injections, the ingredients of which are extremely various; but their modes of operation, Dr Simmons remarks, may be referred to their mucilaginous and ſedative, or to their detergent, ſtimulating, and aſtringent qualities. In the hands of ſkilful practitioners great advantages, he thinks, may be derived from the uſe of theſe remedies; but, on the other hand, an improper and unſeaſonable application of them may prove a ſource of irreparable miſchief to the patient.

Such injections only as will tend to lubricate the ſurface of the urethra, and to counteract and deſtroy the ſtimulus of the virus, ought to be uſed

uſed in the firſt ſtages of the diſeaſe; and by degrees, as the inflammation abates, we are deſired to add ſome mild aſtringent preparation to a mucilaginous and ſedative injection, taking care that its aſtringency be ſuited to the ſtate of the diſeaſe, and to the irritability of the patient.

Of the various forms of aſtringent injections made uſe of by practitioners, our Author gives the preference to mercurials; for they are all, he obſerves, poſſeſſed of more or leſs aſtringency, and it is to this property we are to aſcribe their effects; the idea of their correcting the venereal virus having been originally introduced upon miſtaken principles. Calomel mixed with the mucus of a gonorrhœa, has no more power, he thinks, in deſtroying the infectious properties of that mucus than ceruſe, or any other aſtringent preparation; and a diluted ſolution of ſublimate injected into the urethra, will, like a ſolution of verdigriſe or blue vitriol, conſtringe the mouths of the lacunæ; but this is all that it will do, for it will never leſſen the infectious nature of the virus.

As gonorrhœa is very often a local affection, it may be imagined, our Author remarks, that the internal uſe of mercury is unneceſſary towards

wards a cure. When the infection has been ſlight, and the inflammation and other ſymptoms trifling, he has indeed ventured to proceed without the uſe of mercury, particularly in weak, relaxed, irritable habits; but, whenever the diſcharge is violent, the inflammation conſiderable, or the ſeat of the diſeaſe high up in the urethra, a courſe of mercurials, he thinks, is always adviſable.

When treating of the hernia humoralis, or ſwelled teſticle, this ſymptom, our Author remarks, has been uſually ſuppoſed to be occaſioned by a tranſlation of the morbific matter to the teſticle, from the too ſudden ſtoppage of the diſcharge of a gonorrhœa. Dr Simmons however, we find, has adopted a different idea, and which Dr Monro, in his public lectures here, has for many years paſt endeavoured to inculcate; *viz.* that in all ſuch inſtances, the ſwelling of the teſticle is merely the effect of irritation, and of increaſed inflammation. There are no paſſages, he remarks, by which the morbific matter could paſs from the urethra to the teſticle; if it were taken up by the abſorbents, inſtead of paſſing to the teſtis, it would be carried to the groin, and there produce buboes; and if the ſwelling was occaſioned

ſioned by the matter's being conveyed into the ſyſtem, and thus affecting the teſticle, this gland, as being the ſecreting organ, would be the firſt diſeaſed; whereas we conſtantly find, that the ſwelling firſt begins at the vas deferens, and proceeds backwards through the epididymis to the teſticle; and in many caſes, the inflammation is entirely confined to the vas deferens and epididymis, the teſticle itſelf not being in the leaſt affected.

Blood-letting, ſuſpending the teſticle in a proper truſs, and a horizontal poſture, are recommended as the moſt effectual remedies. As the diſeaſe is ſuppoſed to be purely inflammatory, and altogether independent of the venereal virus, we are deſired to avoid mercurials: And for the ſame reaſon draſtic purges, and ſtrong emetics, altho' recommended by ſome writers, are condemned by our Author; and cold applications, ſuch as cloths dipped in vinegar, are recommended in preference to warm poultices and fomentations.

The *chordee*, or painful involuntary erection of the penis, occaſioned by the ſtimulus of the venereal virus on the inflamed membrane of the urethra, may in general be quieted by the internal

nal uſe of opiates, and by ſedative injections; and leeches applied near to the ſeat of the inflammation are likewiſe recommended: But there is a ſpecies of this ſpaſmodic erection, our Author obſerves, which goes off and returns at times for the ſpace of ſeveral months, even after the inflammation has entirely ſubſided, and which yields more readily to a liberal uſe of Peruvian bark, than to any other remedy.

A *bubo*, our Author remarks, is now and then merely the effect of irritation; but in general, it is occaſioned by an abſorption of the venereal virus from the ſurface of the urethra, or from a chancre.

In the treatment of buboes, Dr Simmons recommends the diſperſion of the tumour in preference to ſuppuration; not only upon the principle of ſaving a great deal of unneceſſary pain to the patient, but from the riſk of throwing infection into the ſyſtem being thereby leſſened; for the large ulcerated ſurface, which always remains after the opening of a bubo, expoſes the patient more to the effects of abſorption, than can poſſibly happen from any ſmall quantity of matter, originally detained in an inflamed gland, being carried into the ſyſtem.

In

In order to diſperſe venereal buboes, we are commonly adviſed to rub mercurial unction on the ſkin at the inſides of the thighs, that the mercury, by paſſing through the diſeaſed glands, may deſtroy the virus; but this notion, our Author remarks, is founded on an erroneous principle, for the mercury applied in this manner acts merely by its ſtimulus, and by thus increaſing the inflammation, tends of courſe rather to haſten than retard the ſuppuration. Cold applications to the parts affected are here recommended in preference to every other; and buboes are ſaid to have been frequently diſperſed, even after matter was formed, by the uſe of emetics.

In opening ſuch buboes as have come to ſuppuration; when they appear to have ariſen from ſimple irritation, a ſlight opening with a lancet, in a depending part of the tumour, will uſually be ſufficient; but when the ſuppuration has been tedious, and taken its origin from a chancre, we are directed to lay it open by cauſtic. But even in the caſe of a bubo from a chancre, when the patient is of a good habit of body, and the tumour has maturated quickly, it heals ſooner, we are told, when ſuffered to break of itſelf, than it

uſually does when opened, either by cauſtic or the knife.

In phymoſis and paraphymoſis, the uſe of Goulard's vegeto-mineral water is recommended in a particular manner; in general, warm applications are condemned, and we are deſired to make uſe of no external remedy whatever, but in a cold ſtate.

When treating of *chancres*, our Author remarks, that in the greater number of caſes, they are to be conſidered as local affections only; not occaſioned by the venereal virus being firſt abſorbed and carried into the habit, and then thrown out again, but merely by the inflammation and ulceration ariſing from particles of matter applied to the membranous ſurface of the glans and prepuce.

Objections have been made, our Author obſerves, to the cure of a chancre by topical applications, on a ſuppoſition, that if the ulcer is healed by ſuch means, the virus will be carried into the habit, and the patient be in danger of a conſtitutional lues. This he believes has ſometimes happened, but it has been only in caſes of large ſpreading chancres, and where the means of preventing infection had been neglected.

Upon

Upon the whole, Dr Simmons concludes, that as a chancre is originally a local affection, the ſooner we deſtroy the virus in the part, the more effectually we prevent internal infection; and an effectual method of doing this is recommended, which has long been inculcated here by Dr Monro, *viz.* the application of lunar cauſtic to the chancre, ſo as not only to make the ſore throw off ſloughs, but to deſtroy the very virus which gave riſe to the diſeaſe. And, in ſupport of an opinion long ago publiſhed by Mr Bell, as well as by ſome others, he proceeds to obſerve, that if, inſtead of thus deſtroying the virus in the part as early as poſſible, we ſuffer the chancre to continue to diſcharge for ſeveral weeks, we are certainly expoſing the patient to the danger of infection during all that time.

On the ſubject of *obſtructions in the urethra*, caruncles, or ſmall fungous excreſcences in the paſſage, are commonly imagined, we are told, to be the cauſe of ſuch diſorders. But our Author is of a different opinion; and ſuppoſes, that ſtrictures or contractions in different parts of the canal, are moſt frequently to be conſidered as the origin of ſuch ailments; and a proper uſe of

bougies is recommended as the moſt effectual mode of treatment.

The diſſertation is concluded with an inquiry into the nature and cure of a gleet. When the venereal taint is effectually eradicated, aſtringent injections are recommended; together with the uſe of bark, chalybeate waters, and cold bathing, and large doſes of balſam of copaiva.

VI.

A Treatiſe of Midwifery, comprehending the whole Management of Female Complaints, and the Treatment of Children in early Infancy; to which are added, Preſcriptions for Women and Children, and Directions for preparing Variety of Food and Drinks adapted to the Circumſtances of lying-in Women. By Alexander Hamilton, *Profeſſor of Midwifery in the Univerſity of Edinburgh, and Member of the Royal College of Surgeons.* 8*vo.* Edinburgh.

THE comprehenſive treatiſe of midwifery which is now before us, is chiefly intended for the uſe of female practitioners; and we are inclined to think, that thoſe who beſtow upon it

an

an attentive reading, will have no heſitation in allowing, that it is better fitted for the purpoſe intended, than any thing that has yet appeared in an Engliſh dreſs. A Work of this kind, rendered univerſally and readily intelligible by diſtinct arrangement, and ſimplicity of ſtyle, has been much wanted. The Work before us, however, not only comprehends the moſt important rules of delivery, and directions for the after treatment both of mother and child, but alſo gives the previous neceſſary inſtruction in the moſt plain and familiar manner, diveſted of every term which may not be fully and clearly underſtood by any female qualified for the profeſſion of midwifery. It may therefore, we think, be juſtly conſidered as a valuable acquiſition to the public. To juſtify this character, however, we muſt refer our readers to the work itſelf. For, of a general ſyſtem, we cannot propoſe to give a full or diſtinct analyſis.

There can be little doubt, that the ſucceſs of practitioners, in this branch of the medical art, muſt, in ſome meaſure, depend on a knowledge of the ſtructure and functions of thoſe parts which are the immediate ſubjects of the midwife's attention. The want of that knowledge muſt con-

ſtantly expoſe the patient to the hazard of ſuffering from the ignorance and officiouſneſs of the practitioner, and may be conſidered as the ſource of errors in practice, which have been highly fatal in their conſequences. With the view, therefore, of removing this ſource of miſchief, the ingenious Profeſſor very properly introduces his ſubject with a conciſe but accurate deſcription of the bones of the baſin, the ſhape and dimenſions of its cavity, and its application to the paſſage of the child. He then deſcribes the ſeveral parts of the genital ſyſtem, explains their principal functions, and gives ſome account of generation, and of the periodical evacuation which diſtinguiſhes the ſex.

He next proceeds to give a detail of the diſeaſes ariſing from the irregularity of the menſes. And here he obſerves, that while thoſe women are moſt healthy who have this diſcharge in the moſt regular manner; on the contrary, thoſe who ſuffer bad health, either want it altogether, or have it ſparingly, exceſſively, or at irregular intervals. A prejudice, he obſerves, for a long time prevailed, that when the menſtrual evacuation was diminiſhed or ſuppreſſed, ſomething bad was retained in the habit. This aroſe from an erroneous

erroneous opinion, that the menſtrual blood was of a poiſonous quality, and might, by its vapour, kill animals; deſtroy vegetables, ſtop fermentation, and the like; and therefore, that a woman's preſence at theſe times was extremely dangerous; that if ſhe touched wine, it would immediately become ſour; if ſhe aſſiſted in making gellies, that they would never thicken; at ſalting meat, it would be ſpoiled. But although he conſiders theſe as being prejudices founded merely upon ſuperſtition, and looks upon the menſtrual diſcharge, in its natural ſtate, as being an evacuation of pure good blood, yet he conſiders it as liable, not only to the diſeaſes of the general maſs, but alſo to acrimony from ſtagnating in the vagina. He thinks, however, that when the conſtitution ſuffers from obſtruction, it is not from the retention of diſeaſed blood, but from the veſſels being overloaded, or from the ſudden ſtoppage of an accuſtomed evacuation. And he obſerves, that, in general, irregularities of the monthly evacuation are oftener the effect of ſomething faulty in the habit, than the cauſe of the bad health which at that time occurs.

He obſerves, that, for the moſt diſtinct view of the complaints reſulting from this cauſe, they

may be reduced to three heads. *1ſt*, Thoſe about the time of its commencement. *2d*, Thoſe after the habit has been eſtabliſhed: And *3dly*, Thoſe about the time of its final ceſſation.

The firſt of theſe periods is to be viewed, he thinks, as a very critical ſeaſon with females; and he ſtrongly recommends prudent conduct in the management of them at this time. Late hours, exceſſive heat, particularly by dancing, or long confinement in crouded places, ought to be prohibited in the ſtrongeſt terms; and when there is reaſon to expect the approach of the menſtrual diſcharge, every thing which can diſcompoſe either mind or body is to be carefully ſhunned. The food ſhould be plain and ſimple, taking care, particularly, to avoid groſs aliment, and aſtringent drinks.

Under the ſecond period, he gives directions for the management in the different caſes of obſtruction or ſuppreſſion, of painful menſtruation, and of immoderate diſcharge. On the firſt of theſe ſubjects, he is of opinion, that there is not yet in the whole catalogue of medicines, any one which can be relied upon for that purpoſe. He admits, however, that purgatives, eſpecially thoſe tending to induce teneſmus, as the aloetic

purgatives;

purgatives; that exerciſe, dancing, riding, the cold baths, the warm baths, electricity, and the like, have at times been attended with the deſired effect. But he remarks, that ſince a remedy which in one inſtance will prove mild, inoffenſive, or ſucceſsful, will in another throw the patient into the moſt violent nervous or hyſteric diſorders, medicines of this kind ought to be given with great caution. When theſe medicines are employed, he directs, that they ſhould not be uniformly continued, but begun about a week before the expected return, and continued for a few days after that, if the evacuation does not previouſly occur. In caſes of painful menſtruation, he places the chief reliance on opiates, taking care, however, to counteract their binding quality by the uſe of gentle laxatives. And he further adds, that theſe meaſures are to be employed only on emergencies, as they are with difficulty left off.

Where an exceſſive menſtrual diſcharge occurs, he is of opinion, that more in general is to be expected from regimen than medicine. Cooling diet, cool air, and cold applications, as wet cloths frequently applied to the os externum, when the flooding is exceſſive and dangerous,

are

are the principal remedies. And to prevent the return of the diſorder, a light decoction of Peruvian bark, ſharpened with elixir of vitriol, is, he thinks, more to be depended upon than any other remedy.

During the laſt period, or the time of the final ceſſation of the menſes, he obſerves, that the ſymptoms which occur are extremely different, according to the conſtitution and circumſtances of the patient. The chief affections, however, may, he thinks, be referred to the following heads.

1. Thoſe of fulneſs, in conſequence of the ſudden ſtoppage of an uſual evacuation in full habits. 2. Frequent, long-continued or immoderate floodings, in feeble and relaxed habits. And *3dly*, General affections of the ſyſtem, from an alteration of the conſtitution. For relieving the firſt of theſe, he recommends ſpare living, blood-letting at proper intervals, an open belly, and ſuitable exerciſe. Againſt a frequent or immoderate diſcharge in relaxed habits, he recommends, that the flux be checked by cold applications; that the painful ſymptoms be relieved by opiates; and that the conſtitution be afterwards ſtrengthened, when the patient is able to bear

bear it, by the cold bath. But where, even at this period, the flooding appears to proceed from fulneſs, he recommends proper evacuations and cooling regimen. Where general affections of the ſyſtem take place, he conſiders them as indicating a change in conſtitution, requiring the aid of the moſt ſkilful and experienced of the profeſſion, and beyond the province of the female practitioner, for whoſe uſe this Treatiſe is chiefly intended. And by a ſimilar recommendation, in every caſe where ſimple and eaſy meaſures will not anſwer, if much good be not done, much miſchief may at leaſt be frequently prevented.

He next treats of the various local affections of the genital parts, and gives particular directions for their prevention and cure. The nature of pregnancy, which leads to an explanation of the ſtructure of the gravid uterus, the changes which it undergoes from conception, the progreſſive evolutions of the ovum, the embryo and child, is the next ſubject of conſideration. This naturally leads him to conſider the diſeaſes of pregnancy. Theſe he has referred to three claſſes; 1*ſt*, The complaints, ſuch as thoſe of breeding, which are confined to the early ſta-

ges

ges of pregnancy. 2*dly*, Thoſe which occur in the laſt months, ariſing from the ſtraining of the womb and its preſſure on the neighbouring parts; and 3*dly*, Thoſe which are confined to no particular period, but happen at all the different terms of geſtation. Of the treatment of the different affections falling under each, he gives a very accurate and minute detail. And the ſubject is concluded with ſome important cautions for the treatment of pregnant women.

The third part of this Treatiſe comprehends the management of delivery. Labour, which he defines the effort of nature to expel the child, he conſiders as of three kinds, natural, lingering, and preternatural. Directions for the treatment in each of theſe caſes are delivered in the moſt conciſe, accurate, and judicious manner. The tenderneſs to patients, and regard to female delicacy, which is inculcated in theſe directions, cannot eſcape the obſervant reader; and the peculiar earneſtneſs with which female practitioners are intreated to be diffident of their own abilities, and to have recourſe to ſuperior aſſiſtance in caſes of doubt and danger, but at the ſame time to be equally cautious of betraying timidity, impatience, or diſtruſt, which

may

may give an unneceſſary alarm to the patient, if duly attended to, may be productive of the moſt uſeful conſequences.

This part of the ſubject is concluded with directions for the management of twins or triplets. This ſubject, in its nature intricate and perplexing, from the variety of opinions which prevail, is explained with preciſion and accuracy.

The next great diviſion of this Work reſpects the management of women after delivery. Here he carefully points out thoſe errors which have been moſt fatal; and conciſely delivers rules for treatment, ſuggeſted by common ſenſe and a faithful attention to the operations of nature. He then proceeds to give a detail of the diſeaſes incident to the child-bed ſtate. Under theſe he conſiders, firſt accidents from delivery, as ſwelling and inflammation of the parts, occaſioned by bruiſes of the child, or ignorance of the practitioner, lacerations, inverſion of the womb, and the like; and then, diſeaſes more ſtrictly ſo called, under which he includes the treatment of faintings, floodings, after-pains, inflammation of the womb, affections of the breaſts, the weed, the miliary, and the puerperal fevers.

The

The laſt diviſion regards the management of children in infancy. And it is here to be regretted, that the limits of the plan has prevented the Author from treating this intereſting ſubject with all the minuteneſs that could have been wiſhed. Here, however, he has ſuggeſted many uſeful advices for the prevention of thoſe diſeaſes to which the fatality of infancy may be imputed. Theſe are conſidered under the articles of cleanlineſs, cloathing, purging, nurſing, air, and exerciſe.

The diſeaſes themſelves are then ſhortly treated of in the following order: 1. The accidents occurring immediately at birth, or ſoon after, as thoſe ariſing from original malconformation, external injuries, and the like. 2*dly*, The internal diſeaſes, as the red and yellow gum, ſickneſs, vomiting, gripes, ſore mouth, teething, *&c.* On each of theſe ſubjects, although his obſervations be ſhort, yet they are perſpicuous, and may have conſiderable effect in preventing improper treatment.

The Work is concluded with remarks on the qualifications which female practitioners ought to poſſeſs, and with directions for preparing food and drink adapted to the circumſtances of lying-

in

in women, which may render this Work not only a valuable acquiſition to the female practitioner, but alſo to the intelligent mother and the careful nurſe.

VII.

An Account of a Method for preſerving Water at Sea from Putrefaction, and of reſtoring to the Water its original Pleaſantneſs and Purity, by a cheap and eaſy Proceſs: To which is added, a Mode of impregnating Water in large Quantities, with Fixed Air, for medicinal Uſes, on board Ships and in Hoſpitals; and likewiſe a Proceſs for the Preparation of Artificial Yeaſt. By Thomas Henry, F. R. S. *&c.* 8*vo.* Warrington.

THE Author of this Treatiſe introduces his ſubject, by deploring the loſs of ſuch a great number of men, as in long voyages at ſea, have, till of late, been uniformly carried off by ſcurvy. This dreadful calamity, he obſerves, takes its origin from putrid air, putrid proviſions, putrid water, a deficiency of freſh vegetables, and want of cleanlineſs; but he ſeems to think, that as putrid water is one of the prevalent cauſes

ſes of the diſorder, ſo a great deal may be done in preventing it, merely by a conſtant and plentiful ſupply of freſh water.

Our Author is by no means ignorant of the advantages to be derived from the mode of diſtilling ſea-water, as lately introduced to the navy; but this, he apprehends, is only intended to furniſh a partial ſupply of freſh water in caſes of neceſſity; and that it muſt be altogether inſufficient for the conſumption of a large crew; whereas, his ſcheme aims at the conſtant preſervation of water from the putrefaction to which it is expoſed in long voyages.

A method of preſerving water from putrefaction was ſome years ago propoſed by the late Dr Alſton. It conſiſted in adding a quantity of lime to every caſk of water; that ſubſtance having a ſtrong antiſeptic property, and water, as long as it retains the impregnation of lime, being never known to putrify. But lime communicates a diſagreeable taſte to water, and, abſtracted from that inconvenience, it might perhaps in many inſtances be detrimental.

To free the water, at the time of uſing it, from the lime, Dr Alſton propoſed the precipitation of the latter, by throwing into the water a quantity

quantity of magneſia; on this principle, that as limeſtone is rendered ſoluble in water by its deprivation of fixed air, and has a greater affinity with that air than magneſia has, the particles of quick-lime would attract the air from the magneſia, and thereby becoming no longer ſoluble, would fall to the bottom and leave the water taſteleſs and fit for œconomical purpoſes. Dr Alſton's theory was juſt, but the expence attending it, owing to the price of magneſia, was ſuch as to prevent the execution of the propoſal.

A variety of experiments were made by our Author, in order to diſcover a cheap and eaſy method of precipitating the lime, ſo as to reſtore to water impregnated with it, its original ſweetneſs and pleaſantneſs; and the reſult of theſe trials has fully anſwered his expectations.

We are here preſented with engravings of the different utenſils uſed in this proceſs: For a proper idea of theſe, we muſt refer our readers to the Work itſelf; but a particular detail of the proceſs we ſuppoſe will be very readily underſtood.

The Method of impregnating Water with Quick-lime.

To every caſk of water of 120 gallons, add two pounds of well burnt quick-lime, either

freſh from the kiln, or properly preſerved. When the lime has been in the caſk ſome minutes, and the heat and effervescence occaſioned by the mixture are over, let the caſk be ſtopped from any communication with the external air.

The Method of freeing Water from the Lime, and reſtoring it to its original pure State.

Let a caſk be prepared, of a form ſomewhat narrower, in proportion to its depth, than uſual. The top muſt be formed of one plank, and have a piece cut out of the centre, of a circular form, and as large as can be allowed without weakening the ſides too much. This piece, or bung, muſt be made to fit as cloſely as poſſible, and have an iron-handle affixed to it for the purpoſe of lifting it, and of confining a weight which is to be laid on, to keep the bung from yielding to a ſmall force from within. A ſmall hole muſt be bored in the ſide of the top, which is to be exactly ſtopped with a plug, for a purpoſe to be explained in the ſequel.

Fill this caſk, which may be ſuppoſed to contain 60 gallons, ſecured on a convenient part of the deck, or ſlung up in the ſhrouds, with the lime-water drawn off clear from the ſediment,

ſo

ſo as to avoid any viſible particles of lime floating in it; allowing ſufficient room for the air-veſſel, and a free ſpace of about half an inch between the ſurface of the water and the top of the caſk.

Let a veſſel be alſo prepared, capable of containing two gallons, or 1-30th of the capacity of the caſk. Into this veſſel introduce half a pound of marble, pure *unburnt* limeſtone, or chalk groſsly powdered, and two quarts of water. Then pour gradually on theſe, three ounces of ſtrong vitriolic acid, commonly called oil of vitriol, and ſtopping the mouth of the veſſel with a tubulated ſtopper, let it down by means of ſtrings into the caſk filled with lime-water. The fixed air let looſe from the mild calcareous earth, will bubble up through the lime-water. When this has continued about a minute, the bung is to be faſtened on, and a weight properly applied, ſo as to keep the bung in its place.

In about an hour, the bung may be removed in order to ſee whether the diſcharge of air continues; if it has ceaſed, or be conſiderably abated, three ounces more of vitriolic acid is to be added, and the air-veſſel returned to its former ſtation in the caſk.

The time neceſſary for precipitating the lime from the water, will be in proportion to the briſkneſs of the effervescence; but, in general, a few hours will be ſufficient. Should the firſt parcel of calcareous earth and vitriolic acid be unequal to the ſweetening of the lime-water, and no longer diſcharge air briſkly when agitated, the contents of the air-veſſel are to be poured out, and a freſh quantity of the ingredients ſubſtituted in their place.

When the water is become quite mild, the air-veſſel is to be taken out, and, if the calcareous earth continues to diſcharge air, let it be plunged into another caſk of lime-water, that there may be no needleſs expence of fixed air.

The ſpecific gravity of the lime is ſo much ſuperior to that of the water, that it will ſoon fall to the bottom of the caſk, when the operation is finiſhed. As ſoon as the water is become clear, it muſt be drawn off by a cock for uſe; or, if the caſk be wanted to purify other quantities of water, it may be drawn off ſooner into other veſſels to clarify.

The precipitated lime may be collected, and being now in the ſtate of chalk, and impalpably powdered, may be uſed inſtead of prepared chalk,

chalk, for the medicinal purpoſes to which that article is applied.

Cautions to be obſerved in theſe Proceſſes.

1. The quick-lime ſhould be choſen, as pure, free from any foreign taſte, white, well burnt, and as freſh from the kiln, as can be obtained. What is carried to ſea for future uſe, ſhould be carefully packed up in clean tight caſks, ſo as to preſerve it from moiſture and the action of the air.

2. The caſks into which the lime-water is put, ſhould be perfectly clean and ſweet; and thoſe ſhould be ſelected for this uſe, that are well ſeaſoned and free from ſap.

3. The water is to be firſt poured into the air-veſſel, then the calcareous earth, which is to paſs through a paper cone, to prevent its adhering to the ſides of the mouth of the veſſel; and *laſtly*, the acid is to be added, no attention being paid to the mixing the earth and water intimately. By this means, the acid attacks the calcareous earth gradually, and the veſſel is in no danger of burſting by the too ſudden exploſion of the air. For the ſame reaſon, care ſhould alſo be taken that the air-veſſel be not ſhaken too rapidly.

4. Gently agitating the upper part of the caſk from time to time during the proceſs, will accelerate the completion of it, by occaſioning a quicker abſorption of the fixed air; and the ſmall plug muſt occaſionally be taken from the hole in the top of the caſk, to let out that part of the air which is not ſoluble in water.

5. The precipitated lime is to be cleared out of the caſk after each time of uſing it; and the caſk ſhould be frequently waſhed thoroughly.

6. Care muſt be taken, that the mouth of the air-veſſel be clear of calcareous earth, before the ſtopper be put in; and that the ends of the tubes in the ſtopper be not clogged up with any thing that may prevent the paſſage of the air through them.

7. Each ſhip ſhould be provided with ſeveral of the air-veſſels, and each veſſel ſhould have two or three tubulated ſtoppers adapted to it; the veſſels and their ſtoppers to be marked with ſimilar numbers.

8. The ſize and number of the purifying caſks muſt be in proportion to the rate of the ſhip, and the convenience with which they can be managed.

9. If

9. If the caſk be left with the air-veſſel in it during the night, or for any conſiderable length of time, a ſmaller plug may be put into the ſmall hole in the top of the caſk, ſo as to leave it not quite air-tight.

10. If during the proceſs the fixed air ſhould eſcape by the edges of the round bung, it may be prevented by any ſlight luting, which may be eaſily removed when the bung is to be taken out.

11. It will be ſcarcely neceſſary to mention, that the air-veſſel, and the large circular bung-hole in the top of the caſk, are to be ſo proportioned, that the latter will eaſily admit of the paſſage of the former through its aperture.

Our Author now proceeds to communicate his method of impregnating water in large quantities with fixed air, ſo as to give it the properties of mineral water, for the uſe of the ſick on board of ſhips and in hoſpitals.

Dr Nooth's glaſs machine, with Mr Parker's and Mr Magellan's improvements, though admirably contrived for the preparation of ſmall quantities of artificial mineral water, is by much too ſmall for the ſickly crew of a large ſhip. To remedy this inconvenience, a mode is here pro-

poſed, by which the ſame kind of proceſs may be performed on a much larger ſcale; but as a diſtinct idea of the inſtruments recommended cannot be conveyed by deſcription, ſuch of our readers as wiſh for more particular information, muſt have recourſe to the drawings with which Mr Henry has favoured us.

From the proceſs here recommended by our Author, a plentiful ſupply of this medicinal water may be had at all times, and at a very trifling expence, which may not only be a preventative againſt putrid diſorders, but even a powerful remedy when they actually exiſt.

As it is a matter of importance to procure freſh fermented bread at ſea, our Author recommends the following proceſs for obtaining artificial yeaſt, and for making bread by means of it.

Boil flower and water together to the conſiſtence of treacle. When the mixture is become cold, fill a ſmall caſk with it, and let it be fully ſaturated with fixed air, in the manner directed by Dr Prieſtley and others, for impregnating water. Pour the mixture thus ſaturated, into one or more large bottles or narrow-mouthed jars. Cover it over looſely with paper, and upon

on that put a ſlate or board, with a weight to keep it ſteady. Place the veſſel in a ſituation where the thermometer will ſtand from 70 to 80 degrees, and ſtir up the mixture two or three times in 24 hours. In about two days ſuch a degree of fermentation will have taken place as to give the mixture the appearance of yeaſt.

With this yeaſt, when it appears to be in the above deſcribed ſtate, and before it has acquired a thoroughly vinous ſmell, mix the quantity of flour you intend to make into bread, in the proportion of ſix pounds of flour to a quart of yeaſt, and a ſufficient quantity of warm water. Knead them well together in a proper veſſel, and covering it with a cloth, let the dough ſtand for 12 hours, or till it appears to be ſufficiently fermented, in a degree of warmth equal to that above mentioned. It is then to be formed into loaves and baked.

Mr Henry next gives directions for preparing artificial pyrmont water; Seltzer water; and Mr Bewley's julep, in large quantities; but theſe proceſſes cannot be rightly underſtood but by references to the different figures, inſerted by our Author, of the ſeveral utenſils neceſſary in carrying them into execution.

The

The publication is at laſt concluded by a poſtſcript, anſwering ſome objections which Dr Lind of Haſlar hoſpital ſuppoſes may be made to ſome parts of the different proceſſes here recommended.

The only material objection ſtated by Dr Lind, is, that the agitation of the ſhip may, in ſome inſtances, obſtruct the proceſs recommended for the purification of the water; but a method here pointed out, for ſuſpending the different veſſels uſed in that proceſs, appears to be fully ſufficient for preventing every inconvenience of that nature.

SECT.

SECT. II.

Medical Obſervations.

I.

The Hiſtory of a Caſe, in which Worms in the Noſe, productive of alarming Symptoms, were ſucceſſfully removed by the Uſe of Tobacco. By Mr Thomas Kilgour, *Surgeon in Jamaica.*

A GENTLEMAN of Montego-bay in Jamaica, aged twenty-ſix, of a middle ſtature, and robuſt make, about the middle of July 1777, complained for three days, of a ſlight obtuſe pain, in his right upper jaw-bone, root of the noſe, eye, and forehead of the ſame ſide.

On

On the evening of the fourth day, the pain became exceedingly violent, extending through the third dens molaris, and affecting the right ſide of the face and head, with ſevere and inceſſant ſhootings. He applied next morning to an aſſiſtant of Mr Thomas Brown, an expert ſurgeon in this place, to extract the tooth, in which he felt the greateſt uneaſineſs, imagining his complaints originated from it. The tooth was perfectly ſound, and its extraction was attended with no alleviation of the pain. At night he took an opiate, but it afforded no relief.

I was deſired to viſit him next day. He then felt inexpreſſible agony and diſtreſs. The eye and right ſide of the face were much inflamed, but little ſwelled. From the right noſtril there diſtilled, in large drops, a thin dark coloured ichor, of a very offenſive ſmell, ſimilar to the diſcharge from a carious bone, but more diſagreeable. I examined the noſtril, but could perceive no ulceration. I therefore concluded it muſt be a collection of ſome acrid matter in the maxillary cavity, that occaſioned theſe violent ſymptoms, and that the diſcharge from the noſe was the matter finding its paſſage through that way.

The

The caſe being alarming, and the fever conſiderable, we called for the aſſiſtance of Dr Murray, who readily agreeing to our opinion of a collection of matter being formed in the maxillary cavity, a perforation was made into it, through the ſocket from which the tooth was extracted. But no diſcharge of matter followed the perforation, nor did the pain in the leaſt abate. On the contrary, it continued to increaſe more and more at the root of the noſe; and, about an hour after the operation, there were voided from the right noſtril, two inſects, in appearance like the maggots formed in putrid meat. On placing the patient in the light, a vaſt number were perceived in motion at the upper part of the noſtril. I introduced a forceps, and took out three or four at a time; and, in the courſe of that day, upwards of thirty. They were in general three-fourths of an inch long, and one-eight thick, compoſed of rings, ſuddenly tapering towards the tail, and had a large browniſh head. In extracting, they made a ſtrong reſiſtance with what ſerved them inſtead of feet, and gave a ſenſation to my hand like a file drawn acroſs a ſoft body. When taken out, they were very lively, and crawled

crawled about in the open air a long time before they died.

It was ſuppoſed theſe inſects were hatched in an ulcer of the noſe, from a venereal cauſe, the patient being affected with a ſimple gonorrhœa about a twelvemonth before, which was cured in the common way, and without any return of ſymptoms. This being the idea formed of the diſorder, after premiſing the neceſſary evacuations to moderate the febrile ſymptoms, a mercurial courſe was entered upon, both with a view of correcting the general ſtate of the habit, and likewiſe from its known qualities, in being offenſive to worms, to deſtroy the inſects. Three grains of black precipitate were ordered to be given at bed-time, along with an opiate, the noſtril to be frequently fumigated with cinnabar, and a ſolution of calomel and camphor, in oil, to be thrown up by injection.

Having a particular regard for the patient, I ſtaid ſeveral hours with him, and was much diſappointed in finding neither the fumigation nor injection to have the ſmalleſt effect in mitigating the pain, or deſtroying the inſects. I therefore ſet about ſome experiments to find out a remedy capable of killing them, and happily, in a little time,

time, diſcovered one that proved ſucceſsful; but previous to this attempt, that the mercurial ſolution might have the fulleſt juſtice done it, I put a few of the inſects into it, and found them at the end of an hour as lively as ever; a clear proof they were not of a ſpecies to be affected by oils or mercury.

The trials I made upon them were as follow;

I took five wine-glaſſes; into each glaſs I put two of the maggots; into one glaſs, I poured a ſtrong decoction of chamomile and wormwood; into another, vinous tincture of opium; into the third, rum; into the fourth, I blew tobacco-ſmoke; and into the laſt, I poured a decoction of tobacco.

The bitter decoction gave them no diſturbance. The tincture of opium, at its firſt application, threw them into violent motion; but in a ſhort time they recovered and moved about at their eaſe. The rum killed them in about ten minutes. The tobacco-ſmoke, in a few blowings, ſhrivelled them to death; and the tobacco-decoction inſtantly convulſed and deſtroyed them.

Next day, by conſent of Dr Murray and Mr Brown, the tobacco-decoction was injected into the noſtril, and the fumigation and mercurial injection laid aſide. The black precipitate and opiate

opiate were ordered to be continued at bed-time; and, with a view to obviate putrefaction, and ſupport the ſtrength, two ounces of infuſion of the bark were adminiſtered every hour through the day, and the patient indulged in a little wine, and ſuch ſlight nouriſhment as he could take. At firſt the tobacco-decoction gave a good deal of pain; but, in a little time, it became pleaſant and agreeable, ſenſibly correcting the fœtor, and bringing away the inſects in great numbers, and in a very weakly ſtate. After uſing it a few days, ſeldom more than half-a-dozen a-day were voided, and theſe frequently dead. At length, after a courſe of ten days, numbers being extracted by the forceps, and falling out of themſelves, ſometimes dead, ſometimes alive, a white tranſparent ſubſtance, near two inches long, and a quarter of an inch broad and flat, with three large inſects in it, was brought out by the forceps, upon which the pain greatly abated, and from that time the inſects diſappeared. In a few days more the abraſions of the membrana Schneiderіana were healed up, and before the middle of Auguſt, the patient was able to go to the mountains to recover his ſtrength.

The

The above mentioned ſubſtance, I preſume, had ſerved as a nidus for theſe inſects. On the ſurface of it were a great many inequalities and furrows. It is to be obſerved, that this young man had been ſubject to an hæmorrhage from the noſe, from the time he arrived at puberty till he ſettled in this iſland about five years ago, ſince which time he has had no attack of it. He loſt the ſenſe of ſmelling by the right noſtril after the hæmorrhage appeared, and has it only in an imperfect degree by the left; nor has it returned ſince he recovered from this diſorder. Might not this membranous ſubſtance have been formed of the coagulable part of the blood adhering about the oſſa ſpongioſa after the hæmorrhage, the red particles of what remained ſtagnated in the noſtril being reabſorbed? And might not this foreign body, by its ſtimulus, have brought on an ulceration of the membrana Schneideriana whence theſe inſects have been generated? One circumſtance in the above caſe is very aſtoniſhing, *viz.* the rapid generation of theſe inſects; as I am confident I ſpeak within bounds, when I aſſert, upwards of 200 were extracted and voided in the ſpace of 10 days.

It is ſurpriſing, that among all thoſe authors who have written on the diſeaſes of warm climates, there is no mention of maggots in the noſe as a diſeaſe that ſometimes occurs; and yet I imagine it is a complaint that has pretty often come within the knowledge of practitioners; for, ſince the above caſe, I have been informed of ſeveral inſtances that have happened in this iſland. The moſt remarkable is one that occurred ſome years ago, to a married woman of this place. Her huſband, after every thing had been tried in vain by the Faculty, one day when ſhe was in the greateſt agony, poured a quantity of oil of turpentine into the noſe; and this ſeeming to abate the pain, he continued to apply it for ſeveral days ſucceſſively. The event was, the inſects were killed, and the noſe reſtored to the ſtate of a ſimple ulcer, which ſoon healed up. But previous to the uſe of the turpentine, the unfortunate woman had loſt the oſſa naſi, and with this deformity ſhe eſcaped.

Another caſe was that of a young man, a few miles from this, which happened in 1776; but to him it proved fatal.

Mr Robert Monro of Hanover-pariſh, a very old practitioner, and a man of great experience

and

and medical ſagacity, informed me of a caſe of maggots in the noſe he had met with, in which, after every thing that was tried had failed, he thought of uſing the tobacco, from knowing its powerful effects in killing moſt kinds of vermin. The conſequence was, the inſects were ſpeedily deſtroyed, and the patient in a little time reſtored to health. And this fact of Mr Monro's, who was alſo called upon to viſit our patient, was what induced us to perſevere in the uſe of the tobacco, which happily proved ſo efficacious.

II.

Account of a New Method of Treating Dropſy. By Mr John Ring, *Surgeon, New Street, Hanover Square, London; communicated in a Letter to* Dr Duncan.

IN compliance with your requeſt to practitioners in general, to tranſmit to you any improvements made, or ſuppoſed to be made, in the art of healing, I have ſubjoined three caſes, to recommend what I believe to be a more ſucceſsful method of treating the dropſy, than thoſe

uſually purſued. Every inſtance in which I have yet tried it, has confirmed me in that opinion; but as the following were the moſt alarming caſes, I thought it would be intruding too much on the limits of your publication to trouble you with more. If, from theſe hints, the leaſt advantage ſhould accrue to any afflicted with that diſorder, my intention will be fully anſwered.

Caſe 1ſt. W. R. Eſq; was ſeized, in February 1778, with an anaſarca, which increaſed ſo faſt, that I apprehended conſiderable danger, as he was 84 years of age. It was occaſioned by a fit of the gout, which had relaxed him extremely, and I feared would render him unable to ſupport the neceſſary evacuations. Having, in many caſes, ſeen the uncertainty of diuretics, I gave him a purging draught, which reduced the ſwelling; and, on account of his weakneſs, did not repeat it till the third day, by which time his legs, *&c.* were ſwelled to their former ſize. Finding no ground was gained, I interpoſed a draught, conſiſting of tinct. amar. acet. ſcillit. *&c.* to be taken twice a-day on the days free from purging. The acet. ſcillit. kept up a diarrhœa, and excited

nauſea,

nauſea, on which account I ſubſtituted in its ſtead the following draught:

℞. Decoct. cort. Peruv. fort. unc. ſſ.
T. cort. Peruv. Hux. dr. iii.
Ol. Juniper. gut. iv. M. ft. hauſtus, meridie et nocte ſumendus.

From the time of taking this medicine, his appetite was immediately reſtored; the waters no longer increaſed on the intermediate days, and by the occaſional repetition of the purge, were in a ſhort time entirely removed. As the draught rather occaſioned coſtiveneſs, a few grains of rhubarb were ſometimes joined with it; and after the waters were evacuated, the draught, omitting the ol. Juniperi, was continued for ſome time. He has remained in perfect health ever ſince, except now and then a languor, for which he has recourſe to the ſame medicine, and never without effect. It may not be improper to obſerve, that frictions of the legs were recommended in this and the ſecond caſe; and in the laſt, of the abdomen; together with abſtinence from liquids, as much as convenient, in them all.

Caſe 2d. Mrs F. aged 44, having been expoſed to the rain at the time of her menſes, they ſuddenly ſtopped. Her abdomen immediately

began to ſwell; and, in the ſpace of a week, when I firſt was ſent for, (Sept. 6. 1778,) an anaſarca had diffuſed itſelf through the whole ſyſtem, to a great degree for ſo ſhort a time. Her body was increaſed above ſix inches in circumference, and her legs to twice their natural ſize. I directed for her a draught with El. e Scammon. by which the waters were greatly diminiſhed; but in two days, at which time it was repeated, they were collected again to their uſual quantity. The ſecond draught did not agree ſo well as the firſt; it produced more pain, and leſs diſcharge; nevertheleſs her ſtrength was much exhauſted, as her ſtomach was too weak to bear any animal food but broth. The third draught was intended to be given at three days diſtance; but before that time, ſhe was ſeized with ſo violent a pain of the bowels, that an anodyne was neceſſary, which removed it. After waiting a few days, for fear of too great irritation, I changed the draſtic purge for one of a lenitive kind, as inf. Senæ, *&c.*

After taking five cathartics, no advantage could be perceived, as the waters, after the evacuation, ſoon increaſed again, ſo that we almoſt deſpaired of ſucceſs. I did not think myſelf warranted,

warranted, by the former caſe, to give the bark in this, on account of the great quantity of waters, till I had tried diuretics with the uſual corroborants, as inf. amarum, ſal tartari, ol. juniperi, *&c.*; but after giving them for ten days between the days of purging, and finding no other effect but that of raiſing a fever, I ordered a ſaline mixture, which preſently removed it, and afterwards the bark, *&c.* as in the former caſe. The event anſwered my wiſhes; her appetite grew ſtrong; the waters no longer increaſed; and, by the aſſiſtance of a purge now and then, which ſhe bore well, her diſorder was ſoon removed, and has never returned ſince.

Caſe 3d. Mrs N. who had ſeveral children, ſent for me when ſhe thought herſelf in the ſixth month of her pregnancy, and deſired my advice concerning bleeding; as, although ſhe believed herſelf to be with child, the menſes regularly appeared in a ſmall quantity. I did not find the leaſt occaſion for bleeding; her pulſe being low, and every thing indicating great relaxation; and I expreſſed ſome doubt of her pregnancy; but ſhe herſelf ſeemed poſitive of its reality, from her regularly increaſing in ſize; and was more confirmed in it as it advanced, by

thinking that ſhe frequently felt the child move. Her labour not happening when the uſual term of geſtation was elapſed, I propoſed an examination, to aſcertain her true ſtate; and was confirmed in my conjectures, that the tumour was an hydrops ovarii.

I directed for her, (Oct. 29. 1778,) a purging draught, and two days after repeated it; then gave her a mixture of inf. amarum, ſal tartari and ol. juniperi; as I wiſhed to prove, by a ſufficient number of caſes, whether my want of ſucceſs before with that medicine was owing to its inefficacy, or to any peculiarities in thoſe habits where it had been made uſe of. She complained that it occaſioned great heat in her ſtomach, and no good conſequence whatever enſued to recommend its continuance. As ſhe was much weakened by the former evacuations, the cathartic was not repeated till the fourth day; and immediately after, I directed a mixture of the ſtrong decoction of bark, Huxham's tincture and oil of juniper; three large ſpoonfuls to be taken noon and night, on the intermediate days. The cathartics were repeated every four or five days; and to remove coſtiveneſs, two pills at night occaſionally, of equal parts

parts of pil. cocciæ, and pil. rufi. Before the end of December, the tumour was perfectly removed, and her ſtrength almoſt eſtabliſhed. From the time ſhe began the bark, ſhe ſupported the evacuations with eaſe, and the tumour never increaſed; but did not ſubſide very perceptibly, unleſs from the cathartics. The pills were continued for ſome time to remedy coſtiveneſs, which went off as her ſtrength was, by exerciſe, more reſtored. Her complaint has not ſince returned, and ſhe is now advanced near ſeven months in pregnancy.

The inferences I would draw from theſe obſervations, are, 1*ſt*, That in dropſies, where no particular ſymptom, as inflammation of the viſcera, *&c.* forbids it, we ought early to interpoſe bracing medicines, between the uſe of cathartics: And, 2*dly*, That for that intention, no medicine is equal to the Peruvian bark.

III.

An Obſervation on opening the Abdomen and Thorax of a young Lady, who died after a very ſhort illneſs; communicated to Dr Duncan, *by* Mr Richard Paxton, *Surgeon at Maldon in Eſſex.*

A LADY, in the 23d year of her age, of a delicate frame of body and weakly conſtitution, had, for two years paſt, complained of a ſlight pain on the right ſide of the thorax, attended with ſome reſtriction in breathing and a tickling cough; which ſymptoms rendered her extremely averſe to any kind of exerciſe. About the latter end of Auguſt 1780, ſhe was ſeized with the ſymptoms of an autumnal remittent, then prevailing in the neighbourhood, which readily yielded to the uſual treatment in theſe caſes.

The firſt ſymptoms, however, ſtill attended her; the pain in the ſide, and reſtriction in breathing, rather increaſing till the 15th of December; on the noon of which day, I was again called, and found her laid on bed with the following complaints: Debilitated quick pulſe, chillneſs even to ſhivering, together with acute pain

on

on the right ſide, or, as ſhe expreſſed it, below the ſhoulder, and bilious vomiting. They told me, that as ſhe was ſitting at her needle-work in her chamber, to which ſhe had retired after breakfaſt, ſhe felt, and even heard, ſomething give a violent ſnap within her breaſt, in that part where ſhe now deſcribed the pain to be. Her mother going into the room ſoon after, ſhe exclaimed to her, ſhe ſhould die. I begged ſhe might be undreſſed, and go into her naked bed; which was done, and ſent her over a ſaline julep, meaning to viſit her again in two or three hours; but ere that time was elapſed, her father came for me, and I found her ſtomach rejecting every thing ſhe ſwallowed, and every ſymptom exaſperated. I confeſſed myſelf totally at a loſs for the cauſe of the appearances; but being fully ſatisfied of her imminent danger, intreated a phyſician might be ſent for, which was inſtantly agreed upon; and Dr Steele from Witham ſaw her about ſeven o'clock in the evening. By his direction ſhe was bled to the amount of 12 ounces, a bliſter was applied to the ſide, *&c.*

The ſymptoms then were, in the Doctor's own words, "Difficult reſpiration, acute pain in "the right ſide juſt below the breaſt, pulſe fre-

"quent

" quent and oppreſſed, increaſed heat, frequent " bilous retchings, countenance uncommonly " anxious: What was very remarkable, the " pulſe not at all freer from the liberal veneſec- " tion, though the reſpiration a little relieved. " My idea of the caſe at the time was its being " a formal pleuritic attack." She paſſed a painful night without the mitigation of any one ſymptom. On the morning of next day, the Doctor found her pulſe " ſcarcely perceptible, and un- " commonly quick, continual rigours and vomit- " ings, cold clammy ſweat, *&c.* complained of " intolerable ſickneſs, and pain only near the pit " of the ſtomach, with a ſenſe of load and op- " preſſion there." She died at two o'clock that day, or about 28 hours from the time of the ſeizure.

Next day, having obtained leave to open the body, it was performed the ſame evening in preſence of, and with the aſſiſtance of three other ſurgeons.

The abdomen being much diſtended, apparently by ſome fluid, a perforation was made into it with a trocar in the uſual place of tapping for an aſcites; by which, however, nothing but air was let out.

The

The abdomen was then opened in the uſual manner, when the ſtomach and inteſtines appeared greatly diſtended; which diſtenſion ceaſed upon letting out the air contained in them. The ſtomach, liver, gall-bladder, and inteſtines, in every other reſpect exhibited a moſt healthy appearance; and no obſtruction whatever was found in the gall-ducts, or any extravaſation in the cavity of the abdomen.

The thorax was then opened, the right cavity of which was found to contain more than three pints of reddiſh water, with two cyſts detached and floating therein; one of the cyſts ruptured, but not quite emptied of its fluid. The right lobe of the lungs was much compreſſed, ſo as to occupy but a trifling part of the cavity. The left lobe, the heart, and all other parts which we examined, were in a perfectly ſound ſtate; and what is very remarkable, not the leaſt adheſion was found in either cavity.

As Dr Steele had expreſſed an earneſt wiſh for the diſſection, I tranſmitted the account to him by the earlieſt opportunity, and ſome time after received the following:

"Dear Sir, I am much obliged to you for "communicating ſo immediately the particulars

"of

" of the diſſection, which, though it throws ſome
" light on the immediate cauſe of our patient's
" death, enables us to ſay little what might have
" been done to prevent it. One means only ſug-
" geſts itſelf to me, and that from the ſhort pe-
" riod between the attack and cloſe of the ſcene,
" a doubtful one. The effuſion into the right
" cavity of the thorax aſcertained, Would an
" opening between the ribs into a depending
" part of that cavity, have mitigated the ſymp-
" toms, or ſaved life?"

SECT.

SECT. II.

Medical News.

THE new operation of *cutting the ſymphyſis of the pubes*, having greatly divided the opinions of medical profeſſors in different parts of Europe, we preſume the following abſtract from the ſecond volume of Dr Leake's laſt edition of Practical Obſervations on the Acute Diſeaſes of Women, cannot fail of being acceptable to many of our readers; eſpecially as the ſubject is intereſting, and the Author ſeems to have entered candidly and minutely into a diſcuſſion of the principal circumſtances for and againſt that operation. Dr Leake introduces this ſubject in the following manner:

The ſection of the pubes, firſt propoſed by M. Sigault in his Theſis at Angiers, and afterwards by

by him ſucceſsfully performed on the living body at Paris, Sept. 2. 1777, having lately much engaged the attention of Medical Gentlemen, I ſhall beg leave to offer ſome general animadverſions on that new and extraordinary operation; particularly as M. Le Roy, Profeſſor of Midwifery, and Doctor-regent of the Faculty of Phyſic at Paris, who aſſiſted him in the performance of it, was pleaſed to honour me with a letter and his Treatiſe on that ſubject; and as M. Poignand the tranſlator has thought fit to addreſs it to me.

M. Sigault deſcribes the ſection of the pubes, and propoſes it as a ſubſtitute for the Cæſarian operation; the propriety of which, as well as the objections brought againſt it, I am deſirous to examine with attention and candour; for little advantage can ariſe from opinions, where men rather contend for ſuperiority than truth. The ſpirit of enquiry is only commendable when it is exerted for the improvement of ſcience, and ſolely directed for the public good. But although I am inclined to think favourably of this operation, for reaſons hereafter aſſigned, I know that nothing but time and future experience can ſufficiently determine whether it ought to be rejected or adopted.

The

The ſtructure of the parts on which this operation is to be performed, being perfectly known to every medical reader, their deſcription, as well as that of the operation itſelf, would be unneceſſary, eſpecially as the laſt is circumſtantially ſet down in M. Le Roy's tract, entitled, Practical Enquiries on the Section of the Pubes, to which I muſt refer him.

The following are the objections to this new operation. *1ſt*, That the cartilage at the ſymphyſis of the pubes, may happen to be oſſified, which would prevent its diviſion by the knife. *2dly*, That the neck of the bladder may be wounded. *3dly*, That the ſpace gained by the ſection of the pubes, may not, in a narrow pelvis, be ſufficient to allow the child's head to deſcend through the cavity. *4thly*, That the union of the cartilage may not be affected. And *laſtly*, That the internal poſterior ligaments, uniting the ſacrum and ilia, may be torn aſunder, by dividing the bones of the pubes.

In anſwer to the preceding objections, *1ſt*, It may be remarked, that cartilage being a ſubſtance eſſentially diſtinct from bone, is never found oſſified except in a preternatural ſtate, or in old age, after the time of child-bearing is paſt, and

where there could be no occaſion for the operation.

2*dly*, The neck of the bladder being only ſlightly attached to the ſymphyſis of the pubes, by cellular membrane, and not in cloſe union with the cartilage, there never can be the leaſt danger of wounding it, unleſs the operator is unſkilful and ignorant of the ſtructure and ſituation of the parts.

3*dly*, The ſpace only of one inch gained by M. Sigault from the ſection of the pubes, on the dead body, does not appear ſufficient to enlarge the bony paſſage for the exit of a child's head, in a pelvis uncommonly narrow; but in the caſe of Mrs Braſier, M. Le Roy found a ſeparation of two inches and a half. And as the caſe at the Weſtminſter Lying-in Hoſpital affords inconteſtable proof, that after the ſection of the cartilage, the bones of the pubes, without violence, receded from each other full two inches and an eight, I have no doubt but ſo much additional ſpace would in general be ſufficient to let the child's head paſs, even in a pelvis ſo preternaturally narrow, that no other means but the Cæſarian operation could be deviſed for its birth.

Of

Of all the cauſes of difficult labour, the moſt frequent and invincible objection to child-birth is that of a narrow or diſtorted pelvis; to remedy which, the ſection of the pubes ſeems more peculiarly adapted; but here we are told by ſome, that although the long axis of the pelvis may from thence be extended from ſide to ſide, its ſhorteſt diameter from ſacrum to pubes, where additional ſpace is moſt wanted, will not be increaſed in the ſame proportion, and therefore the operation cannot avail. This indeed, at firſt ſight, looks like a ſpecious objection, which, if not thoroughly examined, might greatly depreciate the merit and advantages of the new operation. I ſhall, therefore, beg the reader's attention to the following circumſtances, which if clearly underſtood, I preſume will diſprove and totally ſet aſide what has ſo plauſibly been alleged againſt it. By the ſection of the pubes, it is now generally allowed, even by its opponents, that the ſpace gained by the aperture between the divided bones, is nearly two inches and a half, even in the dead body, where the parts are cold and rigid, and conſequently leſs yielding than in a living ſtate. It will therefore follow, that as much of the occiput or hind-head as is protru-

ded into an aperture at the pubes of two inches and a half; ſo much preciſely will be the ſpace gained by this operation, and ſuperadded to the ſhort axis of the pelvis, from ſacrum to pubes; and ſince the child's hind-head, preſenting at the ſymphyſis, is much ſmaller in diameter than the head itſelf, ſo much greater will be its projection into the aperture; and therefore the ſpace gained from ſacrum to pubes will be equal to the enlargement of the pelvis from ſide to ſide; which is the circumſtance here contended for, and what, we preſume, is fully proved, contrary to the aſſertion of thoſe who have oppoſed the new operation.

4*thly*, From the obſervations and unqueſtionable authority of Petit and De La Faye, we are aſſured, that cartilages will as firmly unite after diviſion, as bones after a fracture. But, to put this matter out of all doubt, Dr Camper, a Dutch phyſician, made experiments upon a quadruped, by cutting through the cartilage of the pubes, and after diſſecting the parts, he found they were firmly united.

Laſtly, Reſpecting the pretended laceration of the internal poſterior ligaments of the pelvis uniting the ſacrum to the ilia, I muſt refer to the

caſe

caſe at the Weſtminſter Hoſpital, already recited, where the ſection of the pubes was made in the preſence of 16 Medical Gentlemen, and where, notwithſtanding the ſpace gained was two inches and an eighth, no laceration, or the leaſt marks of violence, appeared; but, on the contrary, thoſe ligaments were found perfectly firm, and in their natural ſtate. If ſo much ſpace could be obtained without laceration in the dead body, where the fibres were cold and rigid, and their coheſion conſiderably weakened by natural tendency to diſſolution; how much greater ſpace might reaſonably have been expected in the living ſubject, where the ſolids are more ſoft and yielding?

Let us now take a comparative view of the Cæſarian operation, for the ſucceſs of which Rouſſetus contends with ſo much zeal; whilſt Marchant condemns it as highly dangerous, and informs us, that Paré, Guillemeau, Viard, and others of the firſt rank in their profeſſion, found this operation extremely unſucceſsful.

In the 4th volume of the London Medical Obſervations, may be found a caſe of Cæſarian operation accurately related, and the only inſtance that I know of, where it was performed upon

the living body, in this great city, for upwards of a century paſt. From this caſe, as one which may be depended upon, I have tranſcribed the following particulars, being the leading circumſtances, and moſt material practical facts relative to the nature and event of that operation.

The Cæſarian operation was performed on Martha Rhodes, Oct. 21. 1769, by Mr Thomſon, ſurgeon to the London Hoſpital, who informs us, that the patient did not loſe more than four ounces of blood, though ſhe died about five hours after. The body being opened, grumous blood, which was computed to weigh about 20 ounces, was found on the ſurface of the omentum and uterus. The cavity of the womb alſo contained blood; ſo that the whole quantity of this vital fluid loſt by the operation was allowed to be 30 ounces. Mr Thomſon ſays, it is well known, that in natural labours the diſcharge of blood will often much exceed that quantity; and therefore ſeems at a loſs to form a judgment what might have been the immediate cauſe of this patient's ſudden death.

From this laſt opinion I muſt beg leave to differ; but even admitting the quantity of blood diſcharged in a natural labour to be conſiderable,

as

as it ſometimes is, the danger ſhould not be eſtimated ſimply by its quantity, but by the ſhort ſpace of time in which it is diſcharged, as well as the nature of the blood itſelf, and the ſource from which it is derived.

After delivery, the blood is very ſlowly evacuated from the innumerable ſmall veſſels proceeding from the womb, and entering the cellular ſubſtance of the placenta, for the immediate ſervice of the child; reſpecting the mother, this blood may therefore be looked upon as redundant, and not eſſential to the ſupport of her own body. On the contrary, in the Cæſarian ſection, where the large dilated arteries and veins of the womb are divided, and 30 ounces of vital blood, and that merely maternal, ſuddenly guſhes forth in a full ſtream, I am inclined to think that ſo powerful a check to the circulation, may ſuſpend the heart's motion, and prove the immediate cauſe of the patient's death, by producing a mortal ſyncope; particularly when we conſider, that the hypogaſtric arteries entering the uterus, proceed from large branches of the aorta, through which the blood circulates with extreme velocity.

But could we ſuppoſe the patient might eſcape a mortal hæmorrhage after this operation, would not the large quantity of grumous blood extravaſated in the cavity of the belly, from which it could not be evacuated, corrupt and deſtroy the contiguous vital parts, and prove the remote cauſe of her death?

The ſection of the pubes, which allows the child to be born by the natural paſſage, carries not with it thoſe ideas of cruelty which attend the Cæſarian operation, where the patient is, as it were embowelled alive. No formidable apparatus is neceſſary; the ſection being made with expedition, and without pain or danger; no blood-veſſel, nerve, or other parts eſſential to life, are wounded; theſe divided, being only ſkin, cellular membrane and inſenſible cartilage, from which neither hæmorrhage, nor ſymptomatic fever, are to be apprehended.

Theſe are my reaſons for preferring the new operation, by which the mother and child may probably both be ſaved; but where the mother at leaſt, to whoſe ſafety our principal attention ſhould be directed, would generally be loſt by the Cæſarian ſection.

To

To thoſe who vaguely give it as their opinion, that this operation will not ſucceed, the anſwer is ſhort; it has already ſucceeded, and therefore it may again ſucceed, particularly with ſuch as are diſpoſed to give it a fair and judicious trial.

M. Le Roy gives ſeveral examples of its ſucceſs. M. Deſpree, ſurgeon in Brittany, performed the ſection of the pubes with happy event in 1778: And Monſ. de Lambon, firſt ſurgeon to the Dutcheſs of Lorraine, in a letter to Monſ. de Brambilla, lately publiſhed at Mons, informs him, that he had performed the ſection of the pubes on two patients with ſucceſs; one of which ſubmitted to the operation twice, and is now in perfect health, as well as her child, of which ſhe was happily delivered by the ſecond operation.

My ingenious friend, Dr Hauſman of Brunſwick, who did me the honour to number himſelf among my pupils, alſo obliged me with a manuſcript account of this operation ſucceſsfully performed by Profeſſor Siebold.

To conclude, reſpecting the caſe of Mrs Souchot, upon whom the ſection of the pubes was firſt performed by M. Sigault, ſuch was the event, that both the mother and child were preſerved; the circumſtances appeared ſo extraordinary,

dinary, that Commiſſioners were appointed by the Medical Faculty of Paris, to examine into the ſtate of the caſe, and ſucceſs attending it; in conſequence of which, the honour of prize medals was conferred on M. Sigault, as well as M. Le Roy, who aſſiſted him in the operation."

To this Work of Dr Leake, which is dedicated to the Queen, and which has been tranſlated into the French and German languages, is now prefixed a portrait of the Author. It contains alſo additional obſervations on the uſe of camphor in child-bed fevers; and an account of a new and ſucceſsful method of treating uterine hæmorrhagies. Of theſe we propoſe to give ſome account in a future number.

To theſe obſervations on the ſection of the ſymphyſis pubis, we may alſo add, that it has of late been ſucceſsfully performed in Spain, by Signor Canivel, Surgeon Major to the naval hoſpital at Cadiz.

* * * *

The following account of the ſucceſsful treatment of the Hydrocephalus Internus, by means of the Vapour Bath, is extracted from a letter written

written by Dr A. Hunter, Phyſician at York, to Dr Will. Hunter, Phyſician to the Queen.

" A child, in the third year of its age, was afflicted with the hydrocephalus internus in a moſt alarming degree; and as various remedies had been unſucceſsfully uſed, a trial of the Vapour Bath was at laſt recommended, not from any juſt reaſoning upon the caſe, but rather from a deſire to cultivate a forlorn hope. Not being at that time much acquainted with the nature of the Vapour Bath, I gave it as my opinion, that the operation would prove fatal to the child, imagining, that the ſudden rareſaction of the fluids would increaſe the preſſure upon the brain, already diſeaſed by accumulated weight. But when I found that the friends of the child had determined upon the trial, I ſubmitted my judgment to their reſolution; and the child was accordingly placed in the fumigating chair, with anxious fears on my part. The firſt operation was continued for the ſpace of ſeven minutes; and, as the child bore it well, and ſeemed rather better on the ſucceeding day, I felt myſelf encouraged in the proſecution of the fumigation. I accordingly recommended it to be continued every other day; and, at the expiration of 20 days,

days, I ſpeak it with aſtoniſhment! every ſymptom was diminiſhed. The child could then view objects with pleaſurable attention; could articulate a few words, and, with a little aſſiſtance, could walk acroſs the room; whereas, before the fumigation, it had loſt its ſpeech, its eyes wandered without deſign, its apprehenſion was almoſt annihilated, and its limbs were unable to ſupport the weight of its body. The cure being performed in the ſpring, I recommended ſea-bathing during the ſummer months, which fully anſwered the purpoſe of giving additional ſtrength. And here it will be neceſſary to obſerve, that ſeven grains of Peruvian bark, given twice a-day, was the only medicine preſcribed during the courſe of fumigation; and that was exhibited with a view to increaſe the abſorption of the extravaſated fluid.

The Vapour Bath, when highly impregnated with ſtimulating aromatics, occaſions a ſudden redneſs of the ſkin; a temporary fever is brought on, and a copious perſpiration is produced, which uſually terminates as ſoon as the patient is dreſſed. From theſe appearances, we may rationally account for the abſorption of water preternaturally collected in the ventricles of the brain.

This

This being a ſolitary caſe, we muſt not give our hopes too much indulgence: Let it, therefore, only be conſidered as fair ground for future experiment. I could ſay a great deal in favour of the Vapour Bath, in the cure of a variety of diſeaſes, having, ſince the above caſe, had a conſiderable degree of experience in that mode of practice: But, as I wiſh to confine this letter to the ſucceſsful treatment of the hydrocephalus internus, I ſhall leave the ſubject for the preſent, and content myſelf with the general recommendation of a practice that ſeems to deſerve our ſerious attention."

* * * *

Some Gentlemen, at Stockholm in Sweden, have lately begun to publiſh a Medical Journal, to which they have given the name of *Weckoſkrift for Lakare och Naturforſkare*, i. e. Weekly Papers for Phyſicians and Naturaliſts. The Editors have propoſed to confine themſelves as much as poſſible to Swediſh Medical and Philoſophical diſcoveries; yet, as theſe will probably not afford ſufficient materials for a weekly number, they propoſe alſo to pay attention to the moſt intereſting foreign publications.

A ſimilar Work is likewiſe publiſhed at Gottenburg in Sweden, and one number comes out every month, under the title of *Samling af Kon och Uptackter*, i. e. A Collection of Experiments and Diſcoveries. The Editors of this Work have adopted a very extenſive plan; comprehending not only Phyſic, Surgery, Chemiſtry, and Natural Hiſtory, but alſo Oeconomy, Agriculture, Trade, Manufactures, *&c.* together with Biographical Accounts of eminent Literary Men. We are informed in the preface, that although the Editors propoſe chiefly to publiſh thoſe new diſcoveries that are made in foreign countries in the practical ſciences, yet they cannot but likewiſe leave room for their native literary productions. They have alſo made it a ſacred rule, never to let any indecent criticiſm or perſonality enter their publications.

From theſe two ſources we hope, from time to time, to be enabled to communicate to our readers, important diſcoveries in various branches of Medical Literature, particularly in Chemiſtry, which has of late been cultivated in Sweden with no leſs aſſiduity than ſucceſs.

On

* * * *

On the 29th of November 1780, died at Leyden, in the 76th year of his age, Hieronymus David Gaubius, firſt Phyſician to the Stadholder, and Member of many of the moſt eminent learned Societies in Europe. Dr Gaubius ſtudied under the illuſtrious Boerhaave; and from diſtinguiſhing marks of genius and induſtry, became ſo much the favourite of his Profeſſor, that he reſigned the Chemical Chair in his behalf, from the conviction that no one was better fitted to ſupport the credit of the Univerſity. Dr Gaubius taught at Leyden with deſerved applauſe, for the ſpace of 40 years. But, in the year 1775, he retired from the laborious duties of an office, to which his advanced age was but ill-ſuited, to make way for the preſent eminent Profeſſor, John David Hahn, then Profeſſor at Utrecht. The high reputation which he acquired in his own country as a ſkilful practitioner, and an inſtructive teacher, was extended over all Europe by ſeveral valuable publications; particularly by his Inſtitutiones Pathologiæ Medicinalis, and his Adverſaria, which have contributed not a little to the improvement, both of the Theory and Practice of Medicine.

On

* * * *

On the 6th of December 1780, Joſeph Lieutaud, Counſellor of State, and firſt Phyſician at the Court of France, died at Verſailles, in the 78th year of his age. Mr Lieutaud was born at Aix in Provence, and reſided principally there, till he took the degree of Doctor of Medicine. After this he proſecuted his ſtudies for ſome years at Montpelier. He returned to Aix, where he ſoon acquired extenſive practice, and became eminent for literary abilities. There he reſided till the year 1750, when he was invited to act as Phyſician to the Royal Infirmary at Verſailles. There he practiſed with ſuch reputation and ſucceſs, that he ſoon arrived at the head of his profeſſion; and, in the year 1774, upon the death of Mr Senac, he was appointed Archiater. His extenſive engagements in practice did not prevent him from cultivating the Science of Medicine in all its branches, and from freely communicating to others the reſult of his own ſtudies. He publiſhed, during his lifetime, many valuable works. Among theſe we may mention the following, which have eſtabliſhed his reputation while alive, and which will tranſmit his fame to lateſt poſterity.

1. Elementa Phyſiologiæ.
2. Precis de la Medicine Pratique.
3. Precis de la Matiere Medicale.
4. Eſſais Anatomique.
5. Synopſis Univerſæ Praxeos Medicæ.
6. Hiſtoria Anatomico-Medica.

* * * *

While we thus mention the death of two eminent Phyſicians, the fruits of whoſe labours the world have had a full opportunity of enjoying; we cannot, without regret, take notice of the loſs of an ingenious young Anatomiſt, Mr Andrew Blackall, who lately died at Briſtol hot-wells, in the 27th year of his age. To more than ordinary natural abilities, Mr Blackall ſuperadded ſingular induſtry. After proſecuting the ſtudy of his profeſſion at London, Edinburgh, and Paris, he ſettled in Dublin, his native city. There his attention and abilities procured him the friendſhip and patronage of Drs Cleghorn, M'Bride, Purcell, and many others, who were happy to have an opportunity of patronizing ſingular merit. His ambition, however, prompted him to aim at higher objects than he thought could be obtained in Dublin. And, on a vacancy in an anatomical theatre in London, by

the death of Mr Magnus Falconer, he removed to that city, where he began the office of a lecturer with the moſt flattering proſpects of ſucceſs. But a pulmonary conſumption ſoon put a period to his progreſs, and to his life.

* * * *

Dr Thomas Miek, and Dr John Lind of Plymouth, have lately been elected Fellows of the Royal College of Phyſicians of Edinburgh; and Dr William Grieve has been admitted a Licentiate.

* * * *

Mr John Rae, ſecond ſon to Mr James Rae, has lately been admitted a Member of the Royal College of Surgeons of Edinburgh.

SECT.

SECT. III.

List of New Books.

AN affectionate Tribute to the Memory of the late Dr J. Fothergill. By W. Hird, M. D. 4to. London.

A Critical Enquiry into the ancient and modern Manner of Treating the Diseases of the Urethra. By Jesse Foot, one of the Company of Surgeons in London, and privileged Practitioner from the College of St Petersburgh. 8vo. London.

A Treatise on Sympathy, in two parts. Part 1st, On Sympathy in general. Part 2d, On Febrile Sympathy. By Seguin Henry Jackson, M. D. Member of the Royal College of Physicians, London, and of the Royal Medical Society, Edinburgh, and Physician to the Westminster General Dispensary. 8vo. London.

Observations, Medical and Political, on the Small-pox and Inoculation; and on the De-

creaſe of Mankind at every Age; with a comparative View of the Diſeaſes moſt fatal to London during ninety Years. By W. Black, M. D. 8vo. London.

Caſes of the Angina Trachealis, with the Mode of Cure, in a Letter to William Hunter, M. D. *&c.* By Richard Bayley, Surgeon, to which is added, a Letter from Peter Middleton, M. D. to the Author. 8vo. New York.

A Treatiſe on the Gonorrhœa, to which is added, a Critical Enquiry into the different Methods of adminiſtering Mercury, intended as a Supplement to a former Work, entitled, a New and Eaſy Method of Cure, by the introduction of Mercury into the Syſtem, through the orifices of the abſorbent Veſſels on the inſide of the Mouth. By Peter Clare, Surgeon. 8vo. London.

The Principles and Practice of Midwifery; by Edward Foſter, M. D. completed and corrected by James Sims, M. D. 8vo. London.

Chemical Eſſays, by R. Watſon, D. D. F. R. S. 2 vols. 8vo. London.

Philoſophical Enquiries into the Laws of Animal Life. By Hugh Smith, M. D. 4to. London.

Caſes

Caſes of Inſanity, the Epilepſy, Hypochondriacal Affection, Hyſteric Paſſion, and Nervous Diſorders, ſucceſsfully treated by W. Perfect, Surgeon. 8vo. London.

Obſervations on the poiſonous Vegetables, which are indigenous in Great Britain, or cultivated for ornament. By B. Wilmer, Surgeon. 8vo. London.

An Eſſay on Culinary Poiſons. 8vo. London.

A ſhort Enquiry into the Merit of Solvents, ſo far as it may be neceſſary to compare them with the operation of Lithotomy. By Jere Whitaker Newman. 8vo. London.

Select Diſſertations from the Amœnitates Academicæ, a Supplement to Mr Stillingfleet's Tracts relating to Natural Hiſtory, tranſlated by the Reverend F. J. Brand, M. A. vol. 1ſt. 8vo. London.

Medical Anecdotes of the laſt thirty Years. By B. Dominicetti, M. D. 8vo. London.

Obſervations on the Nature, Cauſes, and Cure of Melancholy. By Ben. Fawcet, A. M. 12mo. London.

Obſervations on Fever, by John Roberts. 8vo. London.

Hiſtory of Quadrupeds, by Thomas Pennant, Eſq; 2 vols. 4to. London.

General Synopſis of Birds. By John Latham, F. R. S. 4to. London.

Remarks on the Influence of Climate, Situation, Nature of Country, Population, Nature of Food, and Way of Life, on the Diſpoſition and Temper, Manner and Behaviour, Intellects, Laws and Cuſtoms, forms of Government, and Religion of Mankind. By William Falconer, M. D. F. R. S. 4to. London.

The New Britiſh Diſpenſatory. 12mo. London.

Experiments and Obſervations in Natural Philoſophy. By J. Prieſtley, L. L. D. F. R. S. Volume II. 8vo. London.

An Account of an Elaſtic Trocar, conſtructed on a new principle, for tapping the Hydrocele or Watery Rupture; by which the operation may be performed at any period of the diſeaſe, and with leſs pain than with the common Trocar; with a few words in favour of a larger Trocar, on a ſimilar conſtruction, for tapping the Abdomen. By John Andree, Surgeon to the Magdalene Hoſpital, and to the Finſbury Diſpenſary. 8vo. London.

Praktiſche

Praktiſche Bemerkungen, uber den Gebrauch der Sibiriſchen Schneeroſe, in Gichtkrankheiten, *&c. i. e.* Practical Obſervations on the Uſe of the Rhododendron Chryſanthum, in Rheumatiſm and Gout. By Alex. Bern. Kolpin, M. D. Profeſſor of Phyſic at Alten Stettin. 8vo. Berlin.

Hiſtoire Naturelle de la France meridionale; ou Recherches ſur la Mineralogie du Vivarais, du Viennois, du Valentinois, *&c.* ſur la Phyſique de la Mediterranée, les Meteores, les Arbres, les Animaux, l'Homme & la Femme de ces contrées; avec cinq planches doubles par volume, & une carte geographique des trois regnes. Par M. l'Abbé Giraud-Soulavie. Tome premier. 8vo. Paris.

Recherches Phyſiques ſur le Feu; par M. Marat, Docteur en Medecine, & Medecin des Gardes du corps de Monſeigneur le Compte d'Artois. 8vo. Paris.

Traité des Scrophules, vulgairement appellés Ecrouelles, ou Humeurs Froides. Par M. Pierre Lalouette, M. D. et Chevalier des Ordres du Roi. 12mo. Paris.

Joannis Razoux, Doct. Med. Nemauſenſis, Diſſertatio Epiſtolaris de Cicuta, Stramonio, Hyoſciamo, & Aconito. 8vo. Nemauſi.

L'Art de ſoigner les Pieds; contenant un Traité ſur les Cors, Verruës, Durillons, Oignons, Engelures, les Accidens des Ongles, et leur Deformité. Par M. La Foreſt, Chirurgien Pedicure de ſa Majeſté, et de la Famille Royale. 12mo. Paris.

Ratio occurrendi Morbis a Mineralium abuſu produci ſolitis, auctore Theodorico Petro Caels, Collegii Medicorum Bruxellenſium Socio. 12mo. Amſtelodami.

Analyſe des Eaux Minerales de S. Vincent et de Courmayeur, dans le Duché d'Aorte. Par M. Givanetti, Docteur Collegie, Doyen et Viceprieur de la Faculté de Medecin de Turin. 8vo. Turin.

Meteorographie; ou, Art d'obſerver d'une Maniere commode et utile les Phenomenes de l'Atmoſphere, contenant la Deſcription des deux Barometrographes, ou Barometres qui tiennent note par des Traces ſenſibles de leur Variations, et des Temps precis où elles arrivent. Par M. Changeux. 8vo. Paris.

Diſſertazione ſulla preferenza dell' Operazione della Cateratta per eſtrazione, publicata dentro la Nuova Reale Univerſita di Chirurgia, eretta dal Re. N. S. nel Real Spedale degl' incurabili

curabili dal Studente di Medicina e Chirurgia Salvadore Jacono Catalono. 8vo. Napoli.

Lezioni intorno alle Malattie degli occhio, ad uſo della Nuova Univerſita, eretta dal Re. N. S. nel Regio Spedale degl' incurabili, di Michele Troja Publico Regio Profeſſore per le Malattie ſuddette, e per quelle della Veſica Urinaria, Chirurgio-ordinario de Regi Spedali degl' incurabili, *&c.* 8vo. Napoli.

Eſperienze intorno alla Rigenerazione delle Oſſa al Callo delle Fratturi, ed alla Foſza che la Natura impiega in allungar le Oſſa mentre creſcono; a cui ſono ſtate aggiunte due memoria cioe la prima ſopra la Rigenerazione medeſima delle Oſſa, la ſeconda ſopra la ſtruttura ſingolare della tibia e del cubito nelle Rane, e nel Roſpo con alcune eſperienze intorno alla Rigenerazione delle Zampe intiere negli ſteſſi animali di Michele Troja, publico regio Profeſſore, per le Malattie degli Occhio, e della Veſica urinaria, *&c.* 8vo. Napoli.

Lettre ſopra l'Elettriciſmo de Carlo Mazzacane, Caſinenſe a ſua Eccellenza il Sig. Marcheſe Andreaſi nobile Montavano. 8vo. Napoli.

Saggi ſopra l'Attivita della Machina Elettrica, coſtrutta da Franceſco Maggiotto, Pittore Academica,

demica, della publica Accademia di Pittura, Scultura ed Architettura di Venezia, e della Clementina di Bologna, ed alcuni rifleſſi intorno l'Elettrico Fluido. 8vo. Venezia.

Conſiderazioni ſopra i Corpi Organnizzati, dove ſi tratta della loro origine, della loro Riproduzione, e dove ſi raduna in compendio tutto cio che la Storia Naturale offeriſce di piu certo, e di piu intereſſante, ſopra a queſto materia. Opera del C. Bonnet, dell' Accademie d'Inghilterra, di Suezia, e dell' Inſtituto di Bologna, *&c.* 8vo. Venezia.

Della ſezione della ſinfiſi del pube, e del Taglio Ceſareo, Trattato di Girolamo Perſone Dottore in Filoſofia, e Medicina, Profeſſore di Chirurgia, e Socio dell' Almo Collegio del Medici Chirurgici, nell inclita Citta di Venezia ſua Patria. 8vo. Venezia.

C. F. Danielis, Commentatio de Infantum nuper natorum Pulmonibus & Umbilico. 8vo. Hallæ.

Nath. Em. Dauter, De Uſu Aquæ frigidæ externo topico. 4to. Goettingæ.

Chr. Wil. Jac. Guttereri, Breviarium Zoologiæ. Pars 1mo, Mammalia. 8vo. Goettingæ.

Medicæ

Medicæ Commentationes Academ. Elect. Mogunt. Scientiarum, quæ Erfurti eſt, ad annum 1778-79. 4to. Erfurti.

Chr. Frid. Ioegeri, Diſquiſitio medico-forenſis, qua caſus & annotationes ad vitam fœtus heptagoni dijudicandam facientes proponuntur. 4to. Ulmæ.

Car. Hen. Koeſtlini, Faſiculus animadverſionem Phyſiologici atque Mineralogico-chemici argumenti. 4to. Stargardi.

P. S. Pallas Spicilegia Zoologica Faſiculus, XIV. 4to. Berolini.

M. Sikoræ, Conſpectus Medicinæ legalis Legibus auſtriaco-provincialibus accommodatus. 8vo. Pragæ.

J. C. Strake, Commentatio theoretico-practica de Tetano ejuſque ſpeciebus præcipuis. 8vo. Jenæ.

Synopſis Stirpium indigenarum Aragoniæ. 4to. Maſſiliæ.

Jo. Gotſch. Walleri, Diſputationum Academicarum, Faſiculus primus, continens Phyſico-chemicas, & Chemico-pharmaceuticas, emendatas & correctas. 8vo. Holmiæ.

Noſologiæ Methodicæ Rudimenta; auctore Dominico Cyrillo, Philoſophiæ et Medicinæ Profeſſore. 8vo. Neapoli.

Georg.

Georg. Gottlob. Richter, Medicinæ quondam Doctoris, Magnæ Britanniæ Regis Conſiliarii Aulici, et Archatri, &c. Precepta Dietetica. 8vo. Heidelbergæ.

Pharmacopœia Genevenſis, ad uſum Noſocomiorum; auctoribus, Daniele de la Roche, Ludovico Odier, Carolo-Gulielmo Dunant, Doct. Med. Regiæ Societatis Medicæ Edinburgenſis Sociis. 8vo. Genevæ.

Medicinæ Praxeos Syſtema ex Academiæ Edinburgenæ, Diſputationibus inauguralibus præcipue depromptum et ſecundum Naturæ Ordinem digeſtum; curante Carolo Webſter, M. D. Valetudinarii Pub. Ed. Med. alter. e Coll. Reg. Med. Ed. & Soc. Reg. Med. Paris & Edin. Hujuſque ad Acta edenda a ſecretis. Tomus 3tius. 8vo. Edinburgi.

Diſſertationes Medicæ inaugurales, quas ex auctoritate Reverendi admodum Viri Gulielmi Robertſon, S. S. T. P. Academiæ Edinburgenæ Præfecti; nec non ampliſſimi Senatus Academicæ conſenſu, et nobiliſſimæ Facultatis Medicæ decreto, pro gradu Doctoratus, ſummiſque in Medicina Honoribus et Privilegiis rite et legitime conſequendis, eruditorum examini ſubjecerunt, ad diem 12mum Septembris 1780.

Gulielmus

Gulielmus Boyd, Scoto-Britannus, De Exercitatione.

Ambroſius Cbokſon, Anglus, De Aſthmate Infantum ſuffocativo.

Archibaldus Cullen, Scoto-Britannus, De Frigore.

Georgius Keating, Hibernus, De Leucorrhœa.

Laurentius Nihell, Antiguenſis, De Cerebro.

Philippus Pitt Walſh, Hibernus, De Luis Venereæ ſtadio confirmato.

Diſſertationes Medicæ inaugurales, quas ex auctoritate Reverendi admodum Viri Gulielmi Robertſon, S. S. T. P. Academiæ Edinburgenæ Præfecti; nec non ampliſſimi Senatus Academicæ conſenſu, et nobiliſſimæ Facultatis Medicæ decreto, pro gradu Doctoratus, ſummiſque in Medicina Honoribus et Privilegiis rite et legitime conſequendis, eruditorum examini ſubjecerunt, ad diem 24mum Junii 1781.

Jacobus Armitſtead, Britannus, De Colica Damnoniorum.

Joannes Aſtbury, Anglus, De Morbis cutaneis.

Gulielmus Blackburne, Anglus, de Sale communi.

Tipping Brown, Anglus, De Epileſia.

Edmundus

Edmundus Cullen, Hibernus, de Aëre & Imperio ejus in Corpora Humana.

Jacobus Fenwick, Anglus, De Aſthmate ſpaſmodico.

Joannes Ferriar, Britannus, De Variola.

Philippus Fletcher, Hibernus, De Dyſenteria.

Gulielmus Graham, Britannus, De Perſpirationis Uſu.

Thomas Miller, Scoto-Britannus, De Pubertate.

Joannes Pleaſance, Anglo-Britannus, De Anaſarca.

Joannes Wainman, Britannus, De Epilepſia.

CON.

CONTENTS.

BOOKS.

BOHADSCH. Jo. *De utilitate Electrizationis in Arte Medica,* 7

Radniczky, Ignat. *Specimen Medicum, ſiſtens Experimenta quædam de Senſibilitate,* 16

Deaſe, William, *Obſervations on the different Methods of Treating the Venereal Diſeaſe,* 28

Delius, Hen. Frid. *Diſſertatio de Taraxaco,* 35

Simmons, Samuel Foart, *Obſervations on the Cure of the Gonorrhœa,* 42

Hamilton, Alexander, *A Treatiſe of Midwifery, comprehending the whole Management of Female Complaints, and the Treatment of Children in early Infancy,* 52

Henry, Thomas, *An Account of a Method of preſerving Water at Sea from Putrefaction,* 62

MEDICAL OBSERVATIONS.

The Hiſtory of a Caſe, in which Worms in the Noſe, productive of alarming Symptoms, were ſucceſsfully removed by the Uſe of Tobacco. By Mr Thomas Kilgour, *Surgeon in* Jamaica, 75

Account

CONTENTS.

Account of a New Method of Treating Dropſy. By Mr John Ring, *Surgeon, New Street, Hanover Square, London; communicated in a Letter to* Dr Duncan, 83

An Obſervation on opening the Abdomen and Thorax of a young Lady, who died after a very ſhort illneſs; communicated to Dr Duncan, *by* Mr Richard Paxton, *Surgeon at Maldon in Eſſex,* 90

MEDICAL NEWS.

Remarks by Dr Leake *on the Section of the Symphyſis Pubis, as a Subſtitute for the Cæſarian Operation,* 95

Account of the ſucceſsful Treatment of Hydrocephalus Internus, by means of the Vapour Bath, by Dr Hunter *of* York, 106

Account of New Periodical Publications on Medicine and Medical Philoſophy at Stockholm *and* Gottenburgh, 109

Death of Dr Gaubius, 111

Death of Dr Lieutaud, 112

Death of Mr Blackall, 113

Additions to the Royal Colleges of Phyſicians and Surgeons of Edinburgh, 114

Liſt of New Books, 115

Liſt of Graduations at Edinburgh, 122

MEDICAL COMMENTARIES.

SECT. I.

An Account of New Books.

I.

Les Avantages de l'Inoculation, & la meilleure Methode de l'adminiſtrer. Ouvrage traduit de la Diſſertation Latine, couronnée par l'Academie Royale des Sciences, Inſcriptions & Belles-Lettres de Toulouſe; & compoſée par M. *P. Camper*, Docteur en Medicine, Profeſſeur d'Anatomie, de Chirurgie, & de Medicine, dans l'Univerſité de *Groningue*; des Academies de Paris, de Londres, de Harlem, *&c.*

THIS Diſſertation was written in anſwer to the queſtion propoſed by the Academy of Toulouſe, announced in the title of the book.

Mr Camper thinks it unneceſſary to notice the comparative number of deaths that happen in the inoculated and in the natural ſmall pox. The concluſion in favour of inoculation, drawn from ſuch compariſon, is now fixed beyond a doubt. But the advantages of inoculation, in reſpect of the ſymptoms of the diſeaſe, have not yet been clearly ſhown; theſe, therefore, our Author makes the particular object of his attention.

1. A petechial fever frequently attends the ſmall pox, which is for the moſt part fatal. Our Author has ſeen, in two inſtances, a petechial fever accompanying the inoculated ſmall pox. He profeſſes his ignorance that any perſon has been able to diſcover this diſpoſition to putrid fever lurking in the habit, by certain and undeniable ſigns; but of this he is ſure, that the natural ſmall pox is frequently conjoined with petechiæ, and that they ſeldom appear in the inoculated ſmall pox.

2. A ſecond advantage pointed out by our Author, reſpects the number of ſmall pox. He finds, that in almoſt every caſe of ſmall pox, the eruption is more numerous on the face than on the reſt of the body, in proportion to the extent

of

of ſurface; and, by an accurate obſervation of forty inoculated patients, he ſtates this proportion, to be as 5 to 1 nearly, and that about one-fifth of the whole number of ſmall pox generally appears on the face.

But as the diſeaſe is eſteemed more or leſs dangerous, and is ſaid to be *confluent*, or not, according to the number of puſtules on the face; and as one-fifth of the greateſt number of puſtules that has been known to appear after inoculation, will never give a confluent ſmall pox, our Author thinks, that the danger to be apprehended from a numerous eruption is greatly leſſened, if not altogether removed, by inoculation.

Under the three following heads Mr Camper notices ſome of the ſymptoms of the diſeaſe. The ſwelling of the face, hands and feet, and ſalivation, which have been conſidered as ſalutary when occurring in the courſe of the ſmall pox, our Author thinks are the conſequence only of a numerous eruption, are by no means eſſential to the diſeaſe, and are only to be prevented by inoculation, which diminiſhes the number of puſtules. In the ſame manner he accounts for the inflammation of the fauces, and the cough, on the 7th, 8th or 9th day from the eruption.

Theſe are very troubleſome ſymptoms; but as it is by inoculation alone, that the number of puſtules on the fauces and aſpera arteria can be diminiſhed, it appears that benefit and relief may be derived from this practice.

Our Author, after making ſome obſervations on the ſecondary fever, concludes, that it is poſſible that a ſecondary fever may occur in the inoculated ſmall pox; but ſuch an occurrence is very rare, perhaps does not happen in ten of a thouſand inoculated perſons, although it always appears in the natural ſmall pox. This is therefore a remarkable advantage which the artificial has over the natural diſeaſe.

Our Author, in the whole courſe of his practice, only obſerved two inſtances of an inflammation of the eye, followed by a ſpeck, after inoculation. He never ſaw an eye entirely deſtroyed in conſequence of inoculated ſmall pox.

Mr Camper ſlightly notices the painful ſuppurations, which happen under the ſkin, in the joints, and often in the cartilages, the conſumptions, aſthmas, and abortions, ſo often the conſequence of natural ſmall pox: None of theſe have ever been obſerved after inoculation.

Another

Another advantage not to be overlooked, is, that although a good many puſtules are produced in conſequence of inoculation, yet they never run together, and they always fall off in ſuch a manner that no remarkable pit or ſcar is left.

Farther, by means of inoculation we may eaſily aſcertain whether a perſon has already had the ſmall pox, when that is uncertain, which could not be done without endangering life, if, for the ſake of the trial, the perſon were expoſed to the infection of the natural ſmall pox.

Mr Camper, in the ſecond ſection, treats of the beſt method of inoculation. Almoſt every author recommends the preparation of the body, ſo that it may happily undergo the ſmall pox. Our Author enters upon the ſubject with a view to determine whether it be poſſible to accompliſh ſuch preparation. After enumerating the various injunctions on this head, as laid down by *Rhaſes* in the natural ſmall pox, he obſerves, that theſe rules have been implicitly followed by ſucceeding phyſicians, and equally applied to the natural and inoculated ſmall pox; for, as the diſeaſe in either caſe has the ſame courſe, the ſame doctrine, and the ſame rules are applicable. But we are not to reaſon *a priori;* for the ſmall

pox, like other peſtilential diſeaſes, affect us by contagion; but that contagion acts differently, according to the difference of conſtitution or temperament. We muſt therefore enquire what conſtitutions are more or leſs favourable for the ſmall pox? Whether, by any preparation, theſe conſtitutions can be changed and made better; at what time, and by what means? We are to examine, with the greateſt attention, the ſucceſs of inoculation, adminiſtred with or without preparation.

In conſidering the conſtitution or temperament, as depending upon the ſtate of the air, diverſity of climate, and of modes of living, our Author abſolutely rejects any influence which theſe have been ſuppoſed to have in giving a favourable or unfavourable ſmall pox. He obſerves, however, that when the *ſkin is tranſparent, and of an agreeable roſe-colour, the ſmall pox are always diſtinct;* and concludes, that there are particular conſtitutions, adapted as it were to the confluent, others to the diſtinct, and others to an intermediate ſmall pox; which conſtitutions cannot be changed by any means in our power. Beſides, theſe conſtitutions are often hereditary,

ſo

ſo that we may predict the fate of children from what we know of their parents.

Our Author goes on to examine what phyſicians have done to change the nature, or abate the violence of the diſeaſe, and with what ſucceſs.

They have employed blood-letting; they have prohibited the eating of fleſh and fiſh; in regard to wine, oil, butter, and the like, they have either ordered or interdicted them in the ſame manner as *Rhaſes* has done. But they have never been able to overcome the fatality of the diſtemper. Let us conſult the bills of mortality in an age when the antiphlogiſtic method of *Rhaſes* has been introduced; whether the number of deaths have been fewer. From the year 1731 to 1750, 39,115 have died of the ſmall pox in London. It is evident, therefore, that neither diet nor medicines have any effect on the diſeaſe. The wiſer phyſicians declare, that they never could abate the violence of the ſmall pox, either by blood-letting or by medicines.

The preparation of the body, ſo much celebrated, has been carried on for a month, for two weeks, for twelve, ten, or for nine days before inoculation. But our Author aſks, If it is credible,

dible, that by blood-letting, acid diet, abſtinence, and the like, the conſtitution of the patient can be ſo ſoon changed? Conſult Gatti, Ranby, and Dimſdale, who often neglected all preparation, and you will find them all agreeing with me, ſays our Author, that preparation is altogether uſeleſs.

Dr Camper even goes farther, and thinks preparation hurtful, 1*ſt*, Becauſe the nature of the contagion is not known; 2*d*, Becauſe during the time of preparation, the patients to be inoculated are uneaſy from fear and apprehenſion; 3*d*, When the ſmall pox is epidemic, the perſons to be inoculated are expoſed, by the delay, to the natural diſeaſe.

Our Author ſtarts the queſtion, Whether, upon indulging the patient in the uſe of fleſh, fiſh, and wine, *&c.* before inoculation, ſuch formidable ſymptoms had appeared, as to frighten phyſicians, and induce them to prohibit ſuch diet; or, after the example of Rhaſes, they have, without ſufficient experience, adopted ſo cruel and ridiculous a practice? He has himſelf allowed to ſome of his patients different kinds of fleſh and fat meats; in others, he has employed no medicine whatever during the courſe of the diſ-

eaſe,

eaſe, and the event of his practice never diſappointed him. He acknowledges, however, that he was cautious, and never truſted patients to nature alone, but ſuch as were of a fair complexion. He has inoculated children labouring under *ſpina ventoſa*, and to whom he gave no medicines, with the beſt ſucceſs. With the ſame ſucceſs he has inoculated others, whoſe face and whole body was covered with herpetic eruption, without preparation, and without the adminiſtration of any remedy. Neither does he think, that in theſe inſtances he was guilty of imprudence; for, ignorant what was to be done, or what ought to be given, he choſe rather to commit the cure to *nature*, than to diſturb this careful and provident mother, by improper medicines. He quotes alſo the ſucceſsful inoculation of Murray and Dimſdale in a variety of chronic affections; and from the whole aſks, Whether the advantages in artificial ſmall pox, are not derived from the circumſtance of inoculation itſelf, and not at all from any preparation, or from medicines correcting or changing the craſis of the blood?

Our Author proceeds to conſider thoſe medicines which have been recommended as ſpecifics

in

in the ſmall pox. Syrup of pearls, ſo much boaſted of by *Rhaſes*, antimony, mercury, either exhibited ſeparately or united, as was the practice of Boerhaave, and is ſtill that of our preſent inoculators, have each a ſhare of our Author's attention. He endeavours to ſhow the uncertainty of the ground upon which they are given; the little efficacy they have in changing the nature of the diſeaſe; and he concludes, from the whole of his reaſoning, and from his obſervation, that as yet no ſpecific has been diſcovered for the ſmall pox.

Many phyſicians, he obſerves, have a ſingular choice of diet for patients in the ſmall pox. Dr Camper thinks, that every kind of diet may be proper, provided the ſick take, in moderation, ſuch things as they have been accuſtomed to.

He is of the ſame opinion reſpecting the expoſure of the ſick to cold air. He condemns the Suttonian practice as unneceſſary, and frequently dangerous, from inducing other diſeaſes. He obſerves, that inoculation is equally ſucceſsful in the Indies, at the Cape of Good Hope, and even in the hotteſt regions of America, as in Sweden or in Ruſſia. The heat or coldneſs of the air, therefore, is of no conſequence; we are

to

to conſult the habits of the patient in reſpect of the one or other.

In reſpect of the ſeaſon of the year, and the age of the patient, Mr Camper is inclined to avoid inoculating in the autumn; and he forbids the inoculation of very young children, eſpecially of infants on the breaſt, becauſe he has always found the eruption much more numerous with them than in patients more advanced in life. But when the natural ſmall pox are epidemic, theſe rules are not to be regarded.

The circumſtance of the *menſes* occurring in the courſe of the ſmall pox, has no bad effect, as ſome have thought, on the diſeaſe. Pregnant women may be inoculated with ſafety. Wet nurſes alſo, are inoculated, without detriment to the child, if it is not allowed to ſuck at the time when the eruptive fever commences.

In the choice of the matter for inoculation, Mr Camper agrees with all the inoculators, in preferring limpid matter, as being leſs liable to fail in giving the diſeaſe. It is beſt when taken from the wounds made on inoculation, eſpecially while the eruptive fever is going on. At the ſame time, he obſerves, that inoculation repeated for ſix days ſucceſſively, does no hurt, and one

eruption

eruption only takes place, unleſs a ſecond proceeds from a ſecondary fever.

It is a matter of indifference, our Author obſerves, from what kind of ſmall pox the matter for inoculation be taken; at the ſame time, it may be prudent to take it from the beſt kind.

It is alſo a matter of little conſequence, whether a greater or ſmaller quantity of the virus be applied by one or more inciſions.

In making the inciſion, either with a needle or lancet, it is ſufficient if we pierce the epidermis; it is immaterial whether the wound is bloody or not; and if it is, whether the blood is wiped off or not.

Mr Camper has added two plates, repreſenting the regular and irregular changes which appear to take place in the punctures that are made in inoculation; and he thinks they may be uſeful to young practitioners, who may not have had many opportunities of ſeeing inoculated patients.

II.

Obſervations, Medical and Political, on the Small Pox, and the Advantages and Diſadvantages of general Inoculation, eſpecially in Cities: And on the Mortality of Mankind at every Age in City and Country, &c. *By* W. Black, M. D. 8*vo*. London. 1781.

THE firſt chapter of the work before us, our Author dedicates almoſt entirely to the conſideration of ſmall pox.—He firſt treats of the origin of ſmall pox and meaſles; the treatment of the former, by the Arabians and Indians, and of inoculation in India and China; the tranſportation of the variolous infection to America; the introduction of inoculation to Europe; the advantages derived from it, together with the proportion of ſuch as die in the natural and inoculated ſmall pox.

He then proceeds to ſtate the controverſy reſpecting general inoculation in London and other great cities, at the private houſes of the inhabitants; and concludes with an inveſtigation of the probable effects of this practice, whether it would prove hurtful or beneficial to the community

nity at large.——Baron Dimſdale's different publications on this intereſting ſubject are examined; and, as our Author conceives, refuted.

The Baron has been a very warm opponent to a ſcheme that was propoſed for a general inoculation of the lower claſs of people in London, on the ſuppoſition of its having an influence in rendering the ſmall pox more deſtructive than they have hitherto been, by keeping up a more conſtant ſupply of variolous matter.

Though the loſs, ſays Baron Dimſdale, under inoculation is very inconſiderable, almoſt the whole of thoſe that are inoculated recovering; yet, by ſpreading the diſeaſe, a greater proportion take it in the natural way, more lives are now loſt in London than before inoculation commenced; and the community at large ſuſtains a greater loſs: The practice, therefore, he conſiders as more detrimental than beneficial to ſociety; and gives as the principal ſupport of his opinion, that the bills of mortality from ſmall pox in London, have of late years, ſince inoculation became ſo general, encreaſed to a truly alarming degree. The deaths from this diſeaſe, on a medium of the four years preceding the year 1776, having annually amounted to 2544.

In

In anſwer, however, to this opinion of the Baron's, Dr Black obſerves, that the aſſertion is not founded on fact; for before inoculation was introduced, he finds, that the deaths by ſmall pox were much more numerous than they have been ſince, even greater than in thoſe very years ſelected by Baron Dimſdale.

In the four years immediately preceding 1720, the number of deaths from this diſeaſe in London, amounted at a medium, to nearly 3000 annually; and at that period inoculation had been merely heard of in Britain, but had not come into practice. In 1710, when inoculation had ſcarcely been ever mentioned, the number of deaths from ſmall pox, we find to have amounted to 3138; and in 1681, to 2982.—— In 1721, ſo cautious and fearful were they of inoculation in London, that in that year an experiment was made of its effects upon ſix condemned malefactors, who by that means redeemed their lives. From 1722 to 1727, Dr Jurin could collect only 764 perſons inoculated in all that interval, including London and other parts of England; yet notwithſtanding, in 12 years only, from 1715 to 1728, ſmall pox deaths

are found in London to amount to 27,367; or nearly to 2300 annually.

From theſe and other facts, Dr Black thinks it highly probable, that inoculation has not hitherto had any influence, in rendering the natural ſmall pox more deſtructive than they were before this practice was introduced; and, if all ranks of people could be induced to ſubmit to a general inoculation, numbers, which are at preſent liable to be cut off by this fatal diſeaſe, might be annually ſaved to the ſtate.

Baron Dimſdale farther objects to general inoculation, that it would not probably be found to ſucceed; from the poor in London being miſerably lodged, from their houſes being in cloſe lanes, courts and alleys; from their being often in want of neceſſaries; and from the father and mother being ſo conſtantly abroad, in order to procure food and neceſſaries, as would put it out of their power to give proper attention to their children under inoculation; and from the ſame cauſe, ſuch articles of medicine and diet as might be thought proper by the phyſicians, would never be regularly adminiſtred.

Various arguments are adduced by our Author in anſwer to theſe obſervations of the Baron's on general inoculation; but the moſt concluſive,

cluſive, we think, is, that bad impure air, and the ſeveral objections already enumerated, muſt ſurely prove more hurtful in natural and malignant ſmall pox than in the mild artificial diſeaſe. ——The plan of an inoculating hoſpital, as propoſed by Baron Dimſdale, would not, he thinks, prove of much utility, as none are propoſed to be admitted under ſeven years of age, it being found impoſſible in hoſpitals to accommodate infants; but it is well known, that out of all that are ſeized with the natural ſmall pox, a ſmall proportion only occurs of ſuch as have paſſed their ſeventh year; ſo that of conſequence, if this plan ſhould be adopted, a great part of mankind would be deprived of all the advantages reſulting from the practice of inoculation.

With a view to render the utility of inoculation as general as poſſible, Dr Black propoſes that a Diſpenſary ſhould be erected ſolely for this purpoſe. Here all indigent people would get their children inoculated *gratis*, would receive whatever medicines might be proper; and in dangerous caſes, able practitioners would be ready to attend at the patients houſes.

All this, our Author obſerves, might be done with very little expence; for, with reſpect to

medicines, it is well known that very few are, in general, neceſſary in any caſe of inoculation; and ſuch as are found neceſſary, are by no means of an expenſive nature.—He likewiſe thinks, that there would be no difficulty in procuring the attendance, both of phyſicians and apothecaries: In the infancy of the ſcheme, he would expect this to be got *gratis*; but as the funds of the inſtitution increaſe, the Gentlemen employed, ought, he thinks, to be rewarded with proper ſalaries.

If ſuch a plan as is here propoſed, could be adopted to its full extent, the number of lives, which on moderate calculations, might thereby be expected to be ſaved to the public, would be very conſiderable indeed.—In the modern improved ſtate of inoculation, it is well known, that there is ſcarcely one dies of 500.—It is alſo known, that London, by births and recruits, requires an annual ſupply of, at leaſt, 29,000 individuals: Now, by the calculation of one to 500, out of 29,000 inoculated, 58 deaths only would enſue.

Extend this calculation to Great Britain and Ireland; by Davenant's eſtimate, the annual births among nine millions of inhabitants in theſe

two

two iſlands, will amount to about 300,000; and ſuppoſing all theſe to be inoculated, and one out of 500 to die, the nation, inſtead of loſing 30,000 annually by ſmall pox, which it is pretty certain ſhe does at preſent, would loſe only 600; and extending the ſame calculation to all Europe, from the numbers we ſuppoſe it at preſent to contain, the deaths would not amount to more than 8000; and, according to this calculation, 392,000 lives would be annually preſerved, which are at preſent carried off by this dreadful diſorder.

Having conſidered with great attention this important ſubject in the firſt chapter of his work, Dr Black next proceeds to treat of bills of mortality. On this ſubject he beſtows two chapters. And in theſe, beſides an account of their eſtabliſhment in Europe, and many remarks on the mortality at different ages, in city, town and country, he preſents the reader alſo with many critical reflections upon the diſeaſes and caſualties which have proved moſt fatal. And he has given tables of the diſeaſes, caſualties and total deaths from 1701 to 1776; on which he offers many important remarks. But of theſe the limits of our work will not allow us to give an

analyſis. We may only remark, that the Author's obſervations lead him every where to conclude, that the bills of mortality have hitherto been conducted in an imperfect and negligent manner; and that, therefore, before philoſophers, phyſicians, or the country at large, can derive any benefit from them, they muſt undergo a very great reformation. And in a poſtſcript to his work, he has propoſed a plan for this purpoſe.

In place of the preſent unequal boundaries of pariſhes, and the uninformed rabble of pariſhclerks and female ſearchers, to whom this buſineſs is at preſent entruſted, he propoſes, that London, its ſuburbs and contiguous villages, ſhould be divided into 27 or 28 equal diſtricts; and that to each of theſe, one inſpector ſhould be allotted with a ſalary of L. 60 *per annum*. Theſe inſpectors ſhould be choſen from amongſt medical men, ſurgeons and apothecaries; and their certificate ſhould be indiſpenſible previous to interment. Each of theſe inſpectors ſhould make a monthly report to the general hall. And here, inſtead of appointing a perſon ignorant of the principles of calculation, and ſtill more of medicine, to ſuperintend the general hall, to arrange

and

and claſs diſeaſes, he propoſes to fill that important office with an able phyſician, and to allow him L. 200 of annual ſalary.

To render the returns of births and chriſtenings for London complete, he propoſes that the clergymen of every religious ſect, ſhould be compelled by law, to make a monthly return of their chriſtenings and weddings, to any appointed church in the neighbourhood or diſtrict, ſpecifying their religious ſect. And theſe he propoſes to be carried annually by each inſpector to the general hall. He propoſes alſo, that the inhabitants ſhould be numbered every ſeven years in the fulleſt ſeaſon of winter, and in ſummer when the town is moſt deſerted. By theſe means the regiſter of births and burials, might be rendered ſubſervient to the moſt uſeful purpoſes. And the expence, Dr Black thinks, might eaſily be defrayed by a fee of half-a-crown upon each death, or a ſmall tax upon undertakers. And for the better regulation of this important ſubject, he propoſes that it ſhould be put under the control and direction of the Royal Society, who ſhould chuſe the phyſicians and inſpectors. When conducted on this footing, he thinks it might add to the value of the annual publications of the

Society, and ſerve as a deep reſervoir of important intelligence, a rich fund of medical and political knowledge.

III.

A Treatiſe on Sympathy, in two Parts. Part 1ſt, *On the Nature of Sympathy in general, and of Antipathy and the Force of Imagination:* 2d, *On Febrile Sympathy and Conſent, and on the Balance and Connection of Extreme Veſſels.* *By* Seguin Henry Jackſon, *Member of the Royal College of Phyſicians,* London; *and of the Royal Medical Society,* Edinburgh; *and Phyſician to the* Weſtminſter General Diſpenſary. 8*vo.* London.

IN the beginning of the Treatiſe now before us, the Author endeavours to ſhew the extenſive influence of ſympathy in the animal œconomy. He conſiders it as the firſt and laſt principle of animal life, or of itſelf the living and ſenſitive principle. He conſiders ſympathy as of two kinds, mental or corporeal. The firſt, he tells us, ariſes from a ſenſation in the mind determining to particular organs, or particular parts of the

the body, and raiſing in them certain feelings, actions and inclinations, ſometimes agreeable, ſometimes diſagreeable. Of this ſort are longings of various kinds, depreſſing paſſions, *&c.* Theſe, he thinks, may be called *ſympathies of conſciouſneſs.* The ſecond, he obſerves, depends upon the operation of external bodies, and the condition of the moving and ſentient extremities of the nerves; and more generally occurs in diſeaſed ſtates of the ſyſtem. Theſe he names *ſympathies of impreſſion.*

Theſe ſympathies he conſiders as being either inherent or acquired. The inherent ones are thoſe which have an evident utility. Of this kind are the ſympathies between the ſtomach and the whole ſyſtem, and between the ſtomach, uterus, and ſkin. Thoſe, again, he thinks may be called *acquired*, which are only brought to light by the occurrence of diſeaſe, and do not appear to anſwer any other apparent end. Of this kind are the ſympathetic pains between the inflamed liver and ſhoulder, the uneaſineſs of the glans penis from diſorders of the urinary paſſages, and the like.

Sympathy, in general, he conſiders as greater in young than in old people, which he thinks moſt

moſt probably ariſes from the parts of a young animal being more ſuſceptible of irritations. Sympathy he conſiders as being either ſimilar or diſſimilar. It is ſimilar when the actions, affections and ſenſations are exactly the ſame in the part ſympathizing with that firſt affected. It is diſſimilar when they are different from the actions, affections, and ſenſations of the part impreſſed. Of theſe different ſympathies, our Author gives many examples. And he ſhews, that ſympathy is moſt ſtrongly marked by affections of the ſtomach.

After theſe obſervations and diſtinctions of healthful ſympathies, the Author next proceeds to make ſome obſervations on the ſympathies which attend diſeaſes: Here alſo he endeavours to eſtabliſh many diſtinctions. He endeavours to ſhew, that inflammations may be ſympathetic as well as ſpecific: That diſeaſed ſympathy may be either univerſal or partial; and that when univerſal it may be either immediate or ſecondary.

Our Author next treats of the uſes of ſympathy. The natural ſympathies, he obſerves, are moſt evidently uſeful. In the caſe of diſeaſed ſympathies, this is leſs obvious. He next conſiders

ſiders what ſympathies may be applied to medicinal uſes; and gives examples of ſympathies which are uſeful to be known. An attention, he remarks, to the ſympathy between the ſtomach and ſkin is particularly neceſſary. In obſtinate vomitings, the warm bath may relieve and effectually put a ſtop to them. In cutaneous diſeaſes, we ſhould remember, that the ſtomach may be only ſympathetically affected, and that ſuch diſeaſes may be cured by the operation of medicines on the ſtomach.

In the fifth chapter, Dr Jackſon treats of the ſympathetic operation of medicines. Medicines, he obſerves, produce even univerſal effects by partial operation. Their ſympathetic action will be local, when only the ſurrounding parts act in concert with the part ſtimulated. It is to be conſidered as remote, when the remote parts ſympathizing have ſome ſpecific connection with the part ſtimulated, as the ſtomach with the teſtes, the head with the ſtomach, and the like. Such medicines as produce merely local ſympathy, may be claſſed among the local applications. But if local ſympathy did not aſſiſt the operation of medicines, they could have but little power to do good; as moſt local diſeaſes extend

ſome

ſome way beyond the ſurface of expoſure. Thus, medicines applied ſimply to the ſkin, may relieve inflammations that go ſome depth. If this were not the caſe, how could a fomentation, which comes only in contact with the ſcrotum, give eaſe to a ſwelled teſticle. But the fomentation produces, he thinks, a healthy action in the ſurface of contact, and the neighbouring parts ſympathize with it, and are all relieved in a proportional degree.

It has in general been ſuppoſed, that aqueous applications to the ſkin, in which warmth is united, with moiſture, have the effect of penetrating, and thus relaxing. But although a bit of dried meat, or leather, may be affected in this manner, no effect of this kind can be produced in a living body, or even in a dead body, which ſtill retains its fluids. The ligaments, Dr Jackſon obſerves, will not become a bit ſofter, though the body were ſoaked for any length of time. Hence, while it is undeniable that warmth and moiſture have often good effects in facilitating the reduction of diſlocations, it is certain that they cannot act in the manner that has commonly been ſuppoſed. Dr Jackſon is of opinion, that the ſurface of contact is by their operation lulled or

ſoothed ;

ſoothed; and the irritability, either of the whole or part of the diſeaſed affection, is put to reſt. And it is this acquired diminution of partial excitement, which allows us to uſe violence more freely than before.

In the ſame manner alſo, he explains the action of unctuous and volatile applications as increaſing motion. For he contends, that the oil cannot poſſibly touch any internal part of an animal. He thinks, however, that the good effects ariſing from them are not entirely to be aſcribed to ſympathy, but in part ariſe from the mechanical motion uſed in the application of them. On ſympathy, alſo, he explains the effect of unctuous and volatile applications, in procuring the reſolution of indurated glandular tumors, that do not belong to the abſorbent ſyſtem. As the remedy cannot penetrate to the part affected, its effects muſt, he thinks, be aſcribed to its ſympathetic operation, from the ſtimulus which it affords to the ſkin. And he even thinks, that when mercurial ointment is rubbed on a ſwelled gland in the groin from ſyphilis, the effect is chiefly produced by ſympathy, from the ſtimulus of the remedy on the ſkin, both becauſe the abſorption muſt be very inconſiderable, and as the

the abſorbents, at the part of application, do not paſs through the ſwelled gland. He admits, however, that to produce a more conſiderable effect, it is proper to apply mercurial preparations to the leg or inſide of the thigh.

This firſt part of Dr Jackſon's treatiſe, is concluded with ſome obſervations on the ſympathy of the ſenſes, and the force of imagination. In this chapter he points out many inſtances of ſympathy produced by the paſſions and affections of the mind, and many ſympathetic affections of the external ſenſes. Here alſo, although he does not contend for the imagination of the mother having a power over the fœtus *in utero*, yet he thinks, that both ſympathies and antipathies often affect the child in the womb.

Before we conclude our remarks on this part of Dr Jackſon's treatiſe, it is proper to obſerve, that in many different places he acknowledges his having borrowed many of his ſentiments on this ſubject from that diſtinguiſhed phyſiologiſt Mr John Hunter. And he even mentions, that moſt of the arguments employed in ſeveral ſections are to be conſidered as his. It is much to be wiſhed, that this able philoſopher would communicate his ſentiments to the public on this

ſubject

ſubject in his own words: For the view which Dr Jackſon has given, while it ſerves in ſome degree to gratify, muſt ſtill more excite the curioſity of the reader.

After having treated of ſympathy in general, our Author proceeds, in the ſecond part of his Treatiſe, to conſider febrile ſympathy, and conſent in particular.

Fever, he obſerves, is a ſtate of the ſyſtem characterized by the following circumſtances. After an almoſt imperceptible diminution of ſtrength in the animal functions, there comes on ſome degree of cold ſhivering, followed by an increaſe of heat, an increaſed frequency of pulſe, and increaſed general debility. After this definition, he gives a very accurate enumeration of the different phænomena occurring in the cold, hot, and ſweating ſtage of fever. And he delivers it as his opinion, that ſympathy lays the foundation of the various changes. Parts ſimilar, he obſerves, ſympathize at one and the ſame time with the ſtomach, which he terms the grand ſympathizer and fountain of ſympathy.

This leads him to conſider the phyſiology of the ſtomach, and its various affections in fever. Thoſe affections of which he particularly treats,

are

are anorexia, nauſea and vomiting. Of theſe he thinks a more ſatisfactory explanation may be given, from the ſuppoſition of a conſtriction of the extreme veſſels of the ſtomach, than on any other footing. Every one will allow, he obſerves, that there is a ſufficient proof of ſuch a ſyſtem of veſſels being preſent in the ſtomach, from the frequent inſtances of large ſerous ſecretions, or, more properly ſpeaking, effuſions, which are collected there, and often evacuated by vomiting. And if there be juſt grounds for ſuppoſing a ſpaſm to be formed on the ſurface of the body, it is but reaſonable to conclude, that the ſame may take place in the ſtomach, and even through the whole of the inteſtinal tube. And if the former is in the extreme veſſels of the ſkin, it may from analogy be ſuppoſed, that the latter depends upon a ſimilar affection of the veſſels of the firſt paſſages.

In attempting to eſtabliſh this opinion, Dr Jackſon has on many different occaſions endeavoured to refute the opinion contended for by Dr Cullen, who will not admit that the veſſels of the ſtomach have any concern in this matter. On this ſubject, Dr Jackſon beſtows a whole chapter, in which he treats profeſſedly of the

ſympathy

ſympathy and conſent between the ſtomach and ſkin in fever. There he endeavours to ſhow that this ſympathy and conſent depends upon the balance and connection of the extreme veſſels, and not upon the condition of the muſcular fibres of the ſtomach. And he is of opinion, that the balance and connection of the extreme veſſels giving the conſent between the ſtomach and ſkin, may be illuſtrated both by the operation of medicines and the general phænomena of fever. Nay, he attempts to ſhew, and in our opinion not without apparent probability, that the ſame arguments which Dr Cullen has made uſe of to illuſtrate his doctrine, afford ſtill ſtronger illuſtration and evidence of the doctrine now advanced.

After thus attempting an examination and refutation of Dr Cullen's doctrine, he concludes the preſent work by giving a ſummary view of his own opinion. His opinion is, that the remote cauſes of fever act with a ſedative effect, and induce a debility of the nervous ſyſtem, whereby the vital function of the heart and arteries is conſiderably and particularly affected: That this debility in the circulation will moſt readily be felt at the extreme veſſels, which ter-

minate at every part of the body; but particularly in thoſe at the ſkin and primæ viæ, from eſtabliſhed connection and mutual balance: That a conſtriction will then be formed, and an obſtruction take place in the ſecretions in general, in the exhalation of the perſpirable matter, and effuſion of the gaſtric and inteſtinal liquors: That this conſtriction not only proves a general ſtimulus to the circulation, in conſequence of a ſympathy between the heart and the veſſels, but a particular one to the ſtomach itſelf, as the firſt of the ſecreting organs: That this ſtimulus, at the ſame time that it increaſes the action of the heart and arteries, excites the ſtomach to vomiting; both which effects are to be conſidered as the efforts of the vis medicatrix naturæ, for the ſalutary purpoſe of reſtoring the condition of the extreme veſſels, and the ſecretory organs in general, to their natural and healthful ſtate; which being fully accompliſhed, the pyrexia and vomiting abate. Theſe operations our author ſuppoſes to be brought about upon the principle of a VIS INSITA SYMPATHIÆ.

Of this theory, we leave every reader to form a judgment for himſelf. While, however, we obſerve, that there are many circumſtances in the

the phænomena of fever, which, in our opinion, cannot be reconciled to this or to any other hypotheſis which has yet been publiſhed, we muſt alſo add, that we conſider the author as juſtly entitled to the merit of ingenuity, and ſincerely wiſh him all ſucceſs in his future ſpeculations. He has indeed borrowed many things contained in the volume before us, from modern phyſiologiſts of the firſt eminence, particularly from Mr John Hunter and Dr Cullen. From the former, he has drawn a great ſhare of the firſt part of his work; and from the latter, of the ſecond. But he has in many different places acknowledged his obligations, both to them and the others; and he has delivered many opinions peculiar to himſelf. In ſome parts, he may perhaps be conſidered as having given too much ſcope to fancy; yet, from a candid peruſal of his work, the diſcerning reader will find no difficulty in diſcovering many ſtriking marks of fruitful invention.

IV.

Jo. Wences, Nachtigal, *Diſſertatio de Submerſis.* Vid. *Faſciculus quartus Operum minorum Medicorum.* Franciſci Xav de Waſſerberg. 8vo. Vindobonæ.

THE treatiſe now under conſideration is divided into two ſections; the one, "De "cauſa mortis ſubmerſorum;" and the other, "De auxiliis ſubmerſis ferendis."

In the firſt ſection, our author takes into conſideration, the different opinions which, in different ages, have prevailed, reſpecting the immediate cauſe of death in perſons who have ſuffered from remaining too long under water.

Galen, he obſerves, was of opinion, that death in ſuch inſtances is produced from the too free acceſs of water, not only to the ſtomach, but to the lungs; and this idea was univerſally adopted by all his followers, till towards the end of laſt century.

About this period, Bohnius of Leipſick, and after him Becker, ventured to controvert this doctrine of Galen. For, on diſſecting different ſubjects, whoſe bodies had been long immerſed

in

in water, and in whoſe ſtomachs and lungs no water was diſcovered, they were thereby induced to conſider it as certain, that death in ſuch inſtances muſt depend on ſome other cauſe than the admiſſion of water to the ſtomach and lungs.

This opinion, although for ſome time much controverted, yet at laſt came to be generally received. But the celebrated Mr Louis of Paris, in the proſecution of a ſet of experiments on this ſubject, having, in a variety of inſtances, found the lungs and mucus of the bronchiæ tinged with the ſame colour of the water in which the animals had been immerſed, was thereby induced to conſider the admiſſion of water to the lungs in ſuch inſtances, as the cauſe of death; and this opinion being afterwards adopted by Haller and others, came at laſt to be almoſt univerſally admitted. De Haen, however, having, in the diſſection of different ſubjects who had ſuffered by immerſion in water, found no veſtige of water in the lungs, continued ſtill to ſupport the opinion of Bohnius and Becker.

Surrounded with ſuch a variety of ſentiments, all of them ſupported by great authorities, it comes to be a matter of much difficulty, our au-

thor obſerves, to determine which of theſe ought to be adopted. He himſelf, however, is clearly of opinion, that, in all ſuch inſtances, death is to be attributed ſolely to the conſequences ariſing from a ſtoppage of reſpiration; for the lungs, in a collapſed ſtate, not being able to receive their uſual quantity of blood, a greater proportion muſt of courſe be ſent to the veſſels of the head; and, as ſuch an occurrence muſt certainly terminate in apoplexy, he conſiders this as the ultimate cauſe of death. By the experiments of Ruyſch, Raau, Boerhaave, Portal, and others, this fact is rendered evident, that injections paſs more readily and freely through the lungs, while they are diſtended with air, than when in a collapſed ſtate; and if ſo, no doubt, he thinks, can remain, of ſuch people as ſuffer from drowning, dying in a ſtate of apoplexy.

Having thus determined the cauſe of death, in ſuch caſes, to depend on a too great quantity of blood being forced into the veſſels of the brain, he now proceeds to inquire into the moſt effectual means of relief in ſuch inſtances as ſtill afford ſome reaſon to hope for ſucceſs.

The nature of the cauſe, our author obſerves, at once points out the propriety of an immediate

loſs

loſs of blood; and, for obvious reaſons, any blood to be diſcharged, ought to be taken from the jugular vein. Independent, too, of the veſſels of the brain being more immediately emptied by an opening in this vein, we are more certain of procuring a free diſcharge from it than from any other; for, in moſt caſes of this kind, it is a very difficult matter to procure any conſiderable quantity of blood from other parts of the body.

At the ſame time that a ſufficient quantity of blood is diſcharging, attempts ought to be making for procuring, if poſſible, a return of reſpiration. For this purpoſe, one of the by-ſtanders is directed to apply his mouth to the mouth of the patient; and, having by ſtrong blowing inflated the lungs, he muſt with one hand prevent the eſcape of air by the noſe, while with the other he compreſſes the cheſt, ſo as to imitate reſpiration as nearly as poſſible. It ſometimes happens, we are told, that the lungs cannot in this manner be properly inflated: in ſuch caſes, we are deſired to introduce a curved tube at one of the noſtrils, and to fill the lungs by means of it. By this means, as recommended by Mr Portal, the tube falls directly in upon the

glottis, without any interference with the epiglottis; a circumſtance which frequently proves troubleſome on every attempt to introduce ſuch a tube by the mouth.

When however even this method of inflating the lungs does not ſucceed properly, bronchotomy is recommended as the laſt reſource.

Together with theſe remedies, frictions to every part of the body are recommended. The body is directed to be kept in a moderate degree of heat; ſtimulants to be applied to the noſe; and ſome advantage, we are told, has been reaped from injections of tobacco-ſmoke into the inteſtines.

Our Author condemns the idea of hanging the perſon by the feet with his head downwards. This can never be productive of any advantage; and, by increaſing the determination of blood to the head, may even do much harm. Emetics, he thinks, might prove hurtful; but he agrees with Tiſſot in recommending ſome of the milder preparations of ſquills, not with a view to excite vomiting, but merely to produce a gentle degree of nauſea, which, in ſuch caſes, he is inclined to conſider as a ſtimulus of a very uſeful nature.

V.

V.

Obſervations on the ſuperior Efficacy of the Red Peruvian Bark, in the Cure of Agues, and other Fevers, interſperſed with occaſional Remarks on the Treatment of other Diſeaſes by the ſame Remedy. *By* William Saunders, M. D. *Member of the Royal College of Phyſicians in London, and Phyſician to Guy's Hoſpital.* 8vo. London.

THE efficacy of the Peruvian bark in the cure of intermittent fevers, is now univerſally admitted. Almoſt every inſtance of want of ſucceſs is with juſtice attributed either to the medicine being bad in quality, or improperly adminiſtered. While the beſt mode of adminiſtration is a ſubject which has engaged the attention of many of the moſt able writers, the proper choice of the bark itſelf is perhaps ſtill more important in actual practice. In the treatiſe now before us, Dr Saunders attempts to throw new light, both on the choice of this medicine, and on its general application in practice. We can have no difficulty, therefore, in giving our aſſent to the author's aſſertion, when he obſerves, that, if the execution of his work were equal to its

its importance, it would challenge the attention of the public in a degree far above moſt medical ſubjects.

Dr Saunders introduces his obſervations with ſome remarks on what has been ſaid by former writers reſpecting the choice of Peruvian bark. He obſerves, that the inhabitants of Old Spain hold the Peruvian bark which is in pieces of the largeſt ſize in the higheſt eſtimation; but that, in England, the ſmall and quill bark has been preferred. He mentions ſeveral circumſtances, by which it is rendered probable, that the former is furniſhed from the trunks of old trees; while the latter is obtained from younger trees, not yet arrived at their full maturity. From this circumſtance alone, ſome preſumption is afforded, that it is a bark of a weaker quality. But whatever may be the true cauſe of the differences in the appearance of Peruvian bark, in the treatiſe now before us, undeniable evidence is afforded, that the bark of a large kind, having a coarſe appearance and red colour, is of much ſuperior efficacy to the white or yellow coloured bark which has hitherto been commonly imported into this country.

A conſiderable quantity of bark of the former kind, captured in a Spaniſh ſhip from Lima, was purchaſed by ſeveral druggiſts in London. Of this bark, Dr Saunders gives the following deſcription: It is, ſays he, in much larger and thicker pieces than the common Peruvian bark. It evidently conſiſts of three diſtinct layers: the exterior thin, rugged, and of a reddiſh brown colour; the middle thicker, more compact, of a darker colour, extremely brittle, and evidently containing a large proportion of reſinous inflammable matter; the innermoſt of a more woody and fibrous appearance, and of a brighter red, than the former. In reducing entire pieces of this bark to powder, the middle layer does not ſo eaſily give way to the peſtle as the others; but when due care has been beſtowed in reducing the whole to a fine powder, it is evidently more aromatic, and has a greater degree of bitterneſs, than the common bark. To determine ſtill farther the comparative powers of theſe articles, Dr Saunders inſtituted ſeveral pharmaceutical experiments, of which he has given a detail at full length. In theſe, he tried them with watery and ſpiritous menſtrua, by the addition of chalybeates, mineral acids, *&c.* From theſe experiments,

riments, for a more particular account of which we muſt refer our readers to the work itſelf, he draws the following concluſions :

1. That the red Peruvian bark is more ſoluble than the common, both in water and ſpirit.

2. That it contains a much larger proportion of active and reſinous parts.

3. That its active parts, even when much diluted, retain their ſenſible qualities in a higher degree than the moſt ſaturated ſolutions of common bark.

4. That it does not undergo the ſame decompoſition of its parts by boiling as the common Peruvian bark.

And as a proof of the ſuperior antiſeptic power of the red bark, he obſerves, that both its cold infuſion and decoction were found to preſerve entire their bitter and other medicated qualities; while the infuſion and decoction of common bark, prepared at the ſame time, and in the ſame proportions, had altogether loſt their ſenſible qualities.

To theſe pharmaceutical experiments, Dr Saunders next ſubjoins ſome obſervations on the general operation of bark on the human body. He obſerves, that in health it promotes appetite

and

and digeſtion, it has a tendency to bind the belly, and it renders the pulſe fuller and ſtronger. All theſe effects he has found produced in a much higher degree, by the red, than by the common Peruvian bark. With regard to the uſe of the bark in the cure of intermittents, he obſerves, that although cautious and timid practitioners have in general forbid its uſe, till evacuations have been made; yet in theſe which are endemic, in low and marſhy ſituations, it cannot be given too early; and that the uſe either of emetics or purgatives, as preparatory, is not only unneceſſary, but in ſome caſes productive of more debility, and therefore to be avoided. By this, however, he does not mean to inſinuate, that no caſes occur in which it may not be prudent to adminiſter a vomit, eſpecially to perſons ſubject to bilious accumulations in the ſtomach. But this is more with the view of removing an obſtacle to the operation of the bark, than as neceſſary to render it ſafe.

Dr Saunders agrees with moſt practitioners, in thinking, that bark cures intermittents more readily when taken in ſubſtance, than in any other form. But he thinks, that it ought rather to be diffuſed in ſome liquid, than given in the

form

form of an electuary or pills, which are ſometimes difficultly ſoluble. As the beſt means of correcting the taſte, he recommends that it ſhould be taken in milk, old hock, or a ſolution of extract of liquorice. With regard to the doſe, he thinks it unneceſſary to limit it; one dram given every hour, will remove the diſeaſe more quickly than a ſmaller quantity given at longer periods.

He has found in ſeveral inſtances, that the red bark has removed both tertians and quartans, which had reſiſted the common bark. It is ſo much warmer than the other, that it anſwers all the purpoſes derived from the union of cordials and aromatics with the common bark. In proof of this, ſeveral caſes are related. From the firſt of theſe, it appears, that an intermittent fever, which had continued for five months, and had obſtinately reſiſted the common bark, although taken to the quantity of a dram every hour, was cured by taking one dram of the red bark every ſecond hour, for the ſpace of ten days.

From this, and ſeveral ſimilar caſes, Dr Saunders began to entertain hopes, that even a cold infuſion of the red bark would, in moſt caſes,

cure

cure intermittent fevers, and in all other caſes would anſwer every end which could be expected from common Peruvian bark, in any form in which it had hitherto been employed. He accordingly formed a cold infuſion, by pouring a quart of cold water on two ounces of the red bark in fine powder, and frequently agitating the mixture for the ſpace of twenty-four hours. Three caſes are related of trials made with this infuſion. In the firſt of theſe, a tertian, which had ſubſiſted for many months, was ſtopped in two days, by taking four ounces of the cold infuſion every third hour. And by perſevering in its uſe for fourteen days, the patient was perfectly cured. In the ſecond caſe, a tertian of five weeks ſtanding, accompanied with a conſiderable degree of cough, eſpecially occurring in the cold fit, was cured by the cold infuſion, taken in the ſame manner, and the cough alſo was totally removed. And in the third, a quotidian, which had continued near a year, was removed by taking the cold infuſion, to the extent of a quart in twenty-four hours, for three days.

To theſe caſes, Dr Saunders ſubjoins ſome obſervations on the uſe of the red bark in the cure

cure of other fevers. He obſerves, that the fevers of this country ſeldom have regular remiſſions, until they have been properly treated, by evacuations, the inflammatory by bleeding, and the bilious by vomiting and purging. But when they are brought into ſuch a ſtate of remiſſion, that the pulſe becomes ſlower, that the reſtleſſneſs, anxiety and tendency to delirium, abate, that the mouth and fauces are moiſt, and that the ſkin is more open and pervious at ſome particular time in the twenty-four hours, he thinks that the bark may be given with the ſame freedom as in fevers with diſtinct intermiſſion, and that the red bark may be employed with peculiar advantage.

Notwithſtanding the inflammation at the attack of acute rheumatiſm, and the appearance of the blood in that diſeaſe, Dr Saunders contends, that the diſeaſe very early aſſumes the form of a remitting fever. When this comes to be the caſe, he condemns the perſeverance in the antiphlogiſtic plan, and recommends a cold infuſion of the red bark, which he tells us, he has found from experience to be much more ſucceſsful than the uſe of volatiles and guaiac.

In

In putrid and malignant fevers, Dr Saunders thinks that the cure is to be effected by vomiting and warm cordials; and, as the beſt article of the latter kind, he recommends the red bark, infuſed in wine, by which means, it becomes a more powerful antiſeptic. With the ſame intention alſo, he recommends its union with acids.

Upon the whole, Dr Saunders concludes with expreſſing his hopes, that the obſervations which he has preſented to the public, will remove all prejudices againſt a Peruvian bark of a larger and coarſer appearance, and redder colour than that commonly employed. And, in confirmation of his own opinion, he ſubjoins extracts of letters from Mr Jacob of Feverſham, Mr Boyſe of Sandwich, Sir William Biſhop, Dr Withering of Birmingham, Mr Sherwin of Enfield, and Dr Fothergill of Harpur-ſtreet. The concurring teſtimony of all theſe eminent practitioners, confirm the opinion which Dr Saunders had formed from his own obſervations, and ſhews that the red Peruvian bark is more powerful than any other kind.

VI.

An Account of ſome Experiments on Mercury, Silver, and Gold, made at Guildford, in May 1782, *in the Laboratory of* James Price, M.D. F.R.S. *To which is prefixed an Abridgement of Boyle's Account of the Degradation of Gold.* 8vo. Oxford.

THE numerous fictions with which alchymiſts impoſed upon the world, in darker ages, have long ſince been fully refuted and expoſed in the moſt ſatisfactory manner. After what has already been ſaid and done upon this ſubject, it would hardly have been expected, that, in the end of the eighteenth century, any philoſopher would have been found hardy enough to lay pretenſions to the art of making gold. The principal intention, however, of the treatiſe now before us, ſeems to be, to announce to the public, diſcoveries which, if well founded, are unqueſtionably the moſt extraordinary that have been made for many years. Among others, we may mention the fixing of mercury, ſo that it is prevented from boiling in a red heat, and the tranſmutation of baſer metals into gold and ſilver.

Theſe

Theſe diſcoveries, however, ſingular as they muſt appear, are now announced to the public, not on the authority of a nameleſs or obſcure inventor, but on that of a gentleman of independent fortune, whoſe induſtrious exertions, and ſucceſsful attainment of knowledge in the line of chemiſtry, have been rewarded with marks of peculiar diſtinction by one of the moſt eminent and learned ſocieties in Europe, the Univerſity of Oxford. And ſtill farther weight is added to the narrative, from the experiments having been performed in preſence of many witneſſes; among whom are ſeveral names of high eminence, both in the political and in the literary world. We may therefore neceſſarily ſuppoſe, that they could neither be deceived themſelves, nor could harbour an intention of deceiving others.

Under theſe circumſtances, notwithſtanding the moſt poſitive preconceived opinion againſt the poſſibility of converting baſer metal into gold, and of preventing the natural, and, we may ſafely venture to ſay, almoſt irreſiſtible influence of fire; yet ſtill every one who is a real friend to improvement, muſt conſider the treatiſe before us as meriting ſome attention.

In the introduction to this treatiſe, Dr Price obſerves, that a frequent peruſal of ancient chemical writers inclined him to believe, that the wonders related in their works, though frequently exaggerated, had at leaſt ſome foundation; and he found that ſome diſcoveries, ſuppoſed to be modern, were really recorded by very ancient writers. Specific gravity being uſually conſidered as one of the leaſt dubious marks of real identity between two bodies otherwiſe diſſimilar, it ſeemed probable to our author, that mercury and gold had a baſis nearly alike; while the remarkable analogies between the habitudes of ſilver and mercury to chemical ſolvents and other agents, are known to every chemiſt. Amidſt theſe reflections, although bewildered in a chaos of diſcordant opinions, yet the ſpecious glitter of ſome broken gems allured him to proſecute his ſearch concerning theſe ſubjects of which he here treats: And that, in theſe, he has obtained a degree of ſucceſs beyond any former inquirer, appears from the reſult of the experiments, of which a detail is here given, and which were performed in preſence of many witneſſes, all of whom were fully qualified

to

to detect fallacy in a matter in which every man of common ſagacity could not be deceived.

To the introduction of this work, as may be inferred from the title, is prefixed an abſtract of Mr Boyle's account of a degradation of gold. Of this it would be altogether foreign to our plan to give any analyſis; and, in place of attempting to give a ſhort view of all the experiments in Dr Price's treatiſe, we ſhall here preſent our readers with a few of them at full length, from which we apprehend they will be better able to form a judgment on this ſubject, than from any analyſis.

EXPERIMENT I. *made May* 6. 1782, *before the Rev. Mr Anderſon, Captain Francis Groſe, Mr Ruſſell, and Enſign D. Groſe.*

Half an ounce of mercury, provided by Captain Groſe, bought at an apothecary's of the town, was placed in a ſmall Heſſian crucible brought by Mr Ruſſell, on a flux compoſed of borax, alſo brought by him; a ſmall piece of charcoal, taken out of a ſcuttle fortuitouſly by Mr D. Groſe, and examined by the reſt of the company; and a ſmall piece of nitre, taken alſo

without ſelection by the Rev. Mr Anderſon, from a quantity in common uſe in the laboratory. Theſe being pounded together in a mortar, which all the company had previouſly inſpected, were preſſed down into the crucible with a ſmall peſtle. On this flux the mercury was poured by Mr Anderſon; and upon it, half a grain of a certain powder, of a deep red colour, furniſhed by Dr Price, carefully weighed out by Mr Ruſſell, was put by Mr Anderſon.

The crucible was then put in a fire of a moderate red heat by Dr Price, who, from his greater facility of managing the fire from long habit, was thought moſt eligible to conduct the experiment. He repeatedly called the attention of the company to obſerve the ſtages of the proceſs, and to remark in every part of it, that any voluntary deception on his part was impoſſible.

In about a quarter of an hour from the projection of the powder and the placing of the crucible in the fire, he obſerved to the company, who, on inſpection, found his obſervation true, that the mercury, though in a red-hot crucible, ſhewed no ſigns of evaporation, or even of boiling. The fire was then gradually raiſed, with attention on the part of the company, and repeated

peated calls for that attention from Dr Price, that no undue addition might be made to the matter in the crucible. In a ſtrong glowing red, or rather white-red, a ſmall dip being taken on the point of a clean iron-rod, and, when cold, the ſcoriæ ſo taken and knocked off, were ſhewn to the company, and found replete with ſmall globules of a whitiſh-coloured metal, which, Dr Price obſerved to them, could not be mercury, as being evidently fixed in that ſtrong heat, but, as he repreſented to them, an intermediate ſubſtance between mercury and a more perfect metal.

A ſmall quantity of borax, brought by Mr Ruſſell, was then injected by him, and the fire raiſed, but with the ſame precautions on the part of Dr Price, to ſubject every thing to the minute inſpection of the perſons preſent; and, after continuing it in a ſtrong red white heat for about a quarter of an hour, the crucible was carefully taken out, and gradually cooled. On breaking it, a globule of yellow metal was found at bottom, and, in the ſcoriæ, ſmall ones, which, when collected and placed in an accurate balance by Mr Ruſſell, were found to weigh fully ten grains. This metal was, in preſence of the

above mentioned gentlemen, ſealed up in a phial, impreſſed with the ſeal of Mr Anderſon, to be ſubmitted to future examination, though every one preſent was perſuaded that the metal was gold.

The ſeal being broke the next morning in preſence of the former company, and of Captain Auſten, and the metal hydroſtatically examined, the weight of the larger globule, the others being too minute for this mode of examination, was found to be in air nine grains and a quarter, and in diſtilled water of temp. Fahren. fifty plus, it loſt ſomething more than three-eighths, but not quite an half, of a grain. The ſpecific gravity muſt have been nearly as 20 : 1, and in this eſtimate all preſent acquieſced.

After this hydroſtatical examination, the globule was flattened by percuſſion into a thin plate, and examined by Mr Ruſſell, in the manner of artiſts for commercial purpoſes. On finiſhing his ſcrutiny, he declared it to be as good gold as the grain gold of the refiners, and that he would readily purchaſe ſuch gold as that he had juſt examined, at the higheſt price demanded for the pureſt gold.

The

The plate being then divided, one half was, before the company, ſealed up by Mr Anderſon, to be ſubmitted to a trial of its purity, which Dr Price propoſed that he ſhould requeſt his friend Dr Higgins of Greek-ſtreet to make. The remainder being put into aqua regia of nitrous acid and ſal ammoniac, afforded a ſolution ſufficiently rich, before the company ſeparated, to yield, with ſolution of tin, a richly coloured crimſon precipitate.

Captain Groſe was accidentally abſent when the precipitate was made, but ſaw it next day. In about four hours, the portion of metal employed was completely diſſolved; and the next morning, before Captain and Mr D. Groſe, and Mr Ruſſell, Mr Anderſon being prevented from coming, the ſolution being divided into three portions, the following experiments were made.

To the firſt portion, diluted with water, was added a quantity of cauſtic volatile alkali, and the precipitate, which was copious, being duly ſeparated and dried, about a grain of it, placed on a tin-plate, was heated, and found to explode ſmartly. This experiment was repeated three times.

To

To the ſecond portion diluted, was added a portion of ſolution of tin in aqua regia. A beautiful crimſon-coloured precipitate was immediately found in conſiderable quantity, which, when dried, was mixed with a fuſible frit, compoſed of flint-powder and the fluxes proper for the ruby-glaſs of Caſſius, in the proportion of five grains of the precipitate to two ounces of the frit; and, in a vitrifying heat, it afforded, in about three hours, a tranſparent glaſs, which, by heating, again aſſumed an elegant crimſon colour. The remainder, which continued in the fire, alſo aſſumed a bright red colour.

The third portion being mixed with vitriolic æther, imparted to it the yellow colour given to this fluid by ſolutions of gold; and the æther being evaporated in a ſhallow veſſel, a thin purpliſh pellicle adhered to the ſide, ſpotted in ſeveral places with yellow.

Dr Higgins ſoon after receiving the piece of metal, favoured the author with an anſwer, in which he notified, that the packet came to him under the proper ſeal, and that he was well ſatisfied of the purity of the gold he had received.

EXPE-

EXPERIMENT II. *made at Dr Price's May* 8. 1782, *before Sir Philip Clarke, Dr Spence, the Rev. Mr Anderſon, Captain Groſe, Mr Ruſſell, and Enſign Groſe.*

Half an ounce of mercury being procured from Mr Cunningham, an apothecary in the town, was placed on a flux compoſed of an ounce of powdered charcoal, two drams of borax, and one ſcruple of nitre, and, on it, when a little warm, was projected one grain of a white powder furniſhed by Dr Price.

After the crucible had acquired a red heat, the company all ſaw the mercury lying quiet at the bottom, without boiling or ſmoking in the leaſt; and it continued in this tranquil ſtate, after it had gained a full red heat. It was continued in a fire gradually augmented to a white heat, full three quarters of an hour, a ſmall crucible, previouſly inſpected, being inverted on it, to prevent coals from falling in; and the crucible being then withdrawn and cooled, many globules of white metal were found diffuſed through the whole maſs of the ſcoriæ; of theſe, globules were collected, to the weight of ten grains, before the company ſeparated, and con-

ſigned

ſigned to the care of Mr Ruſſell, who took them away with him.

Part of the remaining globules being afterwards collected, by pounding the crucible, and waſhing over the powder, the whole melted together amounted to thirteen grains. Mr Ruſſell, in the courſe of a few days, cauſed this metal to be aſſayed in the artiſts manner for the refiners, at the office of Meſſrs Pratt and Dean, aſſay-maſters near Cheapſide, and they reported it to be ſilver of the moſt complete purity.

EXPERIMENT VII. *made Saturday 25th of May 1782, in preſence of the Lords Onſlow, King, and Palmerſtone, Sir Robert Barker, Sir Philip Clarke*, &c.

Two ounces of mercury were taken from a ciſtern in the laboratory, containing about two hundred weight, and rubbed up with a few drops of æther, in a ſmall Wedgewood's ware-mortar. A grain of the white powder was then projected, and afterwards rubbed up with it. The mercury, which, before the addition of the powder, had been very bright and fluid, was now perceived by the company to be dull, and to run heavily.

vily. It was poured out into a ſmall glaſs-veſſel; and, after ſtanding about forty-five minutes, was put into a cloth to be ſtrained. It now poured ſo ſluggiſhly that the latter portions of it ſeemed to be in a ſtate intermediate between fluidity and ſolidity. Great part of the ſuperfluous mercury being ſtrained off, a maſs, ſimilar to an amalgam, was left in the cloth, and the remaining mercury, which could not be preſſed out, being driven off by fire, from a portion, about a fourth of the whole maſs, a globule of white metal, which had all the appearance of ſilver, remained, and was kept in a white heat for about two minutes before the blow-pipe. This globule weighed about ten grains, ſo that the whole product, by means of one grain, if collected, would have been found to be forty grains.

On the ſame day, and before the ſame reſpectable company, half an ounce of mercury, revivified from cinnabar, brought by the Rev. Mr Anderſon, was by him placed in a ſmall round Engliſh crucible, taken from among a number of others in the laboratory by Lord Palmerſtone, on a flux compoſed of a ſmall piece of charcoal and a piece of borax, both taken caſually by ſome of the company, from large

quantities,

quantities, and pounded in a mortar previouſly inſpected by thoſe preſent.

This flux being preſſed down in the crucible with a ſmall peſtle alſo examined, the mercury was poured into the depreſſion by one of the ſpectators, and on it half a grain bare weight of the red powder was put by Lord Palmerſtone. The crucible being then covered with a lid, taken in the ſame manner as the crucible from among many others, and ſhewn round to the company, was placed in the furnace, ſurrounded by lighted charcoal.

One or more of the company, particularly the Lords King and Palmerſtone, were, during the whole time of the experiment, cloſe to the furnace and operator, and, as requeſted by him, gave the cloſeſt attention to every part of the proceſs.

When the crucible had acquired a full red heat, the cover was removed, and ſeveral of the company ſaw the mercury in a tranquil ſtate, neither evaporating nor boiling, in which ſtate it continued even when the mercury itſelf was completely ignited.

The cover being replaced, the fire was gradually raiſed to a white heat. The crucible being

ing continued in this heat for thirty minutes, was taken out, cooled, and broke.

A globule of metal was found at the bottom, neatly fuſed, and exactly filling the cavity of the divided ſcoriæ. The globule fell out by the blow among the fragments of the crucible, and was taken up and ſhewn round to the company by Lord Palmerſtone, and in their preſence replaced in the hollow of the vitrified borax, to which it was accurately adapted.

Many other globules were diffuſed through the ſcoriæ attached to the ſides of the crucible, fragments of which were diſtributed among the company at their requeſt.

The bead which lay at the bottom weighed about ten grains, and was found to be perfectly pure ſilver, as appeared from the report of an aſſay-maſter, recommended by the clerk of the goldſmiths company.

From the experiments here related, every reader will be able to form an opinion for himſelf concerning the ſucceſs which Dr Price has had. But without preſuming to offer any remarks which may influence their judgment, we cannot help expreſſing our regret, that a chemiſt in Dr Price's ſituation, ſhould not have alſo publiſhed

bliſhed the proceſs by which his red and white powders were obtained; and that the rather, as we are told in the introduction, that he has already expended the whole of them, and does not propoſe to furniſh himſelf with a ſecond portion, having obtained them by a tedious and operoſe proceſs, the effects of which he has experienced to be injurious to his health, and that he muſt therefore avoid the repetition of it.

VII.

An Account of the Jail Fever, or Typhus Carcerum, as it appeared at Carliſle in the year 1781. *By* John Heiſham, M. D. 8vo. London.

OUR author, in his Preface, aſſigns as the motive of the preſent publication, "That "the treatment of the diſeaſe, which was adopt-"ed and ſucceſsfully purſued at Carliſle, appear-"ed to differ in ſome circumſtances from what "has hitherto obtained in general practice, par-"ticularly in the more early application, and in "the much freer uſe, of bark and Port-wine. "With reſpect to the quantity of wine; where-"as Sir J. Pringle never directed more than a "bottle

"bottle in the day, and rarely ſo much, we "have preſcribed from one bottle to two bottles "and an half daily, and always with advantage. "The doſes of the bark are alſo nearly double "to thoſe which the ſame eminent Phyſician "uſually exhibited."

Here we muſt remark, that the difference of practice betwixt our author and Sir J. Pringle, is more apparent than real, and ſeems to us chiefly, if not altogether, to originate from the different ſituations in which they were placed. The typhous patients of Sir J. Pringle were ſoldiers, men generally about the prime of life, well fed, of plethoric habits and ſanguine temperaments; of courſe, inflammatory ſymptoms often run high during the firſt ſtage of the fever. Sir J. Pringle, with his uſual ſagacity, ſometimes took away a little blood, and was always during this period reſerved in the uſe of bark and wine. But, in the latter period, he judiciouſly gave both thoſe articles according to the urgency of ſymptoms, of age, the conſtitution and former habits of the patient, and altogether abſtained from the uſe of the lancet.

Our author's patients again, according to the account he has given, were the pooreſt and

meaneſt inhabitants of Carliſle, all of them ill fed, ill clothed, and many of them paſt the prime of life. He, with propriety therefore, altogether omitted bleeding, and from the very beginning gave bark and wine with a liberal hand.

The truth is, here, as every where elſe, no general doctrine can be delivered, which is not varied ſomewhat by circumſtances and ſituation. In the preſent caſe, it would be equally unjuſt to affirm, with Dr Heiſham, that two bottles and a half of port-wine may always be given, with advantage, to an adult in the typhus carcerum, as to ſuppoſe with Sir J. Pringle, that one bottle only was the ſtandard quantity. In the nature of things, this admits not of a preciſe limitation; it depends upon a variety of contingent circumſtances, and muſt always, in the laſt reſort, be intruſted to the judgment of the practitioner, at the patient's bed-ſide.

Thus much, candour, and a reverence for the illuſtrious dead, obliged us to remark.

We proceed now to the diſſertation itſelf. Dr Heiſham divides it into five ſections.

In the *firſt*, He treats of the hiſtory and ſymptoms of this fever. In the *ſecond*, Of the prognoſtics.

gnoſtics. In the *third*, Of the remote cauſes of this fever, and particularly of the occaſional cauſes. In the *fourth*, Of the cauſes which predispoſed, or rendered the body more liable to be affected by the occaſional cauſe when applied. And, in the *laſt*, He treats of the cure.

With reſpect to the hiſtory of the diſeaſe, we are informed, that about the beginning of April, or end of March, this fever appeared in Carliſle, at an houſe in Richard-gate, which contains about half a dozen very poor families. It continued during the remainder of the year, but was in a great meaſure confined to the town itſelf; and then it raged with more violence in the ſuburbs than within the walls. It chiefly, if not ſolely, attacked the common and lower ranks of people, more eſpecially thoſe who lived in narrow, cloſe confined lanes, and in ſmall crouded apartments. The married ſeemed more ſubject to it than the ſingle, adults than children, and women than men.

On the 6th January 1782, about ſix hundred had been ſeized with it, that is, about one in eleven or twelve of all the inhabitants of Carliſle, and nearly one in ten died, of thoſe who were attacked by the diſorder; for, upon ſearching

the regiſter of deaths, it appeared, that two fell victims to it in the month of May, four in June, four in July, eight in Auguſt, ſeven in September, nine in October, eight in November, and ſix in December; in all forty-eight, beſides a ſoldier of the firſt regiment of dragoons, and three ſtrangers.

Our author next preſents us with a very diſtinct detail of ſymptoms, which he very properly divides into common and anomalous. With reſpect to the common, they are too generally known to require any recapitulation. The anomalous are the following: A diarrhœa in the firſt ſtage of the fever. A cough, ſometimes with, at other times without expectoration. The pulſe now and then ſtronger than is uſual in typhus. In one or two inſtances, a difficulty of making water, and a ſwelling of the abdomen, with evident fluctuation, occurred.

A relapſe was never obſerved.

Our author, though a profeſſed believer in the general doctrine of critical days, and eager to have his faith ſupported by ſome new props, on this occaſion, candidly confeſſes his diſappointment. He obſerved patients die in almoſt every day of the fever, from the fifth or ſixth, to the ſixteenth or ſeventeenth, and the ſalutary terminations

terminations occurred as frequently on the non-critical, as on the critical days.

As the temperature of the ſeaſon has been often ſuppoſed greatly to influence epidemic diſeaſes, we have here a regiſter of the weather, as to cold, heat and moiſture, previous to the appearance of the diſeaſe, at its riſe, and during its progreſs and decline.

In the ſecond ſection, Dr Heiſham treats of the prognoſtics in this diſeaſe.

On this part of the ſubject, Dr Heiſham contents himſelf with pointing out, *firſt*, Thoſe ſymptoms which indicate a favourable iſſue; and *next*, Thoſe which portend danger and death. He is of opinion, that neither petechiæ, nor a bleeding at the noſe, unleſs accompanied with other dangerous ſymptoms, indicate imminent danger: For ſeveral patients, with thoſe ſymptoms, recovered as well as others who were not affected by them. He never obſerved, however, either petechiæ, a ſcarlet efflorescence, or a bleeding at the noſe, in patients who began to take the bark and wine, early in the diſeaſe.

The remote cauſes of this fever, and particularly the occaſional cauſes, are the ſubjects conſidered in the third ſection.

Our author adduces the following reaſons for believing that the ſtate of the weather was not a very powerful agent in this epidemic. In the *firſt* place, It was confined, in a great meaſure, to the city and ſuburbs of Carliſle. In the *ſecond* place, The ſtate of the air, when the fever raged with the greateſt violence, was different from what it had been when it firſt appeared, but ſimilar to what it was when the diſeaſe was manifeſtly on the decline.

After finding the ſtate of the weather an inadequate cauſe to produce the effects, Dr Heiſham thinks it probable, that human effluvia was the occaſional cauſe of this fever. He here enters upon the argument of contagion at ſome length. In ſupport of the opinion, the melancholy, but well known effects of human effluvia, at the Aſſizes held at Oxford, in the year 1577, and during the Seſſions of the Old Bailie, are quoted and appealed to. After ſeveral other general obſervations, for further information, we are referred to Huxham, Pringle and Lind.

When our author comes to treat of the cauſes which prediſpoſed, or rendered the body more liable to be affected by the occaſional cauſe when applied, inſtead of attempting to explain the

the *modus operandi* of thoſe cauſes, he deems it enough briefly to enumerate them under the nine following heads.

1. A poor watery diet.
2. Uncleanlineſs.
3. Cold.
4. Intemperance in drinking.
5. Exceſs in venery.
6. Fatigue.
7. Grief and anxiety.
8. Fear.
9. Previous diſeaſe.

By avoiding thoſe prediſpoſing cauſes, the Doctor obſerves, that perſons even expoſed to the contagion, will, in general, eſcape the diſeaſe; but to render them ſtill more ſecure, he recommends a generous diet, with a liberal uſe of wine, or ſpirits, the Peruvian bark, and moderate exerciſe in the open air.

In the fifth ſection of this work, Dr Heiſham treats of the cure.

On this important part of the ſubject, our author is very diſtinct and correct, but his practice does not appear to us to differ very materially from that now generally eſtabliſhed.

From the train of ſymptoms, he is led to infer, that the diſeaſe in a great meaſure conſiſts in extreme debility, and in a tendency of the fluids towards putrefaction. Hence the following indications of cure are deduced; *firſt*, To remove the cauſes, or obviate the effects of debility. *Secondly*, To obviate or correct the tendency of the fluids to putrefaction.

The cauſes which continue to operate after the diſeaſe is fully formed are, effluvia from the patient's own body, grief, anxiety, and fear. The operation of the firſt of thoſe cauſes may be counteracted in a great degree by a little attention. Of this, Dr Heiſham was well aware. He accordingly ordered the patient clean linen every day. A ſtream of freſh air was directed upon the ſick-bed, and the chamber kept pure and ſweet, by the diligent removal of the excretions, whether feces or urine. By theſe means, we doubt not, an accumulation of the effluvia would be prevented, and of courſe its virulence much diminiſhed.

Dr Heiſham next ſubjoins ſome obſervations reſpecting the regulation of paſſions of the mind. He directs, that if the patient be anxious about his fate, he ſhould be inſpired by hope; if influenced

enced by fear, his courage ſhould be rouſed; and if grieved, his ſorrow is to be ſoothed. But, above all, every thing which tends to produce fear, eſpecially in thoſe who are already ſick, ought to be ſedulouſly avoided. This leads the author to take notice of ſome practices in Carliſle, which had a very great effect in that way, particularly the tolling of the death-bell, the invitation to burials by the public crier, and the funeral pſalms ſung through the ſtreets. As ſoon, however, as Dr Heiſham repreſented the evil tendency of theſe practices to the learned Dr Percy, then Dean of Carliſle, they were inſtantly reformed as far as lay in his power; an example well worthy of imitation, at leaſt on ſimilar occaſions, in other places where the ſame practices prevail.

Our author next proceeds to the particular treatment of the diſeaſe.

At the commencement of the epidemic, before he had an opportunity of accurately aſcertaining its nature, when called early in the firſt ſtage of the diſeaſe, he ordered the ſaline mixture, and, in caſe of coſtiveneſs, ſuch a quantity of tartar emetic combined with it as was ſufficient to obviate that ſymptom, but not to induce

duce any great degree either of nauſea or vomiting, which he found always hurtful. But, after he had more accurately aſcertained the nature of the epidemic, and when not called, which was generally the caſe, till the firſt ſtage was over, he rejected tartar emetic as an uſeleſs and even noxious medicine, altogether omitted the ſaline mixture, and confided ſolely in the liberal uſe of bark and wine.

The following was his common formula for adminiſtering the bark:

℞. Pulv. cort. Peruv. opt. unc. unam.
Rad. ſerp. virgin. dr. duas.
M. & divide in partes duodecem æquales; ſumat unam, ſecunda, vel tertia, quaque hora, ex vin. rubr. hauſt.

When the patient's ſtomach could not bear the bark in ſubſtance, a ſtrong decoction was uſed as a ſubſtitute. To adults, from one to two bottles and a half of wine, were given in the ſpace of twenty-four hours; and our author thinks, that even more might have been given with advantage, as he never ſaw any bad effects from an exceſs, though very often from the too ſparing uſe of this grateful cordial.

Pediluvium

Pediluvium was found more prejudicial than uſeful; but fomentations of the feet and legs were uſed with advantage.

Though bliſters did not appear to affect the general ſyſtem, or raiſe the pulſe, they very evidently relieved the pain of the head, which was often violent.

The ſymptomatic diarrhœa was immediately attempted to be checked, by the free uſe of aſtringents and opium, without any fear of retaining a putrid fomes in the inteſtinal canal.

Glyſters were ſeldom employed, unleſs in caſes of irritation, from a too long retention of the feces.

When ſymptoms of catarrh were conjoined with fever, the wine and medicines were adminiſtered a little warm, and the rad. ſerpent. virg. omitted. When the debility was exceſſive, and the danger great, though unattended with diarrhœa, our author had recourſe to opium.

With reſpect to the anomalous ſymptoms, they were left entirely to nature.

During the whole courſe of the diſeaſe, the patient was permitted the free uſe of fruits, unleſs contraindicated by diarrhœa.

By adhering ſteadily to the above method, we are aſſured, that all the ſymptoms were alleviated,

viated, the progreſs of the diſeaſe cut ſhort, and the patient ſaved.

VIII.

Antonii Brugmans *Magnetiſmus, ſeu de Affinitatibus Magneticis Obſervationes Academicæ.* 8vo. Lugduni Batavorum.

OUR author points out a new and convenient method, by which it may be eaſily known, whether any body, mineral, animal or vegetable, is attracted by the magnet, and thus, whether it contains iron or not. For, although different bodies are known to contain iron, both by the teſt of chemical analyſis, and by their affinity to the magnet; yet there are others, which, from chemiſtry, we know to be poſſeſſed of a martial principle, which, however, do not affect the moſt ſenſible magnetic needle.

Our author, in the preſent work, endeavours to diſcover the cauſe of this effect, and, if poſſible, to obviate it. Nor have his labours been unſucceſsful; for he has found, that different bodies, which ſeemed altogether deſtitute of iron, ſuch as vitriol of copper, cork, and filbert-

nuts,

nuts, and ſeveral others, are eaſily attracted by the magnet.

The whole of our author's method turns upon this, that the bodies, the martial principle of which we wiſh to aſcertain, ſhould be rendered as moveable as poſſible. For this purpoſe, he recommends to place the body to be examined, upon either end of a very moveable non-magnetic needle *, or, what is preferable, upon the ſurface of very pure quickſilver, or very limpid water; and, in this ſituation, to approach to it a ſtrong natural or artificial magnet of a parallelopiped form.

Quickſilver anſwers exceedingly well for ſolid bodies, ſuch as woods, ſtones, and thoſe minerals and metals which do not readily form an amalgam with it. But fluid bodies, and thoſe minerals which eaſily unite with quickſilver, and thus deſtroy its mobility, are either to be committed to water alone, or, if they are ſpecifically heavier

* We are prevented from deſcribing this needle by the want of a plate; but our author acknowledges, that it has frequently diſapppointed his expectations; on which account, it is neceſſary, on examining thoſe bodies which contain little iron, to have recourſe to quickſilver, or to water.

heavier than this fluid, or form mixtures with it, they are to be made to ſwim on its ſurface, placed upon a ſmall piece of paper, or on a thin lens of concave glaſs; upon which the approach of a good magnet, if the body contains iron, will not only diſcover it, but will frequently give it a conſtant polarity.

Many trials, which our author made with the greateſt care, ſhow the utility of this method. He found, that black earth, yellow, red, and green ochre, red fuller's-earth, tobacco-pipe clay, the clay of the Delft-ware, and all veſſels made of it, Engliſh fuller's-earth, the bolar earths, and all kinds of terra ſigillata, and other kinds of earth and ſand of a black, blue, or aſh colour, did not reſiſt the action of a good magnet. With the ſame event, he examined, not only that kind of clay which is uſed in making red bricks, but every other kind which acquires a yellow, blue, or other colour, in the fire. He found, that red bricks were capable of receiving a conſtant polarity. Whether that pure and white kind of argillaceous earth, of which the china of Saxony and Japan is made, would ſhow the ſame effect, he cannot be certain; for although china-veſſels

are

are attracted, yet he informs us, that he has often met with bodies which were deſtitute of magnetic power, unleſs they had undergone the action of the fire.

Turfa, when freſh, has a remarkable affinity to the magnet. The longer, however, that this foſſil is expoſed to the open air, the more is this power diminiſhed.

Indurated cement (*cæmentum*) becomes a true polar magnet. White vitriol, both natural and artificial, as alſo green and blue vitriol, lapis atramentarius, touchſtone, ſtone of which millſtones are made, lapis pumicis and lazuli, ardeſia, lava, ſteatites and ſerpentini lapides, tourmalinus, ſuccinum, ſeveral precious ſtones, as ruby, hyacinthus both of the Eaſt and Weſt Indies, chryſolithus, ſmaragdus, granite, lapis nephriticus, turcoſa, ſome jaſpides and achates, as alſo ſeveral kinds of mica and aſbeſtus, and the ores of iron, tin, copper, zinc, cobalt, and quickſilver, were moved ſooner or later by the power of the magnet, according to the quantity of iron which they contained; and thus clearly proved the falſity of the common opinion, that the ores of iron or other metals, that ſtones and other minerals which contain iron, are not attracted by the magnet,

magnet, unleſs they have been previouſly calcined, either by themſelves, or with ſome inflammable body.

Our author proceeds to ſhow, that different animal and vegetable ſubſtances, of the martial principle of which doubts have been entertained, are readily attracted by the magnet, although they had not been prepared to ſhow this affinity, either by calcination, or any other operation whatever. Thus, ſponge, cork, Peruvian bark, filbert-nuts, almonds, the old bark of trees, cherry-ſtones, the woods of rhodium and mahogany, and ivory, gave evident marks of this magnetical affinity, when a ſmall piece of theſe bodies, about the ſize of a pepper-corn (for a rounded figure is preferable), was put on the ſurface of quickſilver, and a ſtrong magnet approached to them.

Other ſubſtances, again, ſhewed a magnetic power, when they were calcined, or reduced to aſhes, or when they were, according to Boerhaave's method, changed into a ſimple earth ſo called. Of this kind are the filices pyromachi, writing paper, ſoot, white wool, ſeveral herbs and fruits, the feathers of birds, fins of fiſh, ſea-ſhells, animal bones and hair, blood and its ſe-

rum,

rum, fat, and the fleſh of animals; the calces of ſome metals, as of lead and zinc, diaphoretic antimony, red precipitate of mercury, turpeth mineral, *&c.*; for of all of theſe, a greater or ſmaller proportion adhered to the magnet.

By theſe experiments, our author thinks, we are enabled to correct the opinions of others reſpecting the producing and deſtroying the magnetic power in bodies, and they ſerve alſo as the foundation of new doctrines.

It is not in the leaſt to be wondered at, he obſerves, that Becher and Geoffroy procured an artificial iron from clay or argillaceous earth; for a conſiderable quantity of it enters into their compoſition, and is only ſeparated by a chemical proceſs. A certain colour of earths, ſuch as aſh or ochery coloured, is not a neceſſary mark of magnetic affinity; for ſometimes thoſe of a clayey or other colour, are obſerved to approach the magnet with greater force than others whoſe external appearance ſeemed to indicate a ſtronger affinity: yet our author found, by repeated trials, that the magnetic power decreaſed in proportion as the colour of bodies came nearer to perfect whiteneſs; ſo that ſome earths, and other bodies produced from them, are found,

which have no magnetic affinity at all. He thinks, that indurated cement ſhould be referred to the martial earths, on account of the great quantity of iron which it contains.

Our author could not deſtroy by any artifice the magnetic power of iron, which however almoſt all the chemiſts deny the croci of iron to poſſeſs; for whether he examined the ſolutions of this metal made in mineral or vegetable acids, or the crocus appoſitivus of Stahl, and other calces prepared either from ſolutions or with ſulphur, or iron itſelf expoſed for a length of time to the influence of the open air and moiſture, he always obſerved remarkable proofs of magnetiſm; and although this property was in ſome meaſure diminiſhed, yet this diminution depended upon the adherence of ſaline matter, and the magnetic power was fully reſtored when it was removed.

In the ſame manner, the ſeparation of phlogiſton from iron had no effect in deſtroying its magnetic power. The ſcoriæ of iron, that had been fuſed with nitre, and again ſeparated from it, were readily acted upon by the magnet.

Thus

Thus no art is capable of deſtroying or decompounding this metal, in ſuch a manner as to deprive it of its magnetic affinity.

Farther, although many ſubſtances, ſuch as the ſilex pyromachus, different earths, and others which we enumerated above, become magnetic by calcination; yet our author does not aſſent to the opinion of Mr Buffon, who thinks this magnetic power is produced by the fire; for as iron is found almoſt every where, even in the atmoſphere itſelf, he imagines, that the martial principle of thoſe bodies is only rendered more conſpicuous by the force of the fire.

Red coral, the external habit of which bears marks of an admixture of iron, even when prepared by calcination, did not ſhow any magnetic affinity: Hence our author infers, that the colour of mineral bodies depends, in ſome inſtances, upon the martial principle, and in others upon an inflammable matter alone.

The magnetic attraction, which ſome bodies ſhow after calcination inſtituted with inflammable ſubſtances, does not always depend upon the iron contained in the calcined body, but upon the martial principle of the inflammable matter. Thus, white chalk calcined *per ſe* has no

magnetic affinity; but when tallow is added during the calcination, the whole maſs is attracted by the magnet. Hence, in order to aſcertain the preſence of iron in any body, it ought to be calcined without any addition whatever.

SECT.

SECT. II.

Medical Obſervations.

I.

Obſervations on Regimen and Preparation under Inoculation, and on the Treatment of the Natural Small Pox, in the Weſt Indies. To which are added, Strictures on the Suttonian Practice; in a Letter to Dr Andrew Duncan. *By* James Makittrick-Adair, *Fellow of the Royal College of Phyſicians at Edinburgh.*

Antigua, July 24. 1780.

SOME years ago, I had prepared for the preſs ſome obſervations on the Suttonian regimen and practice under inoculation; but

my ſudden and unexpected return to this colony, and the multiplicity of my avocations here, prevented even the recollection of my former intention, until the ſmall pox broke out in the metropolis of this iſland, when a general inoculation became neceſſary.

I take the liberty of tranſmitting to you a narrative of my practice, not only under inoculation, but in the natural ſmall pox, as concerted with, and, I believe, generally adopted by, your quondam pupil, and our mutual friend Dr Samuel Athill; and ſhall ſubjoin ſome ſtrictures on the Suttonian mode of treatment.

Should it be objected, that I have been anticipated in ſome of my ſtrictures, I anſwer, that allowing this to be true; yet, beſides ſome hints that are new, no author that I have read, has, on his own experience, ſo fully pointed out the bad effects which may reſult from the repellent plan. If, therefore, a due attention to the following remarks, ſhall tend to awaken the ſuſpicion of medical men, and thereby lead them to watch its effects, I ſhall not have publiſhed in vain.

SECT.

SECT. I. *Treatment under Inoculation.*

The unavoidable communication between the ſlaves in each plantation, made it neceſſary to inoculate, without regarding the circumſtance of pregnancy or chronic complaints: A few were inoculated by a ſaturated thread; but, in general, by a lancet loaded with the matter of a maturated puſtule.

The ordinary diet of the ſlaves being ſimple, little change was neceſſary; nor was I very rigid with reſpect to the regimen even of white patients.

In compliance with cuſtom, I purged twice before inoculation, and once between that and the eruptive fever; to all the healthy, above three months, purging pills of jalap, calomel and emetic tartar were given; for very young infants, magneſia, mercurius alkaliſatus and ipecacuanha, were directed; and ſuch as were conſtitutionally weak, or reduced by diſeaſe, were put upon the uſe of bark, bitters, animal food and wine.

I did not purge the mothers of ſucking infants, deeming the practice to be unneceſſary, uncertain and abſurd.

To avoid unneceſſary repetitions, I ſhall divide the ſmall pox into four ſtages; the *febrile*, *eruptive*, *ſuppuratory*, and that of *incruſtation*.

Though the writers on the ſmall pox, in general, endeavour to aſſign a certain number of days for the commencement and termination of each of thoſe ſtages; yet I have found that a variety of circumſtances may either precipitate or retard them.

About three days before I expected the eruptive fever, I directed, for all but infants at the breaſt, a ſolution of emetic tartar, acidulated with vitriolic acid, adding as much laudanum as ſhould prevent ſevere nauſea and vomiting: To children above ſix months, it was given without the acid; but few under this age took it, except ſuch as from diſturbed ſleep, twitchings and ſtartings, ſeemed to be threatened with convulſions; and, in theſe caſes, I generally preferred a tincture of ipecacuanha with laudanum.

It was a general direction, that warm water ſhould be kept in readineſs, for the immediate immerſion of ſuch as were threatened with convulſions; and a doſe of the above medicine was directed

directed to be given, and repeated every hour, or two hours, until the ſpaſms ceaſed.

This diaphoretic, which generally ſweated, and ſometimes vomited, was continued till the eruption appeared; after which period, no medicine was given, unleſs a profuſe eruption, or ſome other circumſtance, demanded it.

When the puſtules were nearly dried on the face, I purged twice or thrice with the preparatory medicines, but in a larger doſe.

Sect. II. *Natural Small Pox.*

Febrile Stage.] As ſoon as I ſuſpected the fever to be variolous, I gave to adults about ſix grains of calomel, and one grain of emetic tartar; and the operation being finiſhed, I continued the medicine in half that quantity, every four, ſix or eight hours, until I could pretty exactly determine the quantum of the eruption: If it was likely to be copious, I continued the medicine till the commencement of the third ſtage, otherwiſe I deſiſted: If the patient was conſiderably vomited or purged by it, I ordered an opiate at night, but not otherwiſe. To all children above ſix months, calomel and ipecacuanha

cacuanha were given; to infants under that age, magneſia, ipecacuanha and mercurius alkaliſatus: To the infirm of any age, bark and mercurius alkaliſatus; uſing the precautions enumerated above, to obviate or remove convulſions. In one caſe, the patient was bled, on account of conſiderable pains, anxiety and febrile heat.

Eruptive Stage.] If the eruption promiſed to be moderate, tepid drinks only were preſcribed, and the chamber kept cool. If very coſtive, a glyſter, or gentle aperient were given. I have already related the method of treatment, when I ſuſpected the eruption would be profuſe; and whether before or during the eruption, if the mercurial medicine operated briſkly, an opiate was given at night, with great advantage; the patient was expoſed to a free current of air, and permitted to drink cold water, if deſired.

Stage of Suppuration.] This ſtage, I believe, commences very ſoon after the eruption, or inflammatory effuſion, and proceeds ſucceſſively in the different parts of the body, in proportion as the puſtules appear and fill, until they have attained their full ſize, and acquire that yellowneſs of the apices, which is rarely obſerved, however, except in the diſtinct ſmall pox: A

proof

proof that in the confluent ſmall pox, a genuine ſuppuration does not take place. Hence it appears, that the ſtage of ſuppuration really commences and continues longer than is generally believed; and indeed the three ſtages run ſo inſenſibly into each other, that their periods cannot be aſcertained.

If the puſtules were few, warm drinks were preferred to cold, and even the gentleſt aperient avoided. If the eruption was copious, and the mercurial had been properly employed in the former ſtages, it was now diſcontinued, and only an opiate given at night, provided the patient was very ſore or reſtleſs; and even repeated at midnight, if the firſt doſe had not a proper effect. But when the evacuating medicines had either been omitted in the former ſtages, or uſed too ſparingly; or when the eruption had been premature, and very precipitate, and the inflammatory ſuffuſion in the intervals of the puſtules was conſiderable, eſpecially if of a dark red colour; the mercurial was uſed through this ſtage, but in ſuch ſmall doſes as not to hazard a profuſe purging.

Stage of Incruſtation.] This ſtage is ſuppoſed to commence from the time the apices of the puſtules

puſtules in the face begin to be diſcoloured and hardened: But this is not ſtrictly true; for at this time, the proceſs of maturation is really going on in the body and extremities: A more certain and important mark of its commencement is a ſenſible diminution of the ſwelling of the face; which, though it takes place pretty regularly about the eleventh day in the diſtinct ſmall pox, is ſometimes later in the confluent. The commencement of the ſecondary fever depends chiefly on the detumeſcence of the face; but in ſeveral caſes it appeared earlier; the evening exacerbation becoming more gradually ſevere, and the morning remiſſion leſs diſtinct, except in a patient who died on the nineteenth day; for in this caſe it came on with great rigour, and the firſt hot fit deſtroyed him.

The treatment under this ſtage of danger was regulated by circumſtances. If the ſecondary fever was ſlight, the patient was kept cool and quiet, and the belly gently ſoluble.

But if the ſecondary fever came on with any degree of ſeverity, I again had recourſe to the mercurial evacuants, bliſtered the back, or, more frequently, the ſcrobiculus cordis; and if the patient was reſtleſs at night, the opiate was given,

given, and generally waſhed down with weak warm punch.

The relics of the diſeaſe were purged off by jalap, calomel and tartar emetic, given earlier than under inoculation.

Soft vegetable drinks, and ſometimes weak broths, were given through the diſeaſe.

I loſt two inoculated patients; one, an infant, whoſe mother having died about a month before, of a puerperal fever, it was neglected by the nurſe; the other, an infant of ten weeks old; of the confluent ſmall pox, contracted, I believe, before inoculation.

Though a conſiderable proportion died of the natural ſmall pox during this epidemic, two only died under my care; one, an old man of ſeventy, neglected in the firſt ſtages; and a boy who had long laboured under diarrhœa: He had been inoculated, but without effect: He had very few puſtules.

SECT. III.

Before I proceed to the remarks on the preceding ſections, I ſhall aſſign ſome reaſons for the preſent publication.

In

In the year 1766, when I ſettled at Andover in Hants, I found, that in the town and neighbourhood there were ſeveral inoculators, who either had been, or were then, partners of the Suttons. I was led chiefly by curioſity, to enquire into the mode and effects of this novel practice; and from a ſtrong predilection for the cooling regimen in inflammatory and putrid fevers, I conſidered it as a valuable extenſion of Sydenham's plan; and, in the only caſe of inoculation in which I was at that time conſulted, I adopted the reducing regimen with all the rigour of a Suttonian.

Soon after, ſeveral patients, chiefly women, applied to me for advice. Almoſt all their caſes were complicated and anomalous; ſome patients were ſallow and cachectic, with irregularity or obſtruction of the menſtrua; others, apparently athletic, were become hyſterical or hypochondriacal; ſome laboured under irregular fevers, with perverſion of all the ſecretions and excretions; others were manifeſtly hectic, with the ſymptoms of phthiſis pulmonalis.

Of thoſe ſeveral died; others, tired out with my unavailing efforts to relieve them, applied to ſome other medical men, and perhaps without ſucceſs.

ſucceſs. Out of more than twenty caſes, I ſhall ſelect the following: Thoſe of the farmer and his wife firſt excited my ſuſpicion concerning the cauſe.

By deſire of the late Sir John Elwill, I viſited a farmer and his wife, his tenants at Dean near Saliſbury.

They had been inoculated twice; but though they remained ſix weeks in the inoculating houſe, they had no eruption.

They informed me, they had both been remarkably healthy before inoculation, but had been ill ever ſince.

I found the farmer perpetually tortured with pains in his bowels, with conſtipation, and hectic fever: He was relieved chiefly by caſtor oil, and apozems of linſeed and ſal diureticus.

The wife, a corpulent athletic woman, with a train of hypochondriacal ſymptoms, which ſeemed to depend on catamenial obſtructions, was, at times, ſubject to ſevere hyſterical paroxyſms. She was relieved, as far as depended on a reſtitution of the menſtrua, by extract of hemlock and the aloetic pill; but her nerves continued very irritable long after I left her.

A farmer's daughter in a neighbouring village conſulted me: I found her in the laſt ſtage of a conſumption, and therefore attempted palliation only. The patient and her parents aſſured me, that, before inoculation, ſhe had been ſtrong, florid and healthy, and conſidered her as a martyr to the new practice.

A female, ſervant to an old bachelor my neighbour, ſoon after being inoculated, in which the puſtules were few, was ſeized with convulſions. They ſeemed to partake more of the nature of epilepſy than of hyſteria. Their returns were frequent and ſevere; and, in the intervals, ſhe complained of an heavy conſtant pain at the ſcrobiculus cordis. All the means I could deviſe for her relief were unavailing, and ſhe died at the end of ſome months of an aſcites. This woman dated the commencement of her illneſs from the time of her being inoculated.

But as the purſuit of truth is my ſole aim, I acknowledge, that ſeveral diſeaſes were attributed to the relics of ſmall pox, long before inoculation was practiſed in Europe; but I believe the diſeaſe was rarely productive of complaints, unleſs where the eruption was much more copious than under the preſent mode of inoculation;

tion; and I ſhall hereafter endeavour to explain, how a defect, as well as an exceſs, of eruption, may injure the future health of the patient. It cannot be doubted, that the Suttonian mode of inoculation has rendered the immediate danger much leſs than under any former mode; but I am perſuaded, that, to render it more ſafe in every reſpect, it is neceſſary, in general, to be much more moderate in the uſe of the reducing and repellent plan, and, in ſome caſes, totally to deſert it.

This leads me to take notice of a circumſtance which merits our moſt ſerious attention, ſo far as regards the probable conſequences.

The Suttons having remarked, that their plan always leſſened, and often totally prevented eruption, they were induced, not only to adopt it indiſcriminately, but often to carry it to exceſs; becauſe, by a quick rotation of patients, their profits were conſiderably increaſed. This method of treatment was alſo very agreeable to the patients; they were gratified by the proſpect of being ſoon relieved from a rigid diſcipline; and the females were aſſured of their beauty being unimpaired.

Baron Dimſdale's candid and judicious publication did not tend ſo much to regulate and modify this practice, as to apply the principles of it to the treatment of the natural ſmall pox.

From ſome caſes which have occurred to me, in which Dr Dimſdale's plan was adopted, I have been led to wiſh, that, well qualified as he is, he had been more explicit in pointing out thoſe circumſtances under which a mitigation of the general regimen would be neceſſary; and indeed, that he had been leſs implicit in adopting that plan in its utmoſt extent; becauſe I am perſuaded that it is unneceſſary, and has been in ſome caſes unſafe.

More than twelve years ago, the late Dr Kirkpatrick, author of a treatiſe on inoculation, was of the ſame opinion: Dr Gatti, who inoculated at Paris with the utmoſt ſucceſs, reprobates, in the ſtrongeſt terms, all preparation whatſoever; and attached as I am to mercurials and ſudorifics, as preparatory to inoculation, I ſhould deem my patient more ſafe without any preparation whatſoever, than under that adopted by Dr Dimſdale: But medical men muſt often ſubmit to modes of practice, merely becauſe they are in faſhion.

Before

Before we proceed, it may be neceſſary to enquire into the probable cauſes of thoſe diſeaſes, which have been conſidered as conſequent of imperfect criſis of the natural and inoculated ſmall pox, that we may be enabled to avoid, obviate, or remove them.

1. *In the natural ſmall pox.*] *Firſt*, The aſſimulation of ſuch a quantity of varioloſe matter, that part, not being depoſited on the ſurface, is retained in the habit. 2*dly*, The whole being depoſited, a part falls back again on the habit, and is not properly diſcharged, either from general weakneſs, an unfitneſs of the organs to ſeparate it, or a neglect of proper evacuants.

2. *Under inoculation.*] *Firſt*, Debility of the conſtitution, either natural, or from improper regimen; by which the matter is not duly depoſited on the ſurface. 2*dly*, The efforts of the conſtitution being ſo diſturbed during the proceſs of eruption and maturation, either by reſiſting the determination to the ſurface by cold, *&c.* or by promoting counter-determinations, eſpecially to the inteſtinal canal, and thereby preventing the natural criſis of the diſeaſe.

That much miſchief may ariſe from interrupting critical efforts in this diſeaſe, is evident, *firſt*,

From the alarming ſymptoms, nervous and febrile, often produced before the eruption. 2*dly*, The dangerous and fatal commotions excited, when the eruption is imperfect, or totally interrupted. 3*dly*, The exceſſive and often fatal diſturbances produced by part of the virus being abſorbed, and ſtimulating the internal organs. 4*thly*, The chronic diſeaſes produced by the relics of diſeaſe.

If, therefore, we conſider the ſmall pox as a diſeaſe, whoſe natural and neceſſary criſis is by a *complete* depoſition on the ſurface, the motives and indications for inoculation and concomitant treatment muſt be,

Firſt, So to prepare the body, that the variolose matter generated in the habit ſhall be mild in quality, and moderate in quantity.

2*dly*, To prevent any violent or dangerous commotions, or changes, being produced in the ſyſtem, during the ſeparation and expulſion of the variolous matter.

3*dly*, To render the depoſition of this matter complete and ſafe; and,

4*thly*, To prevent the future health from being injured by a return of the virus into the habit.

SECT.

SECT. IV. *Remarks on the preceding Sections.*

The means neceſſary for ſatisfying the preceding indications, may be conſidered under the heads of *diet*, *drinks*, *air*, and *medicine*; and, under thoſe heads, ſome obſervations on the treatment of the natural ſmall pox will be ſubjoined.

1. *Diet.*] Abſtinence from the uſe of ſtimulating food and ſauces, and a moderate uſe even of bland nouriſhment, to prevent repletion, have a tendency to leſſen the inflammatory diatheſis, and weaken the propulſive powers of the heart; and I have been told, that ſome of Sutton's partners pretended, that they could ſo regulate the regimen, as to aſcertain the number of puſtules; aſſerting, that even a ſingle meal of animal food has produced a freſh crop of puſtules. This I know, that ſeveral of Sutton's patients, by returning too quickly to a full diet, have had a freſh crop of puſtules, or impoſthumation. Theſe circumſtances afford a proof, that the regimen has been too rigid, and may ſometimes be injurious, as appears even from ſome of Baron Dimſdale's caſes.

Whatever other evils may ariſe from this plan, there is one, of which, I believe, it is frequently

quently productive, *viz.* too ſudden repletion, from too quick a tranſition to full diet, perhaps often exceſs in proportion to the former reſtraint. To this probably may be owing ſome of the diſeaſes attributed to retention of the virus.

Some years ago, the ſmall-pox was introduced into this iſland by a ſhip from the coaſt of Africa. Several of the perſons inoculated at that time, were ſeized with alarming ſymptoms; the eruptions had not their uſual aſpect; ſeveral died; ſome, inſtead of eruptions, had immenſe ſwellings of the inoculated arms, and ill-conditioned impoſthumations and ulcers. Theſe untoward events deterred ſome of the practitioners from farther inoculation at that time, from a ſuſpicion that there was a degree of malignity in the virus. Of thoſe who had then been repeatedly inoculated, without eruption, ſome were ſeized in the natural way during the late epidemic. I will not deny that there might be ſomething unfavourable in the ſtate of the air; but, from ſome circumſtances that have occurred lately, I am inclined to ſuſpect, that the reducing plan being carried too far, was a principal cauſe of thoſe untoward accidents; for I know experimentally,

rimentally, that perſons in hot climates will not bear the repellent treatment to a degree which may be inoffenſive in Europe. Another remark ariſes from the foregoing fact, that theſe and other inſtances ſhew, that, by reducing the patient too much, we may abſolutely incapacitate him for receiving the infection ſo long as he remains in that ſtate; and yet, under a different degree of health, he may be nevertheleſs ſuſceptible of it: A memorable inſtance of this ſort happened at Marlborough in Wiltſhire, which, without my interpoſition, would have produced a law-ſuit.

I ſhall finiſh my remarks on this head, by obſerving, that, when the eruptive fever was ſevere, and therefore threatened a profuſion of puſtules, I confined my patient to a liquid vegetable diet. In a few caſes, however, I directed broths, and a little wine, when the eruption ſeemed to be tardy, and the puſtules did not fill properly, owing to conſtitutional debility: But I am perſuaded, caſes of this kind occur more rarely than the nurſes ſuppoſe; and it was with the utmoſt difficulty I could reſtrain them from the uſe of cordials, where the apparent oppreſſion of the ſpirits, and depreſſion of the puſtules,

were really the effects of over fulneſs, and exceſs of fever. Nurſes in general are ſo ſtrongly under the influence of this prejudice, that the utmoſt vigilance is not ſufficient to prevent their purſuing this deſtructive practice.

2. *Drinks.*] Sutton's punch, as he called it, may be of uſe in the confluent ſmall pox, as ſedative and antiſeptic; but I never had occaſion to uſe it: Tamarind beverage was ſometimes given as an eccoprotic. In the laſt ſtage, warm ſour punch, negus, or wine-whey, were of uſe in the evening, to waſh down the opiate, eſpecially after the operation of a purge.

3. *Air.*] In no circumſtance has the treatment of the ſmall pox been ſo much improved, as by a free perflation of the ſick chamber; and we may juſtly attribute the mortality of the diſeaſe formerly, to confinement of the patient to hot unventilated chambers, aſſiſted by the liberal uſe of cordials. The public is much indebted to Baron Dimſdale, for introducing the liberal uſe of cold air and cold drinks in the natural ſmall pox; but are we therefore to conclude, that expoſure to extremely cold air is neceſſary under inoculation? That it will extinguiſh febrile heat, I have had ſufficient experience; but if there is

no

no riſk of the fever running beyond that degree which is neceſſary for a moderate and complete eruption, to what purpoſe do we apply this powerful ſedative? If it were a neceſſary part of the regimen, inoculation would not ſucceed ſo well in the Torrid Zone, where this advantage cannot be procured: Indeed I am fully convinced, that the benefit derived from expoſure to the air, does not ariſe ſo much from the degree of cold, as from a conſtant change of the atmoſphere, immediately ſurrounding the patient.

It is however peculiarly incumbent on a medical writer, candidly to produce every fact or argument that may tend to invalidate his own opinion and experience; and under this idea, I think it juſt to obſerve, that Governor Hollwell, in his account of inoculation in the Eaſt Indies, tells us, that from the time of inciſion, to the commencement of fever, cold water was poured on the patient morning and evening; but deſiſted from until the eruption was complete; and continued after that time, until the puſtules dropped. This practice ſeems, *prima facie*, to be ſimilar to the repellent plan of Dr Dimſdale, and therefore to militate againſt my arguments.

But

But I would remark, that the regimen was leſs rigid. It does not appear that purgatives were uſed. The temperature of cold water in hot climates is not many degrees different from that of the atmoſphere. The application of cold, even in this degree, was omitted during the fever and eruption, and therefore could have very little effect as a repellent. And as the puſtules were all opened, and re-abſorption leſſened or prevented, the effuſion of the water in the laſt ſtage had no other effect than that of ſimple ablution.

Medicine.] Under this head I ſhall make ſome remarks on *purgatives*, *ſudorifics*, *febrifuges*, *ſedatives* and *ſtimuli*.

1. *Purgatives.*] It ſhould ſeem, that the Suttonians rely much on the effect of purgatives in leſſening the eruption; and in compliance with the cuſtom of others, I uſed aperients as preparatory; though, when I practiſed in this country more than thirty years ago, I never gave a preparatory purge, unleſs when I ſuſpected worms; but for ſome time before inoculation, and in the interval between that and the eruption, kept my patients on a courſe of mild mercurial alteratives; yet our ſucceſs then was much

greater

greater than under the late epidemic; for though more than ten thouſand were inoculated, I do not recollect that in the whole iſland more than two perſons died under inoculation: Our ſucceſs in the treatment of the ſmall pox in the natural way, was then much leſs than under the late epidemic; a proof that the Suttonian practice is more favourable under the natural than the inoculated ſmall pox.

Dr Sydenham, and moſt of the authors ſince his time, ſeem to have been exceedingly averſe from promoting any kind of evacuation during the ſtages of eruption and maturation; leſt they ſhould interfere with the eruption, ſuppuration, ſalivation, and ſucceſſive tumefaction of the face and hands. And indeed, though Drs Freind and Mead had often ſnatched their patients from deſtruction, by purging in the ſecondary fever, yet they remained ſo much under the influence of prejudice, as not to ſee the propriety of preventing, rather than removing thoſe dangerous ſymptoms, by early purging in the firſt ſtages.

The late Dr Simpſon of St Andrews, ſeems to have hinted at the advantage of this practice; but we certainly owe to Dr Dimſdale the judicious application of this and the other parts of the

the ſedative plan, to the cure of the natural ſmall pox; and I certainly ſaved ſeveral of my late patients by adopting his practice, when the eruption was copious; though when the puſtules were few, whether in the natural or artificial ſmall pox, I deemed purging to be, *at leaſt*, unneceſſary; and therefore purged ſome days later after the incruſtation than is commonly practiſed.

Though I conſider the application of the repellent plan to the treatment of the confluent ſmall pox, as a moſt valuable acquiſition to medical practice; yet, from ſome caſes which fell under my care in England, and under the late epidemic, I apprehend that it is not totally free from inconvenience and danger, though certainly much overbalanced by the advantages that attend it. The operation of purgatives cannot always be ſo regulated as not to exceed; and cold, by acting too powerfully on the ſurface, may either repreſs eruption too much, or repel the matter too ſuddenly and copiouſly, and thereby produce ſome diſtreſſing ſymptoms, if it does not find a ready outlet by the inteſtines or kidneys.

In

In all the caſes of natural ſmall pox related by Dr Dimſdale, ſo far as I recollect, he had an opportunity of putting his plan in execution either before, or immediately after the commencement of eruption; but it does not appear what ſteps he would have taken, had he been called when the puſtules were in a ſtate of maturation.

I did not, in conſequence of a miſtake, ſee an old man, until the ſtage of ſuppuration was pretty far advanced. The pock was highly confluent, and his ſpitting was copious. About the twelfth day he died, a few hours after being ſeized with rigor and dyſpnœa.

Reflecting on this caſe, and on the motives which have induced Phyſicians to avoid purging and the application of cold at this period of the diſeaſe, I ſuſpected that ſalivation and diarrhœa are ſo far from being eſſential concomitants of the confluent ſmall pox, that they are merely adventitious, and conſequent only of the exceſs of the variolous matter, all of which could not be depoſited on the ſurface; and I was afterwards confirmed in this opinion, by remarking, that ſuch as were purged early, had very little

ſalival

ſalival diſcharge, and this merely from the irritation of ſome puſtules in the throat.

When I had the management of my patients from the commencement of the eruptive fever, I had time to regulate that and the eruption; ſo that very little was neceſſary to be done during maturation, which I did not think it right wantonly to interfere with, being tolerably aſſured that I had done enough to ſecure my patient from the effects of the ſecondary fever.

In a very few caſes, however, I did not ſee my patients till the eruption was complete, and therefore ventured to put the repellent plan in practice even at this late period, and with ſucceſs, the ſecondary fever being moderate, though perhaps leſs ſo than if purging and cold air had been applied earlier. I was indeed leſs averſe from this trial, becauſe, as I have already remarked, it is difficult to determine with preciſion, when the ſtage of maturation commences, or terminates. The caſes were, however, much too few to eſtabliſh a rule of practice; and it yet remains to be determined, whether it would be more eligible to purge during the maturation, or follow the practice of Mead and Freind,

and

and begin the courſe of purging early in the next ſtage.

I have remarked (Sect. II.) that one circumſtance which to me indicated purging, was inflammatory ſuffuſion and tenſion round the baſes, in thoſe parts of the body where the puſtules run leaſt into each other. I purged under thoſe circumſtances, not ſo much becauſe I deemed this inflammation to be a dangerous ſymptom, as from an aſſurance, founded in experience, that with ſuch an aſpect of the pock, there was leſs danger of injuring the patient by this evacuation, than when the interſtices are pale and flaccid. In the negroes, the colour of the ſkin prevents our remarking the degree of inflammatory ſuffuſion ſo diſtinctly as in white perſons; and yet thoſe who attend carefully, may partly from the aſpect, but chiefly from the degree of tenſion under the fingers, determine the degree of ſuffuſion. The increaſe of the evening paroxyſm is perhaps ſtill a more certain indication, as it portends a ſevere attack of ſecondary fever, unleſs the fever of maturation is ſymptomatic of pain, and guided by the opiate.

2. *Sudorifics.*] Medical men ought to be exceedingly cautious in drawing their inferences from

from the apparent effects of any particular mode of practice. The Suttonians attribute their ſucceſs to the repellent plan; Dr Gatti ſucceeded equally well without any preparation, and Mr Clarke, an ingenious Surgeon at Caſtle-carey in Somerſetſhire, ſweated his patients every night, between the inciſion and eruption, and with the greateſt ſucceſs: The Ruſſians alſo have rendered the natural ſmall pox more mild, by ſending the patients to the bagnios, where they ſweat profuſely; and Sydenham has obſerved, that in the diſtinct ſmall pox, the patients had a great propenſity to ſweat from the commencement of eruption to the end of maturation. May not this diſpoſition of the ſkin have contributed to render the eruption leſs copious, by carrying off a part of the aſſimulated matter? Firmly believing, that, by this practice, I ſhould at leaſt endanger the future health of my patients leſs than by the Suttonian practice, I promoted a gentle ſweat every night before the eruption. To the emetic tartar or ipecacuanha, I joined a ſmall proportion of opium. By this addition, I rendered the ſudorific effect more certain; and, at the ſame time, I believed I ſhould quiet that perturbation of the ſyſtem, which in younger

ſubjects

ſubjects produces convulſions, and in all tends to render the eruption too tardy from ſpaſm, or too precipitate from exceſs of determination; and, under both thoſe extremes, incomplete and dangerous; if the quantity of varioloſe matter happens to be great.

3. *Febrifuges.*] Whether the active antimonials and ipecacuanha have any power of leſſening or preventing the eruptive and ſecondary fevers, by anticipation, I ſhall not determine; but in other fevers they are juſtly deemed febrifuges.

Though the doctrine of ſpecific powers has (perhaps too haſtily) been exploded by many of the moderns; yet I am of opinion, that there is in mercury ſome quality by which it corrects the varioloſe virus. It certainly conſtituted a part of Sutton's noſtrum, and Baron Dimſdale has recommended it.

In the remittent and topical inflammatory fevers of this climate, mercury adds much to the efficacy of the active antimonials, and of ipecacuanha; and in one or two caſes of natural ſmall pox, where it affected the mouth a little, the ſecondary fever ſeemed to be more moderate than might otherwiſe be expected from the degree of eruption: I uſed the mercury and antimonial, or ipe-

cacuanha, in larger doſes than it is preſcribed by Baron Dimſdale, and it generally operated both upward and downward; ſo that it was rarely neceſſary to ſubjoin purgatives.

4. *Sedatives.*] Such of this claſs as are ſuppoſed to weaken the force of the heart, and leſſen the impetus of the circulation, are enumerated under the preceding heads, though the following, under certain circumſtances, may be ſaid to have a ſimilar effect; yet their more immediate operation is on the nervous ſyſtem.

Warm Bath.] To ſuch as are properly converſant with medical philoſophy, there can be no difficulty in accounting why cold and warmth, qualities apparently oppoſite, are nevertheleſs both ſedatives.

White children generally uſed the warm pediluvium for ſome nights before the period of eruption; but the number of the negro patients was ſo great as to render it impracticable, at leaſt very inconvenient: One only of each had convulſions. In the natural ſmall pox, I directed it as ſoon as the nature of the diſeaſe was known; and I am perſuaded, that, many years ago, an entire warm bath was very beneficial to ſome of my young patients, eſpecially when the eruption

eruption was tardy, and the pock did not fill kindly.

How does this fact correſpond with Gover-nor Holwell's obſervation? "I have (ſays he) "been an eye-witneſs to the marvellous effect "of the external application of three or four "collons of cold water (each containing about "two gallons) where the puſtules have ſunk, "and the patient appeared to be in imminent "danger, which never failed of filling the pock, "as it were, by enchantment."

Before I proceed, I would remark, that im-perfect narratives of medical caſes have contri-buted very much to retard the improvement of the ſcience. A judicious Phyſician would, after reciting the foregoing fact, have taken notice of the habit of body, the ſtate of the pulſe, the degree of heat, and other ſymptoms; he would alſo have related, whether any internal medi-cines were given, and, if any, whether of the cooling or cordial kind.

It is by an accurate obſervation of all the nice diſcriminating circumſtances, ſtrict analogical reaſoning upon theſe, and a judicious accom-modation of means to the end, that a Phyſician is diſtinguiſhed from an unqualified obſerver,

whether he be a philoſopher or a quack; and it is with concern I remark, that the obſervations and reaſonings even of the moſt reſpectable philoſophers Boyle and Berkley, when they enter on medical diſquiſition, ſavour more of empiriciſm than of ſound medical philoſophy.

It may reaſonably be doubted, whether either the Governor or Bramin inoculators, were competent judges of the ſtate of the eruption; preſuming them to be equally ſkilful as an old Engliſh nurſe. Our nurſes certainly commit egregious miſtakes in this reſpect; and, under the idea of the flattening of the puſtules, have formerly done infinite miſchief to the poor patients.

But, admitting the fact in its utmoſt extent, ſtanding ſingly as it does, can any medical man believe, that the affuſion of ſome gallons of cold water, could alone, and in every caſe, promote eruptions, and fill the pock when flattened and ſunk? By no means; for, beſide irrefragable proofs of the contrary, the Bramins themſelves ſeem to have been aware, that the application of cold water tended to impede eruption; and therefore, as I remarked before, they deſiſted from the uſe of it, in ordinary caſes, during the febrile and eruptive ſtages.

Some

Some uſeful information, however, may be derived from enquiring into the circumſtances under which the application of cold in this mode may be uſeful, unavailing, or injurious.

From Sir John Chardin's account of the treatment of the Gombroon fever, which ſeems to have been a malignant remittent, it appears, that, whilſt cold roſe-water was poured on the patient, the moſt heating cordials were given; and it is not improbable but the practice was ſimilar under a ſuppoſed depreſſion of the variolose puſtules; as the vicinity of India to Perſia may have favoured a ſimilarity of medical ideas and practice. Be this as it may, it will readily be admitted, that the application of cold, as antiphlogiſtic and antiſeptic, may be beneficial, eſpecially in the young and plethoric, when a *temporary* depreſſion of the pulſe, ſtrength and ſpirits, is produced by exceſſive febrile heat, generated by the ungrateful ſtimulus of exanthematous virus on the internal organs.

But when the eruption, or filling of the pock, are impeded by a *permanent* conſtitutional debility; in ſuch caſes, the heat and pulſe being below par, the application of cold alone would at leaſt be unavailing, without the aſſiſtance of in-

ternal ſtimulants; but we may venture to ſay, it would in general be injurious, and that a hot bath would, in ſuch a caſe, as certainly be uſeful.

Opium.] I have already made ſome remarks on the uſe of the anodyne diaphoretic under inoculation. In the natural ſmall pox, opiates and purges, given alternately, rendered the uſe of each more ſafe; for, as the former were apt to increaſe fever, by locking up the groſſer ſecretions, ſo, when purges lowered the patient, opium was an excellent cordial.

Stimulants:—Cordials.] Under this head I bring all ſuch remedies as increaſe the power of the heart, as wine, bark, bitters, *&c.* They are not only admiſſible as preparatives for inoculation, when the patient is weak and low, but are equally uſeful in conſtitutional debility under the natural ſmall pox, though, in the latter caſe, they ought to be uſed with great caution. Sydenham recommends a few ſpoonfuls of ſack in the decline of the diſeaſe; and I have found punch or wine-whey very uſeful, not only at this period, but even in the more early ſtages, after purges.

Bliſters

Bliſters and Sinapiſms.] There were formerly uſed very frequently, either before the commencement of the ſecondary fever, to obviate bad ſymptoms, or after the fever was formed, with a view to compenſate for the defect of ſalivation, or when the ſwellings of the hands and feet were not ſufficient; and ſome years ago, Dr Cloſs, an ingenious German Phyſician, recommended the application of bliſters on the approach of the eruptive fever; and that they ſhould be kept open through the ſeveral ſtages of the diſeaſe. But, under the preſent mode of treating the ſmall pox, bliſters are not ſo neceſſary, more certain and beneficial evacuations being ſubſtituted.

I ſhall conclude with the following inferences, which are, I think, fairly deducible from the premiſes.

1*ſt*, The ſmall pox being a diſeaſe, the natural criſis of which is by a cutaneous eruption, it is not warrantable to prevent a depoſition of the whole matter on the ſurface, unleſs the quantity thereof ſhall be ſo great as to endanger the life of the patient.

2*dly*, Many dangerous and fatal diſeaſes have ariſen from the imperfect depoſition of this matter, or from its retroceſſion.

3*dly*, Inoculation having been inſtituted to leſſen, or totally prevent the hazard of deformity and danger, whatever regimen is found from experience to anſwer thoſe valuable purpoſes, ought to be ſteadily purſued; but all beyond this becomes unneceſſary, perhaps injurious.

4*thly*, Repeated experience ſhews, that very little, if any, preparation is neceſſary, to render the inoculated ſmall pox ſafe and moderate; therefore, the rigid regimen of the Suttonians is unneceſſary, and often depreſſes the powers of the conſtitution too much below the healthy ſtandard.

5*thly*, No general mode of preparation can be equally ſafe and beneficial; the habit of body, the former modes of life, and the preſent ſtate of health, are therefore to regulate the manner and degree of preparation.

6*thly*, In the treatment of diſeaſes, every other conſideration muſt yield to that of the immediate ſafety of the patient; therefore the reducing and repellent plan, though generally unneceſſary under inoculation, though not without its hazards and inconveniencies, even in the natural ſmall pox, ought, nevertheleſs, to be

very

very frequently adopted, as tending, beyond every other method hitherto known, to leſſen the immediate danger ariſing from a copious eruption.

Facts and Obſervations on different Medical Subjects, by Mr R. M'Cauſland, *Surgeon to the King's, or 8th Regiment of Foot.*

IN 1775, the year after I arrived at Niagara, the number of intermittents amongſt the troops, ſeamen, and perſons dependent on the poſt, was ſo large, that I ſoon found that the quantity of Peruvian bark with which I was provided, would be totally inadequate to the demands. As it was impoſſible then to procure any more, it became abſolutely neceſſary to fall on ſome other method of treatment. One of the firſt remedies which I turned my thoughts towards, was emetic tartar; and the advantages which I experienced from it, ſoon encouraged me to make its uſe more general. Since that time, I have given it with ſucceſs, in a great number of intermittents: I am confident I ſpeak conſiderably within bounds, when I ſay, that from the year 1775, to 1781, this remedy alone has

has removed three hundred agues. In a great many of theſe caſes, it was not in my power to keep any regiſter: I cannot, therefore, give an exact account of the reſult of the whole number of caſes in which the tartar emetic alone has been exhibited; but in thoſe where I have been able to keep an account of the treatment and ſucceſs, I have very conſtantly found, that, upon an average, it ſucceeded in two caſes in three. In 1780, during the three months of Auguſt, September, and October, I had upwards of two hundred intermittents under my care: I here give the reſult of ſeveral of theſe caſes, with this neceſſary remark, that upon the preſent ſubject, as well as many others, I have been prevented from puſhing my enquiries as far as they might have been, by the want of medicines; an inconvenience which the remoteneſs of this ſituation, and the uncertainty of navigation during a time of war, have always ſubjected me to. With regard to the method of exhibiting the tartar emetic, I found (as will appear by the tables) that the form of pills ſucceeded better than ſolution; and for this purpoſe, nothing further than a few drops of ſyrup, or a ſmall quantity of elect. lenitiv. was

employed.

employed. I regulated the doſe in ſuch a manner, that at firſt ſome evacuation, by vomiting or purging, might be brought on; afterwards, it was ſufficient to excite nauſea, which ſometimes ended in a ſingle diſcharge of the contents of the ſtomach, or an extraordinary ſtool or two. I never gave it before breakfaſt, as it would then have been more liable to excite vomiting; nor did I ever give it till many hours after dinner, leſt the body ſhould have been deprived of its neceſſary nouriſhment. I generally, therefore, gave the firſt doſe two hours before dinner, and the ſecond doſe on going to bed, except when circumſtances reſpecting the recurrence of the paroxyſm rendered ſome deviation neceſſary. From the ſmall quantity of tartar emetic I had, I was ſeldom able to give above two doſes in twenty-four hours; but I am apt to believe, that a third might be added with advantage: The time I have generally pitched upon for it, was about two or three in the morning, or as near that time as the patient might happen to awake.

No. I.

Tartar Emetic in Pills.

Cured. One Grain.	Various Quantities.	Half a Gr.	Number of days uſed.	*Not Cured.* One Grain.	Various Quantities.	Half a Gr.
16	3	13	5	1	1	4
6	4	1	10	2	2	2
3	1	2	15	2	2	5
1	1		20	1	2	2
26	9	16		6	7	13

Total cured, 51 Total not cured, 26

Relapſed, 15

Total of the exact number of days cure, 286

Average of the number of days cure, $5\frac{1}{2}$

Tartar Emetic in Solution.

Cured. One Grain.	Various Quantities.	Half a Gr.	Number of days uſed.	*Not Cured.* One Grain.	Various Quantities.	Half a Gr.
8	6	5	5		6	
2	10		10		6	
	1		15		7	
	1		20	1	3	
10	18	5		1	22	

Total cured, 33 Total not cured, 23

Relapſed, 4

Total of the exact number of days cure, 174

Average of the number of days cure, $5\frac{1}{4}$

The

Explanation of Table No. I.

The quantity of tartar emetic uſed for a doſe is placed at the head of each column, and refers perpendicularly. The mark of various quantities ſignifies, that in thoſe caſes ſometimes one grain, ſometimes half a grain, or leſs, was taken. The figure marking the number of days that the tartar emetic was uſed, refers horizontally. The firſt horizontal column contains thoſe who took the remedy five days, or under; of theſe were cured ſixteen at one grain, three at various quantities, thirteen at half a grain. Not cured, one at one grain, one at various quantities, and four at half a grain. To avoid prolixity, the cures were thus noted only every five days; ſo that all perſons cured between the fifth and tenth day, appear in the column of the tenth day; but in order to ſtrike an average for the length of the cure, it was neceſſary to come to greater preciſion, by ſumming up the exact number of days of all the caſes. The total was found to be 286; and this divided by 51, the number of caſes gives 5 and 6-10ths, or $5\frac{1}{2}$ nearly for the average. When the ſolution was uſed, the average appears to have been nearly the ſame, *viz.* 5. 2. The relapſed are thoſe who had a relapſe in the ſame year.

The

The obſervations that occur from the above table are, *1ſt*, That one grain for a doſe ſucceeded oftener than ſmaller quantities; and, in general, the larger the doſe that the ſtomach would bear, the more certain was the cure. *2dly*, That the greateſt number were cured on or before the fifth day. *3dly*, That pills were more ſucceſsful than ſolution, which ſeems to be explained by obſervation firſt; and they ſeemed alſo more gentle in their operation. *4thly*, That under the head of *not cured*, are comprehended a great many caſes, in which the tartar emetic might more properly be ſaid to be inadmiſſible than efficacious, as it was continued but for a few days: Theſe were caſes in which it generally excited vomiting. I have, however, comprehended both under the ſame head, becauſe a remedy that cannot be uſed, is not better than a remedy that wants effect. To theſe may be added, a few obſervations which could not appear in the table. *1ſt*, That the tartar emetic, on firſt taking, ſometimes ſeemed to change a tertian into a quotidian, or ſometimes rendered the firſt fits more ſevere; but both theſe effects were uncommon. *2dly*, That the patient ſometimes relapſed during the continuance of the

ſame

ſame doſe that had removed the fit; but this would probably not have happened, if they had the advantages of a reſtorative diet and exerciſe. *3dly*, The tartar emetic, in a few caſes, effected a cure without ever having occaſioned vomiting; and theſe perſons, in general, took pretty large doſes, *viz.* a grain and a half, or two grains.

I am now to obſerve, that the one hundred and thirty-three caſes above ſpecified, occurred in the courſe of a ſummer which was uncommonly hot, the thermometer being frequently above ninety, ſometimes at ninety-two, and once at ninety-four. I have at other times found the tartar emetic more ſucceſsful than it was during this period, and know no other cauſe to attribute it to than the coolneſs of the weather. The year 1781 was remarkably cool, and in ninety-five perſons who took the tartar emetic, only twelve were not cured. The number of relapſes does not appear to be proportionally diminiſhed; but this may perhaps ariſe merely from the circumſtance of many of theſe caſes having happened early in the ſummer, and conſequently the patients being expoſed for a greater length of time (*viz.* during all

all the remainder of the ſummer and autumn) to relapſes.

Second Part of Table No. I.

	Cured.	Number of days uſed.	Not cured.
	48	5	1
	24	10	5
	7	15	4
	4	20	2
Total cured,	83		12
Relapſed,	22		
Average of the number of days cure,	$6\frac{1}{4}$		

In this ſecond part of the firſt table, I have not thought it neceſſary to trouble the reader with all the detail that is found in the firſt part. The quantity of tartar emetic uſed is not ſpecified; but it is to be underſtood, that the doſe was regulated in the manner formerly mentioned. In all theſe caſes, the tartar emetic was given in the form of pills.

No. II.

Cured.	*Relapſed.*	*Not Cured.*
9	4	20

A draught of liquid laudanum fifteen drops, crude ſal ammoniac two ſcruples, was given at the

the commencement of each hot fit. In moſt of the caſes, the patient was under a courſe of tartar emetic.

No. II. is intended to ſhew, in ſome meaſure, the effects of anodyne draughts given at the commencement of the hot fit. After a conſiderable number of trials, it appeared pretty evident to me, that anodynes given in theſe circumſtances were rendered much more efficacious by the addition of a neutral ſalt, as crude ſal ammoniac. This draught ſcarcely ever failed to remove all the painful ſymptoms of the hot fit, to procure ſleep, to bring on a copious ſweat, and to ſhorten the paroxyſm. Such effects were certainly very deſirable, and, in ſome caſes, worth procuring at all events; and yet I am inclined to think, that theſe palliative draughts tended to protract the diſeaſe, and to hinder a perfect cure. I cannot poſitively affirm this, becauſe I am well aware that a conſiderable number of the caſes in No. II. were rather more ſevere than the generality; and if obſtinacy in intermittents ſhould invariably be found to be connected with the ſeverity of the paroxyſms, it will be neceſſary to ſtrike off at leaſt one-third of the caſes from this table, as being rather a-

bove the medium in reſpect to the degree of violence. Upon the whole, the effects of theſe draughts ſeem ſo deſirable, that experiments ſhould be made in greater number, and with more accuracy than the preſent, before they ought to be rejected.

No. III.

	Cured.	*Relapſed.*
By tartar emetic, either in pills or ſolution, according to No. I.	84	19
By Peruvian bark, - -	60	34

By No. III. it appears, that there were much fewer relapſes after the tartar emetic than after the Peruvian bark; and it only remains to enquire, how far the circumſtances were ſimilar in which theſe trials were made. And, *firſt*, in favour of the bark, it muſt be obſerved, that in about half of the caſes in which the Peruvian bark was given, the tartar emetic had already been exhibited without ſucceſs. Suppoſe, that of theſe thirty caſes, it had been inadmiſſible in fifteen; and that, in the remaining fifteen, it had been fairly tried without ſucceſs: It will then be reaſonable to ſuppoſe, that theſe laſt fifteen caſes were in their nature more obſtinate

than

than the medium. On the other ſide of the queſtion, it may be urged, *firſt*, That as intermittents here ceaſe (with a very few exceptions) on the ſetting in of the cold weather, and as the trials of the tartar emetic were made in the ſummer, whilſt thoſe of the cortex were made at the cloſe of the ſeaſon of intermittents, it muſt be allowed, that there were more time and opportunities for relapſes in thoſe who took the tartar emetic, than in thoſe who took the bark; more eſpecially when we conſider, that a ſoldier, as ſoon as he was diſcharged from the ſick liſt, became liable to all the inclemencies of the weather, often being wet up to his middle all day, and lying in the woods all night, expoſed to the fogs, rain, and moiſture of the earth. 2*dly*, It muſt be obſerved, that a conſiderable number of thoſe who took the bark left Niagara immediately after, ſo that there was no opportunity of noting relapſes, if there were any. Upon the whole, I am of opinion, that the arguments on both ſides ſeem ſo nearly balanced, that we may venture to take the table as it ſtands.

No. IV.

Cured.	*Relapſed.*	*Not Cured.*
12	9	1

A pill compoſed of tartar emetic two grains, opium half a grain, taken two, three, and ſometimes four times in twenty-four hours.

N. B. The average of the time required for a cure was ſeven days.

No. IV. ſhews the reſult of ſome experiments formerly made with a combination of tartar emetic and opium in intermittents.

The ſucceſs here appears to have been great, and yet, upon the whole, I do not think it is a method that can be recommended. The objections were, firſt, The diſagreeable circumſtance of an almoſt conſtant ſickneſs. The ſecond is a conſequence of the firſt, *viz.* The patient not being able to take nouriſhment; he therefore remained weak; and to this, in a great meaſure, muſt be attributed the great number of relapſes; at the ſame time, it ought to be obſerved, that theſe trials having been made early in the ſummer, there were more opportunities for relapſes that ſeaſon. I made a few trials with the cuprum ammoniacum and the

flores

flores zinci. The former ſucceeded in ſome caſes, but excited conſiderable ſickneſs, and ſometimes vomiting. The zinc ſeemed to have not the leaſt effect on the intermittent. I have cured ſeveral intermittents, by putting the patient's feet in warm water, and giving a draught of liquid laudanum from twenty-five to thirty drops, with one dram of crude ſal ammoniac, about an hour and a half before the fit was expected. I muſt, however, acknowledge, that it has likewiſe very often failed: Perhaps its failure is as often owing to the difficulty of fixing upon the exact time of exhibition, as to want of efficacy in the remedy. I think I have heard it obſerved by Dr Cullen, that if the ſtimulant effects of an opiate were over before the time of the recurrence of the paroxyſm, it would not ſucceed in preventing it. Suppoſing this to be the caſe, the difficulties are evident: *1ſt*, The period of the ſtimulant effects of opiates is to be fixed. *2dly*, It is neceſſary to aſcertain whether the conſtriction upon the ſurface is not irremediable (at leaſt by any means we would chuſe to make uſe of) many minutes before there are any manifeſt ſigns of it. Theſe are difficulties even ſuppoſing the returns of the paroxyſm to

be regular to a minute; how ſeldom this is the caſe, I leave to every practitioner to judge. It has been obſerved in general (but with many exceptions), that if the above remedy ſucceeded in raiſing a ſweat, it prevented the return of the paroxyſm: Whether this was not rather a concomitant effect than a cauſe, may, I think, be very juſtly doubted; certain it is, that I have frequently known a profuſe ſweat ſuddenly diſappear, and a regular paroxyſm inſtantly ſucceed.

I ſhall now cloſe this ſubject with a few general remarks; and the firſt that occurs is, that in all the above caſes the diet was the moſt unfavourable that can be ſuppoſed, the only alternatives being ſalt pork, or bread and tea. It is but reaſonable to ſuppoſe, that if a nouriſhing diet, of eaſy digeſtion, could have been procured, the proportion, both of failures and relapſes, would have been conſiderably diminiſhed. 2*dly*, Before an intermittent is completely formed, there is for many days a ſtate of laſſitude, diminiſhed appetite, and tendency to thirſt, with aching in the limbs. The tartar emetic given in theſe circumſtances has never failed to remove the ſymptoms, and prevent the formation

of

of a regular ague; but it muſt be acknowledged, that obſervations of this kind were not very extenſive, as ſoldiers ſeldom complain till they have already had a paroxyſm or two. 3*dly*, From what has been ſaid, it appears, that tartar emetic is an uſeful remedy in intermittents. In the caſes in which it ſucceeds, it is probable that it will be found to have two advantages over the bark; *firſt*, That the patient will be leſs liable to relapſes. 2*dly*, That it leaves him with a better appetite, and, upon the whole, in a better ſtate than the bark. But if, on the contrary, after five or ſix days trial, it ſhould not be found to have leſſened or retarded the paroxyſms, it will at leaſt be attended with this advantage, that no time will have been loſt, and the patient will have been as well, or perhaps better prepared for the exhibition of the bark, than he would have been by any other courſe in the ſame time. There are, however, caſes in which little can be expected from it, and others where it might be highly injurious; amongſt the former, I imagine may be reckoned intermittents of long ſtanding, where the ſtrength is much impaired. Amongſt the latter, great irritability of the ſtomach inteſtines, or perhaps even of the

ſyſtem in general. There is one circumſtance worth remarking, *viz.* that though in North America intermittents are very common in the vicinity of all the large lakes that are to the ſouthward of 45 degrees of latitude, yet I have never ſeen a quartan, or met with any practitioner that had ſeen one. Whether the tartar emetic would be equally efficacious in fenny ſituations, and countries where quartans are met with, I cannot pretend to ſay. There is another phænomenon, which, from the deſcriptions of intermittents I have generally met with, I ſhould be led to imagine was rather peculiar to this part of the world, I mean the frequent want of a lateritious ſediment in the urine. In this particular, I have taken all the precautions I was acquainted with, *viz.* taking my obſervations only from urine paſſed at the termination of a paroxyſm, and in caſes where the intermiſſions were perfect; and yet the proportion of thoſe where there was no ſediment was as four to one.

I have ſaid above (p. 260.) that if the patients could have had the advantages of a nouriſhing diet, it was reaſonable to ſuppoſe, that the number of failures and relapſes would have been diminiſhed.

miniſhed. Succeeding obſervations have not abſolutely contradicted this ſuppoſition; but I muſt acknowledge, that they have by no means tended to confirm it; and, in the few caſes I have had an opportunity of ſeeing, I have certainly not found all the benefit I expected from the article of diet. As far as I have been able to obſerve, the ſoldiers were cured as ſoon as the officers and other perſons who had every advantage that could ariſe from a nouriſhing diet and the uſe of wine. I am apt to believe, therefore, that the benefit of a cordial and nouriſhing diet muſt be limited to caſes of ſome ſtanding, and that, in the firſt days of an intermittent, a diluting diet may be more proper, even though there are no ſigns of an inflammatory tendency, and although the primæ viæ are already cleared. The want of appetite, and averſion to wine, which take place at this time, ſeem to point this out. If this be really the caſe, it is an eaſy matter to perceive the reaſon why the tartar emetic, which in general performs a cure in the firſt ſix or eight days, ſucceeded as well with the ſoldiers as with the officers.

From the obſervations which I have been able to make, riding on horſeback appears to be much

much more entitled to the name of a ſpecific in intermittents than in conſumptions. Unfortunately the inactivity of mind and body which this diſeaſe induces, ſeldom allow the patient to puſh it as far as is neceſſary. Riding ſhould certainly never be carried ſo far as to fatigue; but every day will remove this limit to a greater diſtance. In countries where intermittents are endemic, daily riding on horſeback may not only be ſerviceable as a preventative, but it is alſo attended with this further advantage, that in caſe of ſickneſs it can be puſhed much farther without fatigue than if the patient had never been accuſtomed to it.

I come next to mention a few trials which I made of a remedy ſaid to be of much repute among the Indians and Woodſmen of North America, for the cure of the dyſentery. I had often been told, that wood-aſhes, mixed in rum, was a very effectual cure for this diſeaſe; at laſt, an officer who had been out with Indians on a ſcout, aſſured me, that he himſelf had been cured by it. Suppoſing that the virtue of this remedy muſt depend on the fixed alkaline ſalt, I made a lixivium of aſhes in water; and after the previous

previous evacuations by a vomit and purge, I gave it to eight perſons: Of theſe, ſeven were cured by it; and this in the courſe of eight or ten days upon an average. It is remarkable enough, that this remedy, although ſo acrid as to excoriate the fauces, if not largely diluted, always eaſed the belly, and removed the gripes very ſoon after it was ſwallowed, and gradually diminiſhed the number of ſtools. There was reaſon to imagine that it ſometimes had a ſlight purgative effect. After ſome trials, I at laſt fixed upon what appeared to be the moſt advantageous doſe, and by evaporating it, found that it contained about forty-ſix grains of reſiduum, which was nearly all fixed alkali. I generally gave this doſe every night, and ſometimes repeated it in the morning. I muſt now obſerve, that the above eight caſes were not of the moſt violent kind, as the number of ſtools in twenty-four hours did not in general exceed ten or twelve; but encouraged by this ſucceſs, I afterwards made trial of it in more violent ones, and particularly in two or three, in which the number of ſtools in twenty-four hours exceeded one hundred. I cannot ſay, that in theſe caſes I perceived any benefit from it; at the ſame time,

it

it is but juſtice to acknowledge, that I did not repeat the remedy as often, or perſiſt in its uſe as long as the violence of the diſeaſe might require. Notwithſtanding what I had experienced, I could never free my mind ſo far from prejudice, as not to dread the effects of ſo acrimonious a medicine, in a diſeaſe where the parts muſt always be in ſome degree in a ſtate of inflammation whenever it is violent. Nevertheleſs, if I ſhould ever be in ſuch a ſituation as to be deſtitute of other remedies for the dyſentery, authoriſed by the teſtimony of ſo many perſons, and by my own experience, I ſhould make no ſcruple to puſh my experiments with this remedy much farther. I muſt not omit obſerving, that in the laſt mentioned caſes, in which it did not ſucceed, and particularly in the two or three violent ones there ſpecified, on its firſt exhibition it inconteſtibly gave eaſe, and the ſtools came away with much leſs pain; ſucceeding doſes had certainly not an equal effect, and I even began to ſuſpect that they increaſed the diſeaſe; whether or not I did not take the alarm too ſoon, I will not pretend to determine. The patients afterwards recovered by the common methods, and there is therefore reaſon to ſuppoſe

poſe, that at leaſt the lixivium did no eſſential injury. I have ſtated theſe facts as they happened; and if they ſhould tend to throw any light, either on the theory or method of treatment of the dyſentery, my purpoſe will be anſwered.

Regiſter of forty-ſix Caſes of Lues Venerea.

Explanation of the following Tables.] The firſt two columns mark the ſtate of the diſeaſe at the time the cure was undertaken; the firſt, ſhewing the number of days that the patient had had the complaint; the ſecond column marking the degree; and, for this purpoſe, I have diſtinguiſhed three ſtages. 1*ſt*, Excoriations or ulcerations confined to the prepuce or glans. 2*dly*, Eruption, tumour, or ulceration, in any other part of the body, without nocturnal pains, or affections of the bones. 3*dly*, Nocturnal pains or affections of the bones. The figures in this column, therefore, ſignify, firſt, ſecond, third ſtage; and, for further preciſion, the degree of violence of each ſtage is ſubjoined by the initial letter of Slight, Middling, or Violent. I do not pretend to enter into

into the merits of theſe diſtinctions; all that I can ſay is, that ſomething of the kind was abſolutely neceſſary for reducing caſes to a table, and that this form was the firſt that ſuggeſted itſelf to me. The third column gives the ſeaſon of the year, and the patients names, which are numbered merely for the convenience of references. The fourth and fifth ſhew the reſult. The ſixth and ſeventh ſhew the removal of the ſymptoms; the ſixth pointing out in how many days this was effected, and the ſeventh by what quantity of the remedy. It often happened, that warts, or a thickening and hardneſs of the prepuce, remaining after the inflammation was gone, rendered the exact time of the ſymptoms diſappearing rather doubtful; all theſe caſes, therefore, are marked with the letter D. With regard to the eighth and ninth, intended to ſhew the evacuations cauſed by the mercury, I am ſenſible that this head is in a very imperfect, and a very incorrect ſtate. In general, the figures ſhew in how many days the ſpitting began, and by what quantity of mercury; and where the letters U or S occur, they ſignify, that the Urine or Sweat was increaſed. The tenth and eleventh reſpect the whole courſe; the

tenth

tenth ſhewing the number of days that it continued, and the eleventh the quantity of the remedy employed. It will perhaps be objected by ſome, that even in the averages of theſe tables there appear great inconſiſtencies, the confirmed lues venerea in its laſt ſtage having ſometimes required but a ſmall quantity of mercury, whilſt the firſt ſtage has required a very large one. But this obſervation will only tend to confirm what I wiſh to repreſent, *viz.* the inſufficiency of confined obſervations, and the neceſſity of extenſive ones.

In almoſt all the caſes of lues venerea, the infection was communicated by Indian ſquaws, and I have been ſometimes inclined to think, that it was more virulent than in white women.

METHOD I. *Corroſive Sublimate Mercury one-fourth grain in half an ounce of ſpirits, twice, and in ſome caſes thrice a-day.*

State. Number of days ſtanding.	State. Degree.	Names.	Reſult. Not cured.	Reſult. Relapſed.	Symptoms diſappeared in Days.	Symptoms diſappeared by Grains.	Evacuation. Spitting began. Days.	Evacuation. Spitting began. Grains.	Courſe. Days.	Courſe. Grains.
6	1 M	Feb. 1. Wills.	1				13	6½	63	22
2	1 S	July 2. M'Cann.			4	2			14	7
1	1. S	3. Gollaughar.			10	5			19	10
21	2 M	4. Patmore.			10	5			24	12
3	1. S.	Sept. 5. Overhead.			12	6			18	9
3	1. S	Nov. 6. Embery.			12	6			36	18
18	2 S.	Dec. 7. Aſſel			40	20			50	25
21	2. S.	Oct 8. Tarling.	1						57	28
6	2. M	Nov. 9. W. Wright		1	21	10			31	15
5	2. M.	10. Pearce.		1	59	29			63	31
7	1. S.	July 11. M'Lanigan			9	4½			24	12
21	2. M.	Jan. 12. Flaharty.			46	26			53	31

Cured, 8 } Total.
{ Not cured, 2 } Not cured, 4 }

1ſt Stage, { Cured, 5 } 6
Not cured, 1 }

2d Stage, { Cured, 3 } 6
Not cured, 3 }

Averages of a Courſe.

	Days.	Grains.
1ſt Stage, -	29	10
2d Stage, -	46	23

METHOD II. *Acrid Corroſive Sublimate Mercury one-fourth grain, twice or thrice a-day.*

State.		Names.	Reſult.		Symptoms diſappeared		Evacuation. Spitting began.		Courſe.	
Number of days ſtanding.	Degree.		Not cured.	Relapſed.	In Days.	By Grains.	In Days.	Grains.	Days.	Grains.
190	3. M	March 1. St Robiſon	1				U.		34	20
200	2. M	Feb. 2. C. Hains			42	23	10	8	56	33
4	2. S.	3. Liddle			24	6	7	4	39	14
5	1. M	4. Preſcot			24	17	20	15	38	23
21	3. S.	5. Stopple			35	26			49	37
4	1. M	6. St Pierre			51	25	29	21	56	28
120	2. S.	7. Aſhton		1	D.		8	4	50	8
7	1. M	8. Roebuck			42	30			56	41
3	1. M	9. Williams		1	20	12			36	24
D.	2. M.	10. Ruſſen		1	48	35	52	38	61	42

Remarks.

The ſublimate was here made acrid, by the addition of ſal ammoniac. The ſolution was in water.

{ Not cured, 1 / Relapſed, 3 } Cured, 6 / Not cured, 4 } Total.

1ſt Stage, { Cured, 3 / Not cured, 1 } 4

2d Stage, { Cured, 2 / Not cured, 2 } 4

3d Stage, { Cured, 1 / Not cured, 1 } 2

Averages of a Courſe.

	Days.	Grains.
1ſt Stage, -	46	36
2d Stage, -	51	24
3d Stage, -	41	28

METHOD III. *Acrid Corroſive Sublimate Mercury one-fourth grain, twice or thrice a-day. Decoction of the woods four ounces, twice a-day: The warm bath, five, ſix, or more times during the courſe.*

State. Number of days ſtanding	State. Degree.	Names.	Reſult. Not cured.	Reſult. Relapſed.	Symptoms diſappeared In Days.	Symptoms diſappeared By Grains.	Evacuation Spitting began. Days.	Evacuation Spitting began. Grains.	Courſe. Days.	Courſe. Grains.
10	2. S.	March 1. Baker			22	15	20	15	36	20
10	2. S	2. S. Wells			19	12	S		31	20
14	1. M	3. Hully			25	11	4	2	37	17
21	1. V	April 4. Johnſon			26	15	12	9	36	20
10	2. M	5. Flaharty			59	43			72	53
35	1. S.	June 6. C. Robiſon			9	5	8	5	23	11
21	1. M	April 7. Atkins			D.		20	8½	72	19
6	1. S.	8. Wills	1				26	13	55	17½
60	2. V.	9. Buſh		1	D.				50	27
10	2. M.	June 10. S. Pearſon			37	27			48	36
3	1. S.	June 11. Keyſal		1	32	17	19	14	32	17

Remarks.

N. B. In the eleventh caſe, as the medicine was obliged to be omitted (on account of another complaint) the ſame day the ſymptoms diſappeared, it is called *irregular*, and not included in the general ſumming up of the caſes.

Not cured, 1 Relapſed, 1	Cured,	8	Total.
	Not cured,	2	
1ſt Stage,	Cured,	4	5
	Not cured,	1	
2d Stage,	Cured,	4	5
	Not cured,	1	

Averages of a Courſe.

	Days.	Grains.
1ſt Stage, -	44	17
2d Stage, -	47	31

One irregular Caſe not cured.

PART

PART I. METHOD IV. *Friction with Mercurial Ointment. The Warm Bath, five, ſix, or more Times.*

State. Number of days ſtanding.	State. Degree.	Names.	Reſult. Not Cured.	Reſult. Relapſed.	Symptoms diſappeared. In Days.	Symptoms diſappeared. By Drams of Mercury.	Evacuations. Spitting began. In Days.	Evacuations. Spitting began. By Drams of Mercury.	Courſe. Days.	Courſe. Drams of Mercury.	References.
60	3. M.	Dec. 1. Lamb					5	2	72	11	
21	1. V.	May 2. Maycock			D		23	28	41	40	
457	2. M	3. Ling			20	6 1-3d	7	2	52	11	
7	1. V	4. C. May			18	9	9		28	11	
180	3. V.	March 5. Wall			9	3	11	3	28	5	
3	1. M.	6. Bayes			53	9	6	3	64	12	*Vide*
3	1. S.	April 7. Roebuck		1	34	11	8		44	14 1-3d	2. of IV. 16.
4	1. S.	8. Bayes			13	2 2-3ds	6	2	28	3 1-3d	
60	1. M.	July 9. Godfrey			10	2 2-3ds	8	2 2-3ds	21	4 2-3ds	
80	2. S.	Aug. 10. Hubber		1	5	2	6	2	26	4 2-3ds	2. of IV. 20.
35	2. S.	Sept. 11. Lewis		1	14	2	5	2	35	4	2. of IV. 18.
21	1. V.	Oct. 12. D. Derry			18	2	16	2	31	4	
60	2. S.	13. Miner		1	22	4 2-3ds	14	4 2-3ds	44	7 1-3d	V. 2.
150	1. S.	14. Ward			8	1 1-3d	11	1 1-3d	28	3 1-3d	
60	1. M.	Sept. 15. Almon			29	5 2-3ds	7	2 2-3ds	52	9	
5	1. M.	Nov. 16. Swiney			34	6 2-3ds	8	3 1-3d	52	8 2-3ds	
365	2. M	17. M'Laughlan			25	4 2-3ds	10	3 1-3d	45	8 2-3ds	
14	1. M.	18. Burrows		1	39	6 2-3ds	9	2 2-3ds	56	8 2-3ds	2. of IV. 19.
60	2. M.	19. Cooper, A.			47	6 2-3ds	6	2	63	11 1-3d	
D.	2. V.	March 20. Cooper, P.			20	3 1-3d	6	2	43	6 2-3ds	
3	1. S.	Feb. 21. C. Moran			30	8	19	6	44	11 1-3d	
D.	2. S.	22. Pickering			21	4	8	2 2-3ds	37	6	
5	1. S.	May 23. A. B.			24	6 2-3ds	31	9	41	11 1-3d	
D.	2. M	24. C. D.			13	4	4	1 1-3d	35	10	
240	2. M.	25. Allen			D		11	3 1-3d	44	7 1-3d	

N. B. To avoid all miſtakes occaſioned by the different ways of preparing mercurial ointment, the quantity of extinguiſhed mercury is here marked, and not the quantity of ointment.

Not cured,	0	Cured,	20	Total.
Relapſed,	5	Not cured,	5	

In the 1ſt Stage,	Cured,	11	13
	Not cured,	2	
2d Stage,	Cured,	7	10
	Not cured,	3	
3d Stage,	Cured,	2	2
	Not cured,	0	

Averages of a Courſe.

	Days.	Drams of Mercury.
In 20 cured,	42½	9¾
In 5 not cured,	41	7⅞

Averages of the Removal of Symptoms.

	In Days.	By Drams of Mercury.
General average,	23	5
Average of the 1ſt Stage,	25¾	6
2d Stage,	20¾	4
3d Stage,	9	3

PART II. METHOD IV. *The Method of* No. IV. viz. *Frictions and Bathing, tried upon Patients who had previouſly uſed ſome other Method without Succeſs.*

State. Number of Days ſtanding	Degree.	Names.	Reſult. Not cured.	Relapſed.	Symptoms diſappeared. In Days	By Drams of Mercury.	Evacuations. Spitting began. In Days.	By Drams of Mercury.	Courſe. Days.	Drams of Mercury.	References.
70	2.M.	Nov. 1. Wright from I. 8.		1	9	3 1-2d	7	3	34	12	*Vid.* 13.
87	2.M	—— 2. Tarling, from I. 7.			40	10	5	2	47	10	
250	3.M.	Mar. 3 S. Robiſon, from II. 1.			13	7	10	7	17	7	
70	1. S.	May 4. Williams, from II. 9.			6	2 1-3d			21	5	
42	1.M	June 5 Keyſal, fr. III. irr. caſe.		1	13	2	5	2	21	3	*V.* 14.
D.	2.M.	—— 6 Ruſſen, from II. 10.			12	3	6	3	26	3	
120	1. S.	—— 7. Wills, from III. 8.		1	42	7	7	2 1-3d	56	10 2-3ds	*V.* 15.
180	2. V.	July 8. Buſh, from III. 9.			19	7	8	3 1-3d	41	10 2-3ds	
140	3.M.	May 9. Pearce, from I. 9.			80	18	5	2 2-3ds	80	18	
365	1. S.	Aug. 10. John — method unkn.			10	2 2-3ds	4	1 1-3d	20	2 2-3ds	
D.	2.M	—— 11. Mrs P. fr. III. irr. caſe.			28	7	12	4	42	10	
220	2.M.	—— 12. Aſhton, from II. 7.			22	2 2-3ds	5	2	46	3 1-3d	
270	2. V.	—— 13 Wright, from 2. of IV. 1			18	9	6	2 2-3ds	38	5 1-3d	
150	1. S.	Oct. 14. Keyſal, from 2. of IV. 5			13	2 2-3ds	9	2 2-3ds	38	5 1-3d	
250	2. S.	—— 15. Wills, from 2 of IV. 7.		1	9	2 2 3ds	11	3 1-3d	27	3 1-3d	*V.* V. 1.
180	2. S	——16. Roebuck, from IV. 7.			12	4	11	4	34	4 2-3ds	
90	2. S.	Nov. 17. Young, method unkn.			8	2 2-3ds	7	2 2-3ds	26	4	
130	3. S.	—— 18. Lewis, from IV. 11.			23	5 1-3d	15	5 1-3d	44	8 2-3ds	
200	2. M.	Apr. 19 Burrows, from IV. 18.			21	4 2-3ds	6	2	35	6	
250	2. S.	—— 20. Hubber, from IV. 10.			10	2	7	2	38	4 2-3ds	
177	2.M.	—— 21. Miner, from V. 2.			18	2	6	2	48	5 1-3d	

		Cured,	17	Total.	
Not cured,	0	Not cured,	4		
Relapſed,	4				
In the 1ſt Stage,	Cured,	3	5		
	Not cured,	2			
2d Stage,	Cured,	11	13		
	Not cured,	2			
3d Stage,	Cured,	3	3		
	Not Cured,	0			

Averages of a Courſe.

	Days.	Drams of Merc.
In 17 cured,	$37\frac{3}{4}$	$7\frac{1}{4}$
In 4 not cured,	$34\frac{1}{2}$	$7\frac{1}{4}$

Averages of the Removal of Symptoms.

	In Days.	By Drams of Merc.
General average,	$20\frac{1}{4}$	5
In the 1ſt Stage,	$16\frac{3}{4}$	$3\frac{1}{2}$
2d Stage,	$17\frac{1}{4}$	$4\frac{1}{2}$
3d Stage,	$38\frac{3}{4}$	10

METHOD

METHOD V. *Plummer's Pills: Decoction of the Woods.*

Number of Days standing.	State: Degree.	Names.	Result: Not cured.	Result: Relapſed.	Symptoms diſappeared: In Days.	Symptoms diſappeared: By Scruples.	Evacuations. Spitting began: In Days.	Evacuations. Spitting began: By Scruples.	Courſe: Days.	Courſe: Scruples.	Reference.
300	2. S.	Dec. 1. Wills. from 2. IV. 15		1	53	3 1-2d	7	3 1-2d	43	7 1-2d	
120	2. M.	Jan. 2. Miner, from IV. 13	1				22	12	57	17 1-2d	V. 2. of IV. 21.

Cured, - - 0

Not cured, - 1
Relapſed, - 1 } Not cured, - 2

Average of a Courſe.

	Days.	Scruples of Pill.
In 2 not cured,	50	$12\frac{1}{2}$

N. B. It was not intended to raiſe a ſalivation in either caſe.

Summary of the Tables of Lues Venerea.

	Cured	Not Cured.	Symptoms removed in Days.
METHOD I. Van Swieten's ſolution of ſublimate,	8	4	$22\frac{1}{2}$
METHOD II. Sublimate rendered acrid, -	6	4	$35\frac{3}{4}$
METHOD III. Sublimate rendered acrid; warm bath; decoction of the woods, - -	8	2	28
METHOD IV. Mercurial frictions, and warm bath,	20	5	23
PART II. of IV. Where ſome other method had been previouſly tried without ſucceſs, - -	17	4	$20\frac{1}{4}$
METHOD V. Plummer's Pills; decoction of the woods, - - -	0	2	

N. B. The Author has never had it in his power to make any trials of the ſarſaparilla, which were ſufficiently accurate for publication.

Query.

Query. As the 3d method (ſublimate rendered acrid, and the warm bath) appears to have been attended with the feweſt relapſes, and as the 4th (mercurial frictions and warm bath) was never found to fail in removing the ſymptoms for the preſent time; might not a judicious combination of theſe methods, at leaſt, merit a trial? the 4th method being uſed for three weeks, or longer, if the ſymptoms did not give way, and the third being afterwards purſued for a fortnight, or longer.

I have not intruded the above caſes of lues venerea upon the public, with a view of drawing any concluſions reſpecting the different methods of cure therein made uſe of. I am ſenſible their number is by no means adequate to ſuch a purpoſe. My ſole intention was, to ſupport an attempt which I think every individual of the Faculty is bound to make, towards drawing his profeſſion out of that ſtate of uncertainty in which it ſtill is, with reſpect to one of the moſt intereſting points, I mean the effects of medicines. How far ingenious theories, and ſubtile diſquiſitions, have tended to throw light upon the nature of diſeaſes, and the operation of remedies, may be difficult to determine:

Thoſe

Thoſe who are diſpoſed to be ſatirical, allege, that we have changed our theories as often as we have our faſhions; and that, nevertheleſs, men in all ages have ſeemed as perfectly ſatisfied with the infalibility of the preſent theory, as they were with the ſuperiority of the preſent cut of their coat. Politeneſs obliges us to ſuppoſe, that the theories of this age will be more immutable. Such, however, is the inconſiſtency of human nature, that the moſt ſtrenuous oppoſers of dogmatiſm might probably be detected every minute in making uſe of ſome degree of it, though almoſt unknown to themſelves; and I imagine, that a pure empiric will as rarely be found among men of ſenſe and learning, as an Atheiſt will be among philoſophers. If we next turn our views towards obſervation, and examine what aſſiſtance we have derived from it upon the preſent ſubject, I am afraid we ſhall find it far ſhort of what might have been expected. It is well known, that as long as mercury has been in uſe, the comparative ſuperiority of its different preparations is ſo far from being aſcertained, that the moſt oppoſite opinions have been entertained by the firſt authorities, even with regard to the ſame prepara-

tion.

tion. Almoſt as much might be ſaid of antimony, opium, hemlock, neutral ſalts, the different methods of blood-letting, and, in ſhort, of the generality of remedies. It is difficult to find, not only two nations, but even two individuals in the ſame village, who have preciſely the ſame opinions of the virtues and efficacy of of a remedy. If we endeavour to trace the ſource of this contrariety of opinions, this reproach to medicine, I believe, we ſhall find none more obvious than the fallacy of obſervation, ariſing from mens drawing deciſive concluſions from the limited number of experiments which they may have had it in their power to make. The irregularities of a patient are induſtriouſly concealed from his Phyſician: Pride, ſhame, fear, or other motives, often cauſe him to hide or miſrepreſent the true cauſe or nature of his complaint: If he is diſguſted with a nauſeous medicine, he will ſuppreſs its good effects, or perhaps unjuſtly aſcribe bad ones to it: Defects in the quality of the medicines, diet or air, and the complication of other diſeaſes, perhaps not always obvious; are all circumſtances that daily defeat attempts towards obſervation and experiment. When the moſt efficacious remedy is given,

given, it is a chance that one or other of theſe cauſes fruſtrates its effects; and if, by ſome of the unaccountable, though not uncommon, caprices of fortune, this ſhould happen ſeveral times ſucceſſively to a practitioner, he becomes diſguſted, and (not having it in his power to know the real cauſe of his want of ſucceſs) finds himſelf little diſpoſed to riſk his reputation, or expoſe himſelf to further diſappointments, by perſiſting in the uſe of a remedy which has repaid him ſo ill. On the contrary, an effort of nature, or a concurrence of lucky circumſtances, may occaſion virtues to be attributed to a remedy which it never poſſeſſed. Every candid obſerver, I believe, will allow, that this is often a true hiſtory of the peculiar, and ſometimes extraordinary, opinions of practitioners. As long as there is no public repoſitory of facts, nor any channel by which they might be conveyed to the world, ſo long will medicine probably labour under the imperfections we have been endeavouring to deſcribe; for I believe it will readily be acknowledged, that in the proportion that experiments increaſe in number, in the ſame proportion are they ſet out of the reach and influence of the above mentioned caſualties.

It

It follows, therefore, that ſolid and invariable concluſions upon any ſubject, can only be drawn from a very large number of experiments or obſervations. If this poſition be true, and its utility univerſally acknowledged, nothing, I ſhould imagine, can be eaſier than the means of bringing it into effect. With reſpect to military hoſpitals, all that is requiſite is an order for that purpoſe: A yearly regiſter of any form could then be given in by each general and regimental hoſpital. As to the public hoſpitals and infirmaries, now ſo common in every part of Great Britain, it is to be ſuppoſed, that a zeal for the improvement of medicine, and humanity to their fellow creatures, would induce the heads of each to keep exact regiſters, and to make regular publications of them. Perhaps the mechanical regularity that ſuch inſtitutions would introduce into hoſpitals, might not be entirely void of its ſhare of advantage. Beſides the immenſe fund of obſervation which would be found in the military and civil hoſpitals, it is further to be hoped, that private practitioners, ſenſible of the advantages of ſuch an inſtitution, and having at length a known channel to convey their obſervations, would greatly enrich the collection.

collection. It is almoſt needleſs to mention, how beneficial ſuch a plan muſt be to gentlemen entering on the practice of medicine, who, often diſtracted by the contrariety of opinions, know not which to chuſe, and are obliged, at laſt, to reap knowledge in the tedious and limited path of their own experience, encompaſſed by deceptions, and diſguſted by diſappointments. It muſt be obſerved, that in aſcribing all the oppoſition of aſſertions, and peculiarity of opinions, to the ſingle ſource of the fallacy of obſervation, we have conſidered men as not actuated by prejudice, obſtinacy or caprice: That their practice is ſometimes influenced by theſe motives, we muſt be obliged to acknowledge, and I hope it will appear as evident, that the public eſtabliſhment of facts would greatly tend to check ſuch improper influence. In ſuch regiſters, the chief requiſites ſeem to be, *1ſt*, To throw the different means of cure employed into a certain number of methods, ſo that they may be conveniently compared together. *2dly*, To record the principal circumſtances in the cure, in ſo conciſe a manner, that they may not exceed the bounds of a table. How far theſe purpoſes are anſwered by the above tables, I will

will not pretend to determine: All that I will ſay concerning them is, that it was the firſt form that happened to occur; and that, though I have found it ſufficiently convenient, I am ſenſible that it is capable of great improvements. It will undoubtedly be objected by ſome, that the great variety in different caſes, requires a variety in the methods of treatment; and that this muſt be an inſurmountable objection to arranging the different methods of cure, and reducing them to ſo ſmall a number, that compariſons may be drawn between them. To this it may be anſwered, That though we now and then meet with irregular and complicated caſes, in which the method of cure muſt neceſſarily evade every attempt to reduce it to any head, yet theſe are by no means ſo common as might at firſt ſight be imagined; and as the practice of medicine is becoming every day more ſimple, the difficulties on this head muſt, of courſe, diminiſh. I am confident, that there are few chronic diſeaſes that might not be ſubjected to ſuch a plan; and, with reſpect to caſes that could not, with preciſion, be reduced to any of the general heads, they might be compriſed under the title of the *irregular caſes* of that diſeaſe.

Such

Such a plan I have, for my private ſatisfaction, adopted for ſome time paſt; and though I have never met with any thing of the kind, from which I might draw aſſiſtance or direction, I have not found ſuch difficulties in the proſecution, as could be ſaid to balance the advantages which I ſoon perceived I ſhould reap from it. I cannot help obſerving one circumſtance in its favour, which is, that the ſimple ſtatement of a ſet of facts, ſeems always to carry ſtronger conviction with it, than the moſt poſitive aſſertions of men even of the firſt repute: At the ſame time, it would be very unjuſt, to ſay, that this prejudice was always well founded. I ſhould imagine, that the collection of obſervations would be conducted with more regularity, and to much greater advantage, were all the hoſpitals of each kingdom put under the inſpection and direction of their reſpective Colleges of Phyſicians, ſo far as that the latter might be authoriſed to iſſue orders for the trial of ſuch remedies, and conducting of ſuch experiments as might ſeem moſt neceſſary to them, for the improvement of medicine. We might then hope to ſee the pharmacopœias quickly weeded of their uſeleſs articles, whilſt the virtues

tues of every truly valuable remedy would be publicly known, and eſtabliſhed upon the moſt inconteſtible footing: With regard to thoſe of an intermediate rank, we would at leaſt have the ſatisfaction of knowing exactly, what degree of dependence was to be put upon them; and could even, were it neceſſary, calculate to the greateſt nicety, what were the chances of ſucceſs. If tables were judiciouſly arranged and executed, I do not believe that even very numerous obſervations, given in a detail ſimilar to the above tables of intermittents or lues venerea, would exceed the bounds of publication; but if that ſhould be found to be the caſe, the reſult of the whole might alone be given, as is done at the end of each of theſe tables.

I ſhall, in the next place, make a very few remarks on the dyſentery, a diſeaſe which I have had conſiderable opportunities of ſeeing. From ſome accidents, needleſs to mention here, I have it in my power to give only a trifling number of caſes, and which, indeed, ſeem to point out little or nothing. As, therefore, the following aſſertions are not ſupported by facts, the reader is welcome to place what degree of confidence in them he pleaſes. In general, I ſhall obſerve,

1ſt,

1ſt, That I have never been ſo lucky as to reap any advantage from opiates given by the mouth, though I have made long and repeated trials, and though I have given them, not only alone, but alſo combined with ipecacuanha, or with aſtringents, as in the pulvis e bolo compoſitus et ſpecies e ſcordio, rhubarb likewiſe being ſometimes added. Whilſt the ſtools were in any conſiderable number, and there were any remains of painful ſymptoms, I found ſmall doſes of ipecacuanha more effectual; and when the ſtate of the diſeaſe was different from this, I found aſtringents alone the beſt remedies, beginning with mild ones, and ending with tinctura corticis Peruviani. I have, however, experienced great benefit from ſtarch glyſters, with laudanum, their effects being often ſurpriſing, particularly when the rectum was principally affected, and the teneſmus violent: Their only uſe was, however, as far as I have been able to diſcern, in recent caſes. *2dly*, With reſpect to purgatives, I have thought rhubarb and calomel the beſt; for although cathartic ſalts ſometimes procure a more free, ſpeedy and plentiful evacuation, yet I have had ſuſpicions, that by their ſedative and refrigerant properties, they weaken

the tone of the primæ viæ, and tend to prolong the diſeaſe, at leaſt when it is neceſſary to repeat them often. 3*dly*, Although the vitrum ceratum antimonii is frequently of great ſervice in recent caſes, yet the moſt remarkable effects that I have experienced from it, were in thoſe of ſome ſtanding, where I have often ſeen it ſucceed after many other things had failed. It is true, that in perſons with red hair, and thin ſkins, it ſometimes operates rather roughly, but nevertheleſs ſafely, as far as I have ſeen, provided the doſe is managed with caution. I am much inclined to think, that it is liable to conſiderable uncertainty in ſtrength, from circumſtances not only in its preparation, but likewiſe in the preparation of the glaſs. To this, I imagine, muſt, in a great meaſure, be owing the different opinions that have been entertained of it at different times, and by different perſons; ſome ſpeaking of it as eaſy and ſafe in its operation, whilſt others look upon it as a rough and dangerous medicine. From what I have ſeen of it, I think it deſerves a ſtricter enquiry into its preparation and effects. 4*thly*, I have found ſmall doſes of ipecacuanha of great uſe in the beginning of the dyſentery; but towards the

the end of the diſeaſe, and in chronic caſes, it certainly is not equally efficacious: I have often known it gripe; and when the ſtools were reduced to the number of three or four in twenty-four hours, I have had reaſon to believe that it retarded a perfect cure. *5thly*, With regard to aſtringents, I have never had ſuch a ſufficiency, either in variety or quantity, as to enable me to make any experiments worth mentioning here. I can therefore only obſerve, relative to the tincture of the bark, that however free the patient might be from gripes or teneſmus, the inteſtines would ſeldom bear it, till the ſtools were reduced to two or three in twenty-four hours. As perſons in this diſeaſe are very ſubject to relapſes, on changing their diet, it is often neceſſary to continue the tinctura corticis for ſome days after the belly is become quite regular, in order to reſtore the tone of the inteſtines. *6thly*, The irregularities of patients in this diſeaſe, in which diet has the utmoſt influence, render obſervations very difficult, and concluſions very doubtful.

In the following tables, I have arranged the different means of cure employed, under four ſeparate methods. In the firſt table are found what I

have called the *regular caſes*, *viz.* thoſe in which only one method was uſed throughout the courſe of the diſeaſe. The mark of each method is placed at the head of the column, and refers vertically. The figure of the number of days that the method was continued, refers horizontally. In the ſecond table, I have placed what may be called the *comparative caſes*, *viz.* where, in the courſe of the diſeaſe, it was found neceſſary to change the method. In this way, any means of cure that a practitioner may be deſirous of trying, may be comprehended in a method, and a ſeparate column aſſigned to it, by which its ſucceſs will ſoon be ſeen. By comparing the firſt and ſecond tables together, the ſucceſs and failure of each method will be determined. In theſe tables, they were never noted as cured, until they were reduced to one ſtool in twenty-four hours, unleſs when the perſon was accuſtomed to have more whilſt in health, which was very rare.

Regiſter

Regiſter of twenty Caſes of Dyſentery.

Table I. *Regular Caſes.*

November. December January.	I.	II.	No. of days cure.	III.	IV.
	2		5		
		4	10	1	1
			15	3	
			20	1	
			25		
			30	2	
Total cured	2	4		7	1
Average of the number of days required for a cure	5	$7\frac{1}{4}$		18	7

Table II. *Irregular Caſes.*

Unſucceſsful Method.		Names.	Succeſsful Method.	
Method.	Days uſed.		Method.	Days uſed.
I.	15	Wood.	III.	6
II.	22	C. Brown.	III.	6
II.	20	Earp.	IV.	5
IV.	16	Friſby.	II.	18
IV.	19	Bobbit.	II.	12
IV.	13	Palmer.	II.	24

Remarks.

Moſt of the patients in the ſecond table were much afflicted with the diſeaſe, and ſubject to frequent relapſes.

1ſt Method, { Cured, 0 / Not cured, 1

2d Method, { Cured, 3 / Not cured, 2

3d Method, { Cured, 2 / Not cured, 0

4th Method { Cured, 1 / Not cured, 3

In the firſt table, the different methods placed at the head of the columns, refer perpendicularly; the number of days refers horizontally to both ſides.

In the ſecond table, the method which had failed is expreſſed in the firſt column, and the number of days that it had been uſed in the ſecond; the patient's name is in the third column; the method that effected the cure in the fourth; and the number of days it was uſed in the fifth.

METHOD I. Emetics and cathartic ſalts, occaſionally repeated; ipecacuanha in ſmall doſes; aſtringents.

METHOD II. Emetic, ſometimes repeated; cathartic of rhubarb and calomel, repeated every third or fourth day; ipecacuanha; aſtringents.

METHOD III. Emetic; doſes of vitrum ceratum antimonii, every third or fourth day; ipecacuanha; aſtringents.

METHOD IV. Emetic; doſes of vitrum ceratum antimonii, every third or fourth day.

N. B. Anodyne injections were occaſionally uſed in all the four methods.

I cannot cloſe theſe remarks, without adding a few words on the method of arranging diſeaſes, which has, of late, deſervedly engaged the attention of the public. I have often thought, that if the claſſes and orders were entirely expunged from a noſologia methodica, and nothing but the genera and ſpecies retained, the book, though leſs ſyſtematical, would be equally uſeful, and, at the ſame time, contain fewer inconſiſtencies. Although the genera and the ſpecies muſt be of the higheſt utility, for giving accurate diſtinctions of diſeaſes, and affixing preciſe ideas to each term, yet I could never perceive, that the claſſes and orders ſerved any other purpoſe than to perplex the author, to cauſe him to be guilty of abſurdities, and to produce aſſemblages that never exiſted in nature,

ture. Without entering into the different methods that have been taken to claſs diſeaſes, or into all the difficulties that have occurred, in conſtraining nature to put on a ſyſtematical regularity, for which ſhe has given no foundation, and of which ſhe is perhaps not capable, I will only obſerve, in general, that although this ſyſtem ſucceeds pretty well in fevers, and ſome other diſeaſes, yet there are many that ſeem to elude every effort of the kind. The rickets, the jaundice, the ſcrophula, and ſome others, ſeem to be individuals, totally unconnected with every thing around them, and only reducible to the definition of a claſs or order, by catching at ſome trivial circumſtance in their phænomena. It muſt undoubtedly be allowed, that method, in all ſciences, conduces greatly to aſſiſt the operations of the mind; for which reaſon, it may be very neceſſary to fall upon ſome form of bringing certain diſeaſes into one point of view. If, as has been alleged, there is not in all caſes a foundation in nature for aſſemblages, and that therefore we are obliged to form them in an arbitrary manner, we would certainly wiſh to be directed by utility, in the choice of a method. The principles upon which ſuch aſſemblages

were to be made, might be, 1*ſt*, Similarity in the nature and cauſe of certain diſeaſes. 2*dly*, Similarity in their method of cure. 3*dly*, Similarity in their phænomena. With reſpect to the firſt, as long as our theories remain in the ſame uncertain and fluctuating ſtate in which they have been hitherto, it will be in vain to expect a ſteadineſs and permanency from the ſuperſtructure, of which the foundation is deſtitute. The ſame objection lies againſt the ſecond. Whilſt the phænomena of diſeaſes remain the ſame, ſo long will there be, in ſome caſes, a foundation in nature for the third method. Diſeaſes that are moſt liable to be confounded, being brought together, will more readily admit of a compariſon; and, I believe, moſt practitioners will admit, that, to diſtinguiſh and determine the diſeaſe, is often the moſt intricate part of their office. It will perhaps be alleged, that the aſſociating of diſeaſes, by a ſimilarity in their phænomena, is neither more nor leſs, than the method that is followed in every noſologia methodica. To this it may be anſwered, that in the claſſes and orders, there are ſeveral of the ſubdiviſions ſo far from being in danger of being miſtaken for each other, that they do not

agree

agree in any circumſtance, except ſome trifling one, which is laid hold of merely becauſe it enables them to come under the general definition. If, inſtead of this, aſſemblages were formed of diſeaſes which reſembled each other, in ſeveral of their eſſential and moſt ſtriking ſymptoms, and when ſuch ſimilarity was wanting, no aſſemblage was attempted, the form would certainly be more agreeable to common ſenſe. I imagine, that ſuch aſſemblages ſhould rather be treated of under the ſame *chapter* or *ſection*, than comprehended under the title of a *claſs* or *order;* the latter implying a neceſſary connection in nature, whilſt the former has no ſuch import, and is not reſtricted to the ſame regularity. This propoſal may appear very trivial; but it ſhould always be remembered, that inaccuracy in words tends to produce inaccuracy in ideas, and that it is as eaſy to make uſe of a proper term as of an improper one.

I ſhall now finiſh theſe remarks with this apology, that if they are found to contain many defects, and if things are ſaid in them that may have been ſaid before, it is to be hoped that ſome allowance will be made for an author, who, for theſe laſt thirteen years, and ever ſince

he

he left the ſchools of medicine, has been almoſt entirely cut off from all communication with the literary world.

III.

A curious Caſe of a very remarkable and ſurpriſing Recovery in a Private Soldier of the ſecond Battalion, 73d Regiment, ſerving in Gibraltar, 1781,—attended with a Fracture of the Cranium, requiring the Trephine,—a compound Fracture of the lower Extremity, requiring amputation,—and ſeveral other wounds. By Mr Andrew Cairncroſs, *Surgeon to the ſecond Battalion, 73d Regiment.*

DONALD Ross, aged thirty-nine years, was ſtanding ſentry in the King's lines, in the night of the 17th September 1781, during a very heavy canonade and bombardment, both from the Spaniſh lines, and alſo from their gun and mortar-boats in the bay, when he was knocked down by the wind of a thirteen inch ſhell, which fell cloſe by him: The ſhock and fear had ſuch an effect upon him, that he was rendered entirely incapable of making any efforts to ſave himſelf by running away: The

fuze

fuze burnt only a few ſeconds, when the ſhell exploded. He was ſoon after taken up ſenſeleſs by ſome of the guards, in a miſerable mangled condition, by the ſplinters of the ſhell, and pieces of ſtone thrown about; and he was conveyed in a litter to the hoſpital of the 73d. When brought there, his appearance was ſo ſhocking, that I really was almoſt at a loſs what part of his body to pay attention to firſt; not apprehending that I could by any means whatever ſave the poor man's life: There was an wound on his forehead, juſt above the orbitar proceſs of the right eye, extending in a line upwards, and, with the point of my probe, I could plainly perceive the bone bare and fractured. There was a compound fracture of the left arm, a little above the inſertion of the deltoid muſcle; the bone was broken very obliquely; and lower down, about three or four fingers breadth above the elbow, there was a ſimple one. At times he was ſeized with ſevere ſpaſms, and during that period, the arms, in conſequence of the action of the muſcles, almoſt made an acute angle between the joint of the ſhoulder and elbow. There was alſo a compound fracture about the middle of the lower extremity of the ſame ſide,

both

both bones broken very much, with ſeveral looſe ſplinters, and which ſuffered equally with his arm, during his former agitated ſtate. A great part of the ſkin and muſcles were lacerated from three of his fingers of the right hand, and the bone of the middle one was ſhattered to pieces. His body was contuſed all over; the ſcrotum and penis particularly ſo. The Britiſh regimental ſurgeons aſſiſted me; and indeed we were all of opinion, that the unfortunate man could not live, at all events, undergo ſo many operations as it appeared neceſſary to perform upon him. Unwilling, however, that any thing ſhould be left undone, as the wound on the forehead ſeemed more immediately to affect his life, I reſolved upon removing the integuments from that part of the os frontis, to examine the ſtate of the injury there. On laying the bone bare, I found a fracture running about an inch and a half upwards in the direction of the wound; and there was a particular *dint* in the lower part of the bone, which ſeemed to be the point ſtruck. No time was loſt; the trephine was immediately applied on the part; it cut well; the ſawing was complete, without injuring the dura mater, and was removed eaſily by the elevator.

On

On examining the bone removed, the fracture did not extend through both tables, only the outer one; but a *thin lamina from the inner table was found wanting*. On wiping away a little extravaſated blood from the ſurface of the dura mater, the bit of bone was found drove through the membranes into the brain, and ſticking faſt: It was immediately removed; on which a pretty conſiderable hæmorrhage enſued, and was permitted to flow freely, ſo as to take away about ten or twelve ounces; it was afterwards eaſily ſtopt by the application of dry lint. At that time, he had a ſevere ſpaſm, which did not laſt long, and began to know me and the people about him. The other gentlemen aſſiſting, concurred in opinion with me, in deferring any other operation for the preſent, as the moſt material injury had been attended to: His wounds were dreſſed lightly, and a ſtool was procured by a glyſter. On calling next morning, 18th September, to enquire if he was in life, to my ſurpriſe I found that he had ſlept well from the time I left him in the night, was perfectly ſenſible, and not ſuffering any great degree of pain; his pulſe was exceeding good, and not more than ſeventy. The poſition of his leg

and

and arm being altered in the night, and not pleaſing me, was put to rights. The ſaline draughts were preſcribed for him through the day, with thirty drops of the thebaic tincture in the evening, and a glyſter was deſired to be repeated, if neceſſary. 19th, Every thing went on well: He had been at ſtool early in the evening, which was a work of much difficulty, on account of ſo many wounds; had reſted well during the night; was clear in his ſenſes; and pulſe as before. 20th, A ſmall alteration for the worſe; pulſe rather quicker, and ſkin hottiſh; has had a pretty good night's reſt, and a looſe ſtool. Ten grains of nitre were now added to each doſe of his ſaline medicine, with the opiate as before. 21ſt, Upon the whole much as yeſterday; complains of a ſlight headach; the tenſion upon his leg and arm exceedingly trifling; belly continues regularly open. 22d, No quickneſs to be perceived in his pulſe; headach, and heat of ſkin, gone off; belly as before; his hand ſmells pretty ſtrong of ſuppuration; and there is an oozing upon the eighteen-tailed bandage upon his leg. 23d, Much as yeſterday; removed as much of the dreſſings from his different wounds as would come away eaſily;

the

the lint adhering firmly to the dura mater, was not attempted to be removed; the dreſſings from his fingers and hand came moſtly off with eaſe: The lacerated teguments looked well, but there was no proſpect of ſaving the middle finger, as the bone of the third phalanx was ſhattered to pieces, up to its articulation with the metacarpus: The wound in the arm was almoſt cloſed, requiring only a bit of lint with a ſmall pledget of cerate above it; and the tailed bandage was frequently moiſtened with ſpirits and vinegar, to diſperſe the ecchymoſis which was conſiderable. The wound of the leg had but an indifferent aſpect; the diſcharge was bloody and ichorous, but without inflammation or tenſion upon the limb; and there was an utter impoſſibility of replacing the bones in an exact poſition, from ſome unforeſeen obſtacle: As there was no chance of cure here, but by amputation, or tedious ſuppuration, it was dreſſed in the moſt ſuperficial eaſy manner. He continued free from fever and pain, and every thing went on much as before. On the 26th, the ninth day from the accident, the lint came eaſily away from the dura mater, which looked well, and had begun to ſlough off. The wounds on his hand had alſo

alſo as good an appearance as could be expected. As the diſcharge from the wound in the arm was ſo ſmall on the laſt dreſſing, the bandage was not now undone. From the above period, till the fourteenth day after the accident, the appearance of his different wounds continued much the ſame, and the granulations from the ſurface of the brain had a healthy aſpect; but he then complained of an exceedingly acute pain in the middle of the fractured part of the limb, which made him ſtart frequently: On examining it, a tenſion was found coming on faſt; the diſcharge was ſtill ichorous and bloody; his pulſe was getting up: In ſhort, I expected nothing but gangrene and its conſequences to follow; and this now appeared to be the critical time to remove the limb entirely, as the only probable chance of ſaving the patient's life. On conſulting with my brother ſurgeons, they all agreed with me in opinion, that it was ſo; and as no time was to be loſt, it was determined to be done immediately. As ſoon as the neceſſary apparatus was got ready, that I might not diſturb my patient by placing him on a table, I took off the limb in the uſual place below the knee, whilſt he lay in bed in the hoſpital cradle.

He

He bore the operation exceedingly well, all circumſtances conſidered, and ſoon after fell faſt aſleep. On diſſecting the amputated extremity, the tibia was found fractured quite through in a very oblique direction, the fibula into many pieces, and a pretty large ſplinter adhering to the perioſteum, was wedged quite acroſs the interoſſeal muſcles, which in all probability was the obſtacle to the reduction of the limb. He was exceedingly free from pain during the remaining part of that day, and had a good night of it, with tolerable reſt: Next morning, I found him in good ſpirits, without any quickneſs of pulſe; the appearance of his head and hand as before. The opiate was repeated in the evening, and every thing continued to go on as well as could be wiſhed. On the fifth day from the amputation, the ſuppuration being eſtabliſhed, the dreſſings were removed, the ſtump looked well, granulations were ſhooting faſt out upon the ends of both bones, and there was next to no tenſion upon the ſkin, of which a conſiderable portion had been ſaved. The poor man was now exceedingly happy; ſaid, he was ſure he would recover, but wiſhed his finger to be taken off alſo, as he could not bear to look at it. Every day afterwards added to

his recovery, all his ſores looking well, and the ſpace in the cranium filling up faſt. On the tenth day after the amputation, finding every thing ſo favourable, and that nothing but the removal of the middle finger prevented his recovery, which gave a good deal of pain all up the arm, and was very offenſive to the ſmell, I yielded to his ſolicitation, and removed it at the articulation of the metacarpus. The inflammation ſubſequent was inconſiderable, and in three weeks it was perfectly cured. The other ſores all kept pace in their cure, without any further material occurrence; and in ten weeks from the firſt date of the accident, he was perfectly well, but weakly.

IV.

Obſervations on Canine Madneſs, by Dr Houlſton *of Liverpool, communicated to Dr* Duncan.

WHEN men of undoubted profeſſional knowledge, candour, and humanity, ſtand forth to deſtroy the public confidence, in a matter of ſuch moment as a preventative for madneſs, this can only be ſuppoſed to ariſe from

a thorough conviction of the inefficacy of the means propoſed, and an ardent zeal for the cauſe of truth. Well aware that they are hereby depriving numbers of that great cordial Hope, and reducing them to a ſtate of horror and apprehenſions, little ſhort of that which they wiſh to guard againſt, nothing but a deſire of obviating the fatal conſequences of an ill grounded confidence, and of exciting the endeavours of men of ſcience, to diſcover more certain remedies than are yet known, could induce them to take ſuch a ſtep.

Dr Fothergill, in the caſe of Mr Bellamy, and Dr Vaughan of Leiceſter, in three caſes which he has publiſhed, have fully proved, that all the methods recommended for that end, are inſufficient for the cure of the hydrophobia, when once commenced. The patients all died in the courſe of one or two days from the appearance of this ſymptom, notwithſtanding the moſt attentive and judicious treatment. From theſe caſes, they conclude, that no dependence is, in reality, to be placed on the Ormſkirk medicine, before ſo much confided in; and they have each declared their opinion, how doubtful and uncertain, not to ſay uſeleſs, are all the

other methods hitherto propoſed, to prevent the ill conſequences ſometimes reſulting from the bite of mad animals. The attempt, then, to recommend and enforce a plan of treatment, agreeable to reaſon, and ſupported by experiment, muſt meet with approbation, and may be productive of eſſential ſervice to ſociety. May it not very eaſily happen, that a remedy, the gradual exhibition of which may prevent the attack, would prove wholly inſufficient for the cure of the hydrophobia? Or is the inference juſt, that becauſe the action of mercurials, applied for three or four days at moſt, will not cure the diſeaſe in its laſt haſty ſtage, the ſame remedy would have been of no avail in the interval between the bite and the attack, which was (in theſe caſes) of one, three, and nine months? During that period, a gradual and ſufficient action of the mercury might have been excited; whereas, when the hydrophobia has appeared, there is ſcarcely ever time for any ſuch effect. There is ſome reaſon to conclude, too, that under certain diſeaſes, the ſyſtem is leſs capable of being acted upon by mercury, which, though applied in large quantities, ſeems then not to produce its uſual effects. I mean

not

not to dwell upon the reaſonableneſs of a practice, in which the action of the remedy is principally determined to the part where the virus chiefly exerts its baneful powers, *viz.* the ſalivary glands; nor yet upon the authority of the late Dr James, and the celebrated Sauvages, who have largely inſiſted on the beneficial effects of mercury, to prevent the dangerous conſequences of the bite of mad animals. Not to ſwell this paper to an improper bulk, I purpoſe only to give a brief account of a pamphlet, publiſhed at Paris by order of government, entitled, "Me-"thode éprouvée pour le Traitément de la Rage," wherein we are informed of the ſucceſs of a mode of treatment, of which mercurial in unctions is the baſis and moſt eſſential part, laid down by Monſ. de Laſſone, firſt Phyſician to the King of France, and tried on eleven out of fifteen perſons dreadfully bit and torn by a mad wolf, on the 8th and 9th of December 1775, within twenty-four hours of each other. Three of theſe unhappy people, truſting to powdered oyſter-ſhells, and ſimilar remedies of no uſe, were not ſubjected to this treatment, and died in a few days, raving mad; as did alſo a young woman, who did not apply for relief till two

days before ſhe died, and after the ſymptoms of hydrophobia had commenced. The remaining eleven were, by the States of Macon, near which place the accident happened, put under the care of a Phyſician of Cluny, Monſ. Blaiſe; and the account he gives of the ſucceſs attending the method of treatment purſued, of which a ſummary is ſubjoined, is as follows: One man, who, for ten days, exactly followed the plan laid down, whoſe wounds, though very large, ſuppurated well, and were in a good ſtate, and in whom the mercury ſeemed to begin to act, became melancholy, was ſeized with a horror and dread of liquids, and died within forty-eight hours afterwards, though placidly in his ſenſes, and without being convulſed. A ſecond, whoſe mouth and gums had been ſlightly affected by the mercury, which he uſed near a month, grew delirious and furious, and after experiencing the ſymptoms of hydrophobia for two days, died comatous. This man, however, it was found, had privately drank very large quantities of wine, for three days together, preceding his delirium; and, it is ſuppoſed, this contributed greatly to his death. A third, a boy, who continued the uſe of the mercurial frictions and antiſpaſmodic medicines

medicines for eighteen days, and was doing well, being removed home by his friends, died there three weeks after, as is believed, only from the wound in his head not being taken due care of, and not from madneſs, as he drank freely an hour before he died. The remaining eight recovered, although one of them, during the courſe, became ſad and melancholy, and another, a woman, delivered of a child during the time, manifeſted an averſion to liquids. Salivation took place in moſt of them, upon which, gradually excited, (though they endeavour to guard againſt it by repeated purging), depends, moſt probably, in ſuch caſes, the only rational hope of ſecurity from canine madneſs. Dr Blaiſe adds, That "the treatment was conti-" nued, in all, above a month in the eight who " got well *, ſix of whom had been grievouſly

* In the Hiſtory of the Royal Society of Medicine at Paris, Vol. II. we are informed by Monſ. Blaiſe, that of theſe eight, one died with Hydrophobia ſix weeks after he was diſcharged apparently well; but it appears, that four days before this attacked him, he had paſſed his arm down the throat of an ox, believed to be mad, though the man is not ſaid to have been bit by it. Monſ. Blaiſe alſo mentions his having ſince ſucceſsfully treated two other children in this method; whereas a third, bit by the ſame dog, and not ſo treated, died mad.

" bit in parts not covered with the clothes;
" and that moſt of them experienced, nearly at
" the ſame time, ſymptoms of nervous affec-
" tions, which might be attributed to the virus
" too much attenuated and weakened by the re-
" medies, to produce a manifeſt acceſſion of hy-
" drophobia." He concludes with theſe judicious remarks: " It is moſt certain, that the remedies
" we have employed have been very ſucceſsful;
" but they would have been much more ſo, had
" they been uſed early; and particularly, if al-
" moſt immediately after the bite, thoſe exter-
" nal means had been made uſe of, which ap-
" pear to me indiſpenſibly neceſſary, *viz.* deep
" ſcarifications, cutting away the lacerated parts,
" and thoſe adjoining to the wounds, the cau-
" tery, applying cupping-glaſſes, and eſtabliſh-
" ing copious ſuppuration, for a long time, in
" the part bit; becauſe it ſometimes happens,
" that the ſaliva is lodged in the cellular mem-
" brane, where it remains, as it were, fixed and
" inert, till, brought into action by ſome cauſe,
" it enters into the circulation, affects the nerves,
" and produces the train of ſymptoms of this
" moſt terrible of diſeaſes." It now remains only to give the mode of treatment propoſed,

which

which I wiſh to do as conciſely as I can conſiſtently. After opening the body by laxative glyſters, bleed once or twice, eſpecially if there be any ſymptom of madneſs, or any wildneſs in the looks; uſe, morning and evening, for an hour, a warm foot-bath, or, if it can be had, a warm bath; waſh the wound repeatedly and long in warm water, in which common ſalt, or rather ſal ammoniac, is plentifully diſſolved; making, at the ſame time, deep ſcarifications, cutting away lacerated parts, or, which is preferable, (when it is an animal which is bit), applying the actual cautery: This done, rub a dram of mercurial ointment lightly round about the wound, which may be dreſſed twice a-day, with baſilicon or digeſtive, waſhing it each time with the ſalt and water. The mercurial ointment, however, is only to be applied once in twenty-four hours, and in the above doſe. The body muſt be daily kept open by glyſters, to which add one ſpoonful of honey, and two of vinegar; every four or five days, a gentle purgative is given, to prevent ſalivation. To excite vomiting once or twice, will be of ſervice, eſpecially at the firſt, if there be frequent nauſea or inclination to vomit. Once, or if no inconvenience

convenience follows in its uſe, twice a-day, morning and evening, give a ſpoonful of wine, with twenty or twenty-five drops eau de luce, to promote a gentle ſweat. Let the patient take every day four grains of camphor, two grains of muſk, and ſix grains of nitre, made into a bolus, with honey. In caſe of great reſtleſſneſs and want of ſleep, give, in moderate doſe, an opiate; but do not repeat it ſeveral ſucceſſive days. The patient ought freely to uſe diluting drinks, mixed with honey and vinegar; but ſhould the hydrophobia already have come on, theſe and the foregoing medicines may be adminiſtered in glyſters. The food ſhould conſiſt chiefly of vegetables; but milk is to be avoided. This mode of treatment muſt be continued till the wound is healed firmly; a month at leaſt, and longer when the wounds have been conſiderable, or any ſymptoms have manifeſted themſelves. Should the wounds put on a bad appearance, give the bark in ſtrong decoction, as alſo when great weakneſs and languor remain. Uſeful animals, when bit, may be treated nearly in the ſame manner, only a triple quantity of the mercurial ointment ſhould be employed. They ſhould be kept up from mixing

ing with others; and, on the appearance of any ſymptoms of madneſs, they ſhould be immediately deſtroyed; as ought alſo dogs, and animals of leſs uſe, without heſitation. Thus far Dr De Laſſone. Several ſtrong proofs of the ſucceſs attending the uſe of mercurial friction, are inſerted in the ſecond volume of the Memoirs of the Paris Royal Society of Medicine, of which the inſtances given by Mr Odoardi deſerve particularly to be noticed. Of nine perſons bit by a mad wolf, one (treated by another ſurgeon, but not with mercurial frictions) died of the hydrophobia the forty-ſixth day after. The eight others, who uſed this remedy under that gentleman's care, all did well. He mentions ſeveral inſtances which have fallen under his care or notice, in which mercurial frictions on the wounded part have preſerved the patient from all danger, ſometimes without producing ſalivation. Notwithſtanding this ſucceſs, however, he alſo eſteems it the ſureſt method to excite a ſlight degree of ſalivation; and perhaps this will be found to anſwer beſt, when attempted ſoon after the accident, and brought about not too haſtily.

V.

V.

Hiſtory of a Caſe of Rheumatiſm, cured by Electricity. By Dr Simon Lanphier, *Phyſician, Waterford.*

M. A. aged fifty-eight, an woolcomber, in the month of December 1778, was affected with a coldneſs and ſhivering, ſucceeded by heat and partial ſweats, pains of the ſhoulders, extending to the elbows, wriſts, and fingers, attended occaſionally with redneſs and ſwelling. His hips, thighs, and legs, were ſoon attacked in the ſame manner, but were particularly painful at the joints of the knees and ankles, appetite impaired, thirſt moderate, bowels tolerably regular. By the advice of his friends, he had recourſe to a variety of matters, particularly warm porter, brandy and water, and ſulphur, all with a view of promoting ſweat. After the ineffectual uſe of theſe for ſome days, he applied to the late Dr Backas, an eminent Phyſician of this place, who ordered him turpentine drops, with ſome other medicines; but, in conſequence of the ſudden death of that gentleman, he did not

not experience the benefit of his advice that he otherwiſe might have expected.

He ſent for me on the 4th of Auguſt 1779, at eight months from the commencement of his complaint. He was confined to bed, could not ſit up, or put on his clothes without aſſiſtance. He then complained of pains in his ſhoulders, elbows, wriſts and fingers; pain in the ſmall of the back, extending occaſionally to both hips; conſiderable ſwelling of the knees and ankles, attended with excruciating torture; was eaſier lying in bed than in any other poſition; pains not aggravated by additional heat; appetite extremely delicate, in conſequence, as he ſuppoſed, of having taken garlick for ſome days; no material thirſt, except at intervals; bowels regular; pulſe rather frequent, but not full or hard. After premiſing the warm bath, and a ſtrict attention to vegetable diet, I ordered him, on the 5th of Auguſt, thirty grains of Dover's powder; at the ſame time, directing that he ſhould lie in blankets, and forward ſweating, by keeping quiet, taking occaſionally draughts of white-wine, whey; and every ſecond hour a julep, with ſpiritus mindereri.

6th, Sweated profuſely from ten in the morning until ſix in the evening; pains eaſier for

ſome

ſome hours whilſt ſweating, but returned as violent as before. 8th, The medicine repeated, and with nearly the ſame effects. On the 10th, he was ordered a mixture with equal parts of elixir guaiacinum volatile, ſimple ſyrup, and mucilage of gum arabic, a large ſpoonful of which to be taken night and morning, waſhed down with wine-whey. This promoted ſweating, which was not a little increaſed by the addition of ſome volatile ſpirit of ſal ammoniac. The pained parts were gently rubbed, morning and night, with camphorated oil and ſpiritus cornu cervi. In the courſe of ten days, he found himſelf better, was able to get out of bed, and aſſiſt in putting on his clothes: The pains, without any obvious cauſe, returned, and were extremely troubleſome. Bliſtering plaſters were applied to the ſhoulders, with directions to remove them as ſoon as they became painful; next to the elbows and knees, which experienced great relief from their application. The medicine was ſtill continued. Notwithſtanding its uſe, and the occaſional application of bliſters to the parts principally affected, a ſtrict attention to warmth and regularity, on the 5th of September following, his recovery ſeemed very doubtful; I was

therefore

therefore determined to try what effect might be produced by electricity, having given him direction to lay aſide the elixir guaiacinum.

On the 10th of ſame month, a few ſlight ſtrokes were ſent through the parts moſt affected, which were the ſhoulders, elbows, wriſts, and joints of the fingers; the ſhocks were repeated three times weekly, but ſeemed rather to aggravate his diſeaſe. A temporary relief was experienced during the uſe of the application; but matters appeared worſe at the ſucceeding viſit. However, as I have known the ſame effects enſue upon firſt uſing electricity, I determined to perſevere and not repeat the operations oftner; but, to put it to a greater extent in point of ſtrength and number of ſhocks, I alſo inſulated him, and by that means took large ſparks from the pained parts; at length the ſwellings began gradually to diſappear, and were even ſenſibly leſs in any one part, when electrified for ſome minutes, either by drawing ſparks from the part, or ſending ſmall ſhocks through it. Immediately after the uſe of electricity, he could move much better than before, and acquired ſo much ſtrength as to walk tolerably well without any aſſiſtance.

I ſhould have obſerved, that for many days on his firſt viſiting me, he was obliged to be attended by two aſſiſtants. In the month of February 1780, he was able to comb a ball of wool, which he had not done for near fifteen months before. The electricity was continued until the April following, when he found himſelf well in every reſpect; the pains removed, and natural heat of the parts perfectly reſtored. In order to prevent a relapſe, I ordered him to uſe the cold bath, which he began in June, and continued until Auguſt. He is now extremely well, and works at his buſineſs as uſual.

I have lately had frequent opportunities of trying electricity in old rheumatic complaints, particularly where the pain was confined to one or two parts, and have always experienced the greateſt advantage from its uſe. The above caſe ſhews the good effects of electricity in a moſt troubleſome and painful diſeaſe, and, at the ſame time, indicates, that much may be expected from it, even where internal remedies have proved ineffectual. A chronic rheumatiſm, which is conſidered as being in a great meaſure a local complaint, I am ſatisfied, will frequently be removed by its uſe.

VI.

VI.

The Hiſtory of a Caſe, where the Pharynx was wounded through the Muſcles and Membranes which connect the Larynx and Os Hyoides, without proving fatal. By the late Dennis Ryan, M.D. *Communicated in a Letter to* Samuel-Foart Simmons, M. D. F. R. S. *Phyſician in London, and by him to Dr* Duncan.

A Negro, named Harry, who lived as watchman on Wincheſter eſtate, near this place, was ſurpriſed in the night, about the end of laſt February, by two negroes, with an intention to put him to death. He is about thirty years of age, and of a ſlender habit of body, with a remarkably long neck; and, his being ſickly for ſome time, rendered all the reſiſtance he could make of little effect. From the preſent appearance, they ſeem to have made ſeveral thruſts or inciſions with a knife, between the upper edge of the right ſide of the thyroid cartilage and the os hyoides. One inciſion was made tranſverſely. It began below, and oppoſite the middle of the baſe of the os hyoides, and extended almoſt as far as the right carotid.

It ſeems to have totally divided the ſterno-hyoidæus and hyothyroidæus muſcles. This inciſion was croſſed by another, which was made in a longitudinal direction. Where both meet, there is a conſiderable orifice, into which one might eaſily introduce the top of the little finger, three weeks after the accident happened, when I firſt ſaw him. And, upon my removing the dreſſing, which conſiſted of a coarſe rag, and ſome oat-meal and water, there was diſcharged a great quantity of mucus through the wound, the edges of which had now become callous all round. On his attempting to drink ſome water, the moſt part of it ruſhed out by the orifice; but when it was cloſely ſtopped up, by the application of another's hand, he ſwallowed pretty freely, though not without ſome coughing. It is always neceſſary to make a preſſure of this kind, when he takes any food. I had his mouth and noſtrils cloſed for ſome time, but he breathed through the wound. The orifice has of late become ſo ſmall, that it has been thought proper to enlarge it by an inciſion, to allow a free paſſage for the mucus, which is diſcharged from it very copiouſly. When he holds up his chin a little, the thyroid cartilage is about

an

an inch and a half diſtant from the baſe of the os hyoides, and about three-fourths of an inch, when he attempts to ſwallow any thing. The attack was made on him in the beginning of the night, and he lay till morning expoſed to the night air. He was then found, with a piece of blanket wrapped about his neck. Thoſe who firſt ſaw him, ſay, that the loſs of blood he ſuſtained was very trifling. They gave him ſome drink, but it all came out through the wound; and they, as well as he himſelf, declare, that till the thirteenth day after the attack, he ſwallowed nothing whatſoever. Hence he was almoſt totally exhauſted, and his ſituation thought ſo deſperate, that recourſe was had to none of the means uſually employed in ſuch circumſtances, in order to ſupport life. From the time he began to ſwallow, he has gradually recovered ſome ſtrength, and he can now eat plantains, the chief fare of negroes. He walks about tolerably well; and though he breathes in general with ſome difficulty, he will probably live for ſome months, and afford a ſtriking proof of the powerful efforts of nature, without the aſſiſtance of art, even in the moſt dangerous circumſtances.

VII.

Account of the ſucceſsful Operation of the Trepan on the left Temple, with the Extraction of a Splinter of Stone, penetrating the Dura Mater. By Mr George Borthwick, *Surgeon, 14th Regiment Light Dragoons.*

A Dragoon of the 14th regiment received a blow from a ſharp ſtone on his left temple, which gave him a conſiderable wound, and knocked him down. He ſoon recovered himſelf, and walked without aſſiſtance to his barrack, which was a quarter of a mile from the place where he met with the accident. On examining him, about an hour after he received the blow, I diſcovered a wound in the teguments and temporal muſcles, of two inches in length, the wound being in the direction of the fibres of that muſcle; and, by my finger, without the help of a probe, could plainly diſcover a fracture of more than an inch in length, with a conſiderable depreſſion in the temporal proceſs of the os frontis. The courſe of the fracture was in the direction of the fibres of the temporal muſcle.

Finding

Finding matters thus circumſtanced, I removed ſuch a portion of the ſkin, tendinous aponeuroſis, and temporal muſcle, as I reckoned would be neceſſary for allowing the crown of a middle ſized trepan to be applied; and having removed a ſufficient portion of the pericranium, to enable me to examine fully the extent and nature of the fracture and depreſſion, and to allow the operation to be performed, I diſcovered a fracture of near two inches in length, and the depreſſion ſo very conſiderable, that the end of a common ſized blunt-pointed probe could eaſily be introduced obliquely through the fracture, under the cranium. This being done, I immediately took out a circle of bone with the trepan, which enabled me to remove entirely the depreſſed fragments of bone, that amounted to four in number. There was no extravaſated blood found on the ſurface of the dura mater, (though this membrane was entirely ſeparated from that portion of the ſkull which conſtituted the depreſſed fragments); but on removing the circle of bone with the trepan, I diſcovered a ſmall wedge-like ſtone, thicker than a ſhilling, of the ſize of a ſilver three-penny piece, that penetrated the dura mater obliquely oppoſite to the

fracture, and had inſinuated itſelf under that part of this membrane, from whence the circle of bone was removed, and had, no doubt, been broken off from the ſtone with which the blow was given.

During the ſcalping, ſeveral branches of the temporal artery were neceſſarily divided, which made the needle and ligature to be frequently uſed, and the removal of a portion of the temporal muſcle, particularly in this tumefied ſtate, made the operation have a more formidable appearance, than in theſe parts of the cranium where it is more frequently performed.

After the operation, the wound was dreſſed in the uſual manner, and the patient recovered, without any bad ſymptoms ſupervening, and was perfectly well in ten weeks.

I think it proper to add, that in a few hours after the operation, the patient complained of a great ſtiffneſs in the under jaw of that ſide; but it did not increaſe to ſuch a degree as to prevent his being able to admit a table-ſpoon into his mouth. It continued, however, for the ſpace of a week, and went of. If the operation had been performed in any other part of the cranium, I ſhould have been alarmed at the ſtiff-

neſs

neſs of the jaw; but in this caſe, I attributed it to the inflamed and ſwelled ſtate of muſcular fibres of the temporal muſcle; and the event ſhewed, that as ſoon as a proper ſuppuration had time to come on, the inflammation, and, of courſe, the ſwelling, ceaſed, and the ſtiffneſs was at an end.

Was this event the ſooner brought about, from his having taken every night three grains of opium, during the firſt fortnight after the operation?

VIII.

The Hiſtory of a Caſe of Hydrocephalus, ſucceſsfully treated by the Uſe of Mercury. *By Dr* Alexander Eaſon, *Phyſician, Mancheſter.*

ON the 12th of September 1781, I was deſired to viſit John Norman, a child of two years and a quarter old. His mother informed me, he had been in an indifferent ſtate of health for ſome time paſt; and that, during the three laſt weeks, he had convulſive fits ſo frequent, and often of an hour's continuance, both by day and night, that ſhe hourly expect-

ed his death. I found him lying on a pillow, ſupported by his mother's knees, quite ſtupid; his eyes ſometimes open, but more frequently half ſhut; the pupils greatly dilated, and incapable of directing them to any object. Being unable to ſupport his head, it fell to either ſhoulder, or behind, according to its inclination; the ſize nearly equalled that of an adult; the fontanelle open, the ſutures cloſed, and I think the bones were thicker than uſual; the back part of the head was very large, in proportion to the fore part. When he was moved, or held up, he was generally ſeized with a fit. A cough of ſome months ſtanding was now more troubleſome, and reſembled a convulſive one. His feet were cold, and frequently had an œdematous appearance. His pulſe was quick, ſmall, and irregular. He was greatly emaciated, and the very ſmall quantity of food he took was frequently thrown up.

From theſe ſymptoms, I had very little doubt that his diſeaſe was an hydrocephalus internus, and no hopes of his recovery, under ſuch circumſtances, could be entertained

As the infant was in ſo low a ſtate, I thought it moſt prudent to proceed by ſlow degrees in the

the uſe of mercurial medicines. At firſt, he took a few grains of rhubarb, then one grain of calomel every night at bed-time, and on the fourth day, a few grains of rhubarb, as at firſt. After an interval of two days, he took three grains of calomel every night; but during the firſt week his ſymptoms grew worſe; the parietal bones plainly appeared larger; the head meaſured more in circumference, and the fits continued as uſual. He then took the calomel every night, with a tea-ſpoonful of oxymel of ſquills, twice or three times a-day. This gave him about two ſtools in twenty-four hours. No great alteration happened, till towards the end of the third week; from that time the pupils of his eyes began to contract; he took notice of ſeveral objects, and eat rather more food, which was ſeldomer thrown up. His water, when any could be ſaved, was of an amber colour, and let fall a white ſediment. His fits were not altogether ſo violent, nor ſo frequent, and his head meaſured leſs in circumference.

I mentioned this caſe from time to time to my friend Dr Percival, who ſuggeſted to me the advantages of mercurial frictions, along with the uſe of the calomel. As the infant was

ſtronger,

ſtronger, and appearances more favourable, I ordered fifteen grains of the ſtrong mercurial ointment to be rubbed in, three times every day, and that he ſhould take the calomel at night as uſual. This anſwered beyond expectation, and his recovery was rapid. In about five or ſix days, after the firſt rubbing with the ointment, the mucus was diſcharged from his noſe, which, from the commencement of his illneſs, had been entirely dry. His urine was more in quantity, ſtill letting fall a white ſediment; he could hold his head in an erect poſture, during the fifth week; and his fits, gradually declining, on the 20th October entirely ceaſed, except a ſlight return on the evening of the 24th.

Towards the end of October, he could walk with help, and now walks by himſelf; is lively; his complexion is clear; gains ſtrength and fleſh daily; eats moderately; the fontanelle almoſt cloſed; ſleeps ſound, and his head much reduced in ſize, in ſo much that ſome of his night-caps, which were too ſmall, and even thoſe of his younger brother, ſlip on with eaſe. He continued the uſe of his medicines for ſome time, as he found no inconvenience from them,

for

for the mercury never affected his mouth, ſalivary glands, or bowels, which have been in a proper ſtate, and his urine without any white ſediment. At preſent, he takes a ſingle grain of calomel every ſecond night, which I propoſe to continue for ſome time longer.

IX.

Hiſtories of two Caſes: The Diſcharge of a large calcareous Concretion, and the Extraction of the Bones of a Fœtus by the Rectum. By Dr Samuel Fitzgerald, *Phyſician at Mullingar.*

A Lady of rank in this neighbourhood, whoſe name delicacy forbids to mention, had laboured for eighteen months under the moſt excruciating torture and pains in the hypogaſtric region, particularly towards the back and os ſacrum. For the laſt three months of her illneſs, ſhe was ſo reduced for want of food and ſleep, that ſhe could not leave her bed, except when taken up to the tepid baths, in which only ſhe enjoyed any tolerable degree of eaſe. In ſhort, life now had become a burden, and death deſirable to her and all around her. In this

this deplorable ſituation, upon the diſcharge of an emollient anodyne glyſter, ſhe fortunately with it paſſed from the rectum a large hard ball of an oval figure, exceeding in ſize an ordinary orange, and ſo ſolid that nothing leſs than the ſtroke of a hammer could break it. It was of a dark cinneritious colour, and of a calcareous quality in ſubſtance, weighing eight ounces and three drams. A total liberation from pain immediately followed its expulſion, and, in a very ſhort time, the hectic and other alarming ſymptoms vaniſhed, and the lady is now perfectly re-eſtabliſhed in health.

The other caſe is that of Mary Dardis, a native of this town, who, on the firſt day of June, after the uſual term of geſtation, *viz.* nine months from her ſecond marriage, was taken ill of labour-pains; but theſe being rather tedious, and cold, as the midwife termed it, I was ſent for; and, upon examining the ſtate of the uterus, I could not poſſibly find its orifice, though, at the ſame time, I clearly perceived a round hard bulk through the teguments, which I concluded was the head. In this ſituation, I deſired ſhe might be properly ſupported, and patiently

ently wait the increaſe of more efficacious pains, and then to appriſe me of it. For three days I heard nothing from her, and then calling at her place of reſidence, I found her engaged at her ordinary buſineſs, quite well, but uneaſy at not having been delivered. I told her the right time was not yet come; that when it did, all would be well, and not to fret herſelf on that account.

On the 10th of February next enſuing, being nine months and ten days, her huſband, at midnight, called upon me, to let me know ſhe was in high labour. Curioſity, as well as humanity, induced me to viſit her; and, to my great ſurpriſe, the firſt object that preſented to the touch was the foot and leg of the ſkeleton hanging forth from the rectum. This, by merely handling it, readily ſeparated at the articulation of the knee; and, as no entrance to the womb through the vagina was yet to be found, I was reduced to the painful neceſſity of extracting the entire ſkeleton, bone after bone, through the anus. This loathſome manœuvre continued for the beſt part of three ſucceſſive days; for the intolerable ſtench, and difficult acceſs, were ſo great, that I could not bear it longer than an hour at any one time. I ſuppoſe the obliquity of the womb's

womb's elevation was the cauſe of this very preposterous birth, that its orifice had reached that part of the rectum through which the heel of the ſkeleton muſt have gradually found its paſſage; for ſhe had uninterrupted pains in the lower part of her back during the laſt three months, which ſhe called a dry colic. By cleanſing vulnerary injections, and a liberal uſe of the Peruvian bark, the woman is reſtored to health. Though this ſeems ſcarce credible, yet it is literally true, as may be atteſted by a ſurgeon I was obliged to call in, to aſſiſt now and then in the delivery.

X.

The Hiſtory of a Caſe of Hydrocephalus ſucceſsfully treated by Mercury. *By* Dr Thomas Aery, *Phyſician, Whitehaven.*

JANUARY 4. 1780, I was called to Mr ——, aged nine years, of rather a pale complexion and relaxed habit. He had been ſeized, a week before, with an acute pain of the whole head; the teguments of it were ſore to the touch; he complained of nauſea, anorexia, erratic pains of the extremities and ſide; thirſt in the afternoon; tongue

tongue clear; pulſe rather frequent. I gave him a cathartic, an emetic, and one doſe of the pulvis ſudorificus of the Edinburgh Pharmacopœa; bliſters behind the ears were kept open with the mild epiſpaſtic ointment of the Edinburgh Pharmacopœa; and, in the interval of the evacuations, the ſaline mixture, with volatile ſal ammoniac impregnated with lemon-juice, and drops of antimonial wine and thebaic tincture; afterwards drops of dulcified ſpirit of nitre, which were followed by an infuſion of bark with valerian, a ſolution of corroſive ſublimate mercury, and volatile tincture of guaiac, without any apparent effect, although given in large doſes, excepting that the anorexia left him after the emetic, which operated but little.

20th, Light painful to the eyes, the pupil of the eyes much dilated, ſtrabiſmus, and cannot diſtinguiſh capital letters in print; double viſion; ſpeaks very unuſually ſlow; ſtupor, and will not riſe out of bed; looks as full as uſual in the face, but the extremities are conſiderably emaciated; appetite good, or eats food greedily, and ſleeps well; little thirſt; abdomen rather tenſe and hard; ſtools and pulſe regular.

27th,

27th, Symptoms much the ſame. Mr Hamilton, an ingenious ſurgeon and apothecary, who attended this patient with me, now aſked me, "If I did not think the diſeaſe to be the "hydrocephalus internus?" I anſwered in the affirmative, and that I propoſed to put him under a courſe of mercury, as recommended by Drs Dobſon and Percival, and alſo as I had for many years found mercury uſeful when given as an aperient and deobſtruent in dropſies.

February 1. he began with taking a grain of calomel every night at bed-time, and with having a ſcruple of ſtrong mercurial ointment rubbed upon his legs, which were afterwards covered with a flannel; the regimen uſual to raiſe a gentle ſalivation, was alſo directed.

10th, Pain of head increaſed.

11th, Vomiting came on laſt night, and continues, but ſoon ſtopped with taking the ſaline mixture with thebaic tincture; complained of his tongue being very ſore; I found it with a little aphthous redneſs round the ſides of it, but no ſpitting.

22d, Said he was better for the firſt time.

24th, Sat up, and could read ſmall print, and continues well at this time.

From

From February 1. to March 8. he took calomel. gr. xlii. and uſed of ung. cœrul. fort. unc. iii. & ſcrup. iv. without producing any ſalivation, or any apparent evacuation, excepting the night and day that he vomited a little. In Dr Dobſon's and Percival's caſes, the mercury ſalivated. It is, however, a well known fact, that, in the lues venerea, we are ſometimes diſappointed in raiſing a ſalivation, but not from thence in the cure of the diſeaſe, only a greater quantity of mercury is in general neceſſary, as directed by Dr Aſtruc. Why may not mercury ſometimes cure this diſeaſe, without ſalivating, as well as it does the lues venerea? and may it not here have performed the cure, by opening the obſtructed mouths of the abſorbent veſſels, and ſo rendering them capable again of abſorbing the extravaſated water?

XI.

Obſervations and Experiments on the Effects of different Anthelmintics applied to Earth-worms, communicated to Dr Duncan *in a Letter from Dr* Thomas Fowler, *Phyſician at Stafford.*

WHEN I had the honour of being an ordinary member of the Royal Medical Society of Edinburgh, and it came to my turn to write papers for the Society, the following queſtion was aſſigned me, at my own requeſt, as a ſubject for one of them, *viz.* What vermifuges are the moſt eligible from their effects on earth-worms? In conſequence of this, I made a great number of experiments on earth-worms, and made them the baſis of a paper which was circulated, read, and debated upon, in due courſe, agreeable to the rules of the Society.

Since that time, from a conſideration of the frequent occurrence of worms as a cauſe of diſeaſe, and the great difficulty we often find in our attempts to eradicate them, I have been led to hope, that, by a repetition of the experiments, in order to render the effects more accurate, I might

might ſuggeſt ſome practical hints to the Faculty by their publication. For this purpoſe, I have made a conſiderable additional number of experiments with moſt of the ſame vermifuges before employed, and have contracted the reſult of the whole into a conciſe tabular view, by which means their obvious effects and comparative merits will be much more readily examined and underſtood. Moreover, in order to bring this paper within the compaſs of an article not too large for admiſſion into your uſeful Medical Commentaries, I have left out the greateſt part of my former introduction, and have entirely omitted the medical remarks upon all the experiments, excepting two, leaving it to the Gentlemen of the Faculty to draw their own concluſions from the facts.

I ſhould have been glad to have made experiments on human worms, but that was impoſſible; for if a ſufficient number could have been obtained alive, on being removed from their natural habitation in the human body, and expoſed to the open air, the whole of them would almoſt immediately have died.

Earth-worms, it is true, are of a different ſpecies from the human or inteſtinal, as they are

called by Linnæus; but that author includes both with propriety under the ſame genus; and if we examine them attentively, they ſeem to have properties enough in common for a ſet of analogical experiments. I ſhould have been very glad to have made ſome trials with the mechanical vermifuges, ſuch as the rough filings of ſteel and tin, *&c.* but found it was not eaſy to be done, for the worms almoſt immediately after theſe ſubſtances were applied to them, would lie ſtill and not appear at all diſturbed, unleſs they were purpoſely put in motion, and thereby made to feel the ſtimulus of the angular particles of theſe ſubſtances; hence no certain concluſions could poſſibly be drawn from effects ſo contingent. Moreover, calomel and æthiops mineral (eſpecially the former, which is perhaps the moſt powerful vermifuge we are poſſeſſed of) being neither ſoluble nor readily ſuſpended in any aqueous menſtruum or vehicle, could not eaſily be tried. I own, however, that many more experiments might have been made ſimilar to thoſe I had already accompliſhed, but my other avocations did not render it convenient to proceed. I acknowledge alſo, that thoſe which

I have made are not without errors, but I hope there are none that are material.

The uſe of the following table, I apprehend, will be ſo obvious to the reader, as to need very little explanation.

The firſt column contains the preſcriptions of the ſeveral vermifuges.

The ſecond exhibits the number of experiments made with each.

The third contains an account how the worms were affected, on being immerſed in the ſeveral fluids and compoſitions.

The fourth ſhews in what length of time the worms became motionleſs in the vermifuges of the more active kind; but in thoſe of the leſs active kind, that circumſtance was much more difficult to be aſcertained, from the greater length of time requiſite, and therefore was omitted: As it was alſo in expreſſed oils, in which they could not exert their motions in proportion to the ſtimulating powers poſſeſſed by ſome of thoſe oils, on account of their viſcidity.

The fifth ſhews in what length of time the worms were found dead, taking the ſhorteſt and the longeſt period in the collective number of experiments to each article. It is almoſt ſu-

perfluous to add, that the letters D. H. and M. in the two laſt columns, are the initials of days, hours and minutes.

One half of the experiments were made with the conduit or ſoft fountain-water of Edinburgh, and the other half with freſh rain-water. The firſt claſs of experiments were made upon theſe waters, as the vehicles of moſt of the following articles, as exhibited in the beginning of the table. This was done, in order that we might make a proper allowance for the influence of water in killing earth-worms, independently of the medicinal qualities of the ſeveral vermifuges. The worms uſed in the experiments weighed from two ſcruples to ſix; but thoſe were generally preferred, which weighed from three ſcruples to five. They were ſeldom uſed, till they had been purged one, two, or three weeks in moſs; for it was obſervable, that they would die much ſooner under any experiment, if uſed juſt taken from the ground, and conſequently full of earth. In order to know, with more certainty, when the worms were dead, (one being uſed to every experiment), they were, from time to time, taken out of their ſeveral vermifuges in open phials, laid upon a plate, and preſſed with the

the blunt end of a probe, till they ceaſed to move diſtinctly on being preſſed. Some means of this ſort was neceſſary, ſince almoſt all the reptile race of animals are ſo tenaceous of life, that in many circumſtances it is difficult to ſay, whether they are really dead or not.

VERMIFUGES.

	Number of Experim.	Worms how affected.	When Motionleſs.	When dead.
WATERS.				
R. Aquæ fontanæ unc. iv.	3.	Not at all diſturbed.		2 D. 8 H. to 5 D.
R. Aquæ pluvialis unc. iv.	7.	Ditto.		2 D. 1 H. to 4 D.
I. NEUTRAL SALTS.				
R. Sal. mar. dr. ii. aq. font. ferv. unc. ii. M. fiat ſolutio.	2.	Strongly convulſed.	2 M. to 3.	3 M. to 4.
R. Sal. gemm. dr. ii. aquæ pluv. ferv. unc. ii. M. fiat ſolutio.	2.	Convulſed.	Ditto.	Ditto.
R. Nitri crudi dr. ii. aquæ pluv. ferv. unc. ii. M. fiat ſolutio.	2.	Ditto.	2 M.	About 4 M.
R. Salis cathart. Glaub. dr. ii. aquæ ferv. unc. ii. M. fiat ſolutio.	4.	Ditto.	3 M to 5.	10 M. to 16.
R. Aquæ marinæ unc. ii.	2.	Somewhat convulſ.	8 M. to 10.	12 M. to 16.
II. ACIDS.				
R. Succi limonum recentis unc. i.	4.	Violently convulſ.	3 M.	6 M. to 7.
R. Aceti unc. ii.	4.	Ditto.	3 M. to 4.	9 M. to 10.
R. Spiritus vitrioli fortis gutt. xii. aquæ fontanæ unc. ii. M.	4.	Ditto.	4 M. to 6.	10 M. to 11.
III. ALKALIES.				
R. Salis abſinthii dr. ſſ. aquæ pluvialis ſeſcunciam.	2.	Strongly convulſed.	About 2 M.	About 4 M.
R. Salis tartari dr. ſſ. aquæ fontanæ ſeſcunciam. M.	3.	Ditto.	4 M. to 6.	8 M. to 10.
R. Salis ſodæ dr. ſſ. aquæ pluvialis ſeſcunciam. M.	2.	Convulſed.	8 M. to 9.	27 M. to 30.
R. Salis vol. ſalis ammon. dr. ſſ. aquæ pluv. ſeſcunciam. M.	2.	Strongly convulſed.	About 3 M.	29 M. to 34.
R. Lixiv. cauſtic. Ph. Ed. gutt. xl. aquæ font. unc. i. M.	2.	Ditto.	3 M. to 4.	10 M. to 15.
R. Spiritus cornu cervi gutt. xl. aquæ pluv. ſeſcunciam. M.	3.	Convulſed.	3 M. to 4.	15 M. to 16.
R. Aquæ calcis unc. iii.	4.	Strongly convulſed.	9 M. to 12.	25 M. to 30.
IV. METALLIC SALTS.				
R. Merc. corroſ. ſublimat. gr. iv. aquæ pluv. unc. ii. M. fiat ſolut.	4.	Much convulſed.	4 M. to 8.	16 M. to 20.
R. Salis martis ſcrup. ii. aquæ pluv. ſeſcunciam. M. fiat ſolut.	5.	Much diſturbed.	25 M. to 50.	1 H. to 2.
R. Vitrioli albi ſcrup. ii. aquæ pluv. unc. ii. M. fiat ſolut.	4.	Convulſed.	20 M. to 35.	2 H. 1-4th to 2 H. 3-4ths.
V. ESSENTIAL OILS.				
R. Ol. eſſent. e fol. ſabin. gutt. xx. aquæ pluv. unc. ii. ſacch. alb. ſeſquedrachmam. M. S. A.	2.	Very much diſturb.	9 M. to 15.	2 H. to 2 1-half.
R. Ol. eſſent. e fol. abſinth. gutt. xx. aquæ pluv. unc. ii. ſacch. alb. ſeſquedrachmam. M. S. A.	2.	Somewhat convulſ.	8 M. to 12.	1 H. 1-4th to 1 H. 3-4ths.

VI. EXPRESSED OILS.

R. Olei expreſſi ſem. ricini unc. i.	4.			3 H. to 5.
R. Olei expreſſi ſem. lini unc. ii.	4.			10 H. to 12.
R. Olei olivarum unc. ii.	4.			24 H. to 34.

VII. BITTERS.

R. Succi ſummit. tanaceti recent. ſeſcunciam.	4.	Very much diſturb.		50 M. to 70.
R. Succi ſummit. rutæ recent. unc. ii.	4.	Ditto.		55 M. to 65.
R. Succi ſummit. abſinth. rom. recent. unc. ii.	4.	Ditto.		60 M. to 70.
R. Succi fol. juglandis recent. ſeſcunciam.	4.	Ditto.		54 M. to 64.
R. Aloes ſocot. dr. ſſ. aq pl. ſeſcunciam, ſimul terendo fiat ſol.	4.	Much diſturbed.		2 H. 3-4ths to 3 3-4ths.
R. Fol. jugl. rec. ſeſcunciam, aq. pl. unc. vi. coq. ad colat. unc. iii.	4.	Somewhat diſturb.		4 H. to 5 1-half.
R. Flor. lupuli exſicc. dr. ii. aq. pluv. unc. vi. coq. ad colat. unc. iii.	4.	Much diſturbed.		2 H. 1-half to 4 1-half.
R. Pulv. ſem. ſanton. ſcrup. ii. aq. pl. unc. vi. coq. ad colat. unc. iii.	5.	Ditto.		5 H. to 8.
R. Rad. gent. exſicc. inciſ. ſcr. iv. aq. pl. unc. vi. coq. ad colat. unc iii.	2.	Somewhat diſturb.		10 H. to 12.
R. Ætheris vitrioli dr. ſſ. aquæ font. unc. i. M. & obteretur phiala.	4.	Convulſed.	3 M. to 4.	5 M to 7.
R. Spiritus vini Gallici (Anglicè *French Brandy*) ſeſcunciam.	3.	Ditto.	Ditto.	14 M. to 16.
R. Spiritus frument. (Scoticè *Whiſkey*) ſeſcunciam.	2.	Ditto.	4 M. to 5.	14 M. to 17.
R. Vini rubri ſeſcunciam.	5.	Ditto.	5 M. to 6.	15 M. to 20.
R. Olei camphorati Ph. Ed. unc. ii.	4.		4 M. to 8.	15 M. to 20.
R. Pulv. cort. Per. dr. i. aq. pluv. unc. iv. coq. ad colaturæ unc. ii. camphoræ (in ſpiritu vini ten. gutt. xx & mel. deſpum. dr. ſſ. ſol.) ſcrup. i. M.	4.	Very much diſturb.	4 M. to 11.	19 M. to 30.
R. Fellis bovini recentis unc. ii.	3.	Much diſturbed.	5 M. to 7.	20 M. to 35.
R. Folior. nicot. ſeſquedrach. aq. font. unc. vi. coq. ad colat unc. iii.	4.	Very much diſturb.	15 M. to 35.	41 M. to 60.
R. Pulv. rad. jalap. dr. i. aq. pluv. unc. vi. coq. ad colat. unc. iii.	2.	Somewhat diſturb.		2 H. 1-4th to 2 H. 1-half.
R. Gum. aſſæ fœtidæ dr. i. aq. font. unc. ii. ſimul terendo, M.	4.	Much diſturbed.		3 H. to 5 H.
R. Fol. ſpigel. Maryland. dr. i. aq pluv. unc. vii. coq. ad colat. unc. ii.	4.	Somewhat diſturb.		2 H. 3-4ths to 5 H. 1-half.
R. Pulv. cort. Per. dr. i. aq. pluv. unc. iv. coq. ad colat. unc. ii.	4.	Ditto.		4 H. 1-half to 7 H.
R. Pulv. rad. rhei dr. i. aq. pluv. unc. vi. coq. ad colat. unc. iii.	2.	Ditto.		6 H. to 7 H.
R. Fol. ſenæ dr. ii. aq. pluv. unc. iv. coq. ad colat. unc. ii.	4.	Ditto.		8 H. 1-half to 13.

From obſerving the efficacy of common ſalt in deſtroying worms, beyond that of Glauber's, in the preceding experiments, I have ſeveral times directed the former to be exhibited in glyſters, in ſome ſtrongly marked caſes of aſcarides, and it has generally in a few minutes, a quarter, or half an hour, brought away a conſiderable number of thoſe animals, with relief. And from remarking the ſuperior effects of the oleum camphoratum, to thoſe of the ſimple expreſſed oils, in the ſame experiments, I was led to preſcribe the following glyſter in adults, in the ſame ſort of caſes, and have found it a more efficacious remedy againſt the violent itching and other painful ſymptoms of the anus, than any I had ever yet met with. It generally gives ſome immediate eaſe; ſtays all night, without any inconvenience; comes away in the morning, ſometimes with a natural ſtool, ſometimes without; ſeldom brings away any live animals, but ſometimes dead ones, or a viſcid and ſlimy matter. I am inclined to think the glyſters might be exhibited in double quantity, without inconvenience, if found neceſſary; but I have not yet tried it.

℞.

℞. Camphoræ dr. i. olei olivarum ii. unc. M. ut fiat ſolutio pro enemate, hora decubitus omni nocte ad tertiam vicem injiciendo. Deinde repetatur enema alternis noctibus ad quartam vicem, ſi opus fuerit.

XII.

Obſervations on the Plague, Quarantines, &c. in a Letter from Dr Matthew Guthrie, *Phyſician at St Peterſburgh, to Dr* Duncan.

SOME time ago, I did myſelf the pleaſure to ſend you a ſmall bag of the rhododendron chryſanthum, from the mountains of Siberia, to make trial of in your Diſpenſary, in gouty and rheumatic caſes, which I ſee has been received, by your inſerting an extract of my letter in the Medical Commentaries. I ſhould be much pleaſed to ſee the reſult of ſuch experiments, either in the ſame uſeful publication, or by private communication, providing your many important occupations ſhould admit of a ſpare hour.

In the mean time, I ſhall take the liberty to tranſmit to you ſome remarks upon quarantines, and

and the plague, which I have had an opportunity of collecting at the Ruſſian army in particular, and in this country in general, which has been ſo ſeverely viſited with this ſcourge of mankind ſome years ago. I had long entertained an opinion, that the term of quarantine, as eſtabliſhed in the ſeveral countries of Europe, was unneceſſarily long, and that from this circumſtance it defeated, in a manner, its own end; but I was much confirmed in my way of thinking, by finding men of the greateſt practice and experience, whom I conſulted on the ſubject at the army in 1772, (where I had been carried by profeſſional duty), of the ſame opinion. However, even thus emboldened to ſpeak, I do not believe I ſhould have had courage to make an attack on laws that have had the ſanction of ages, if I had not the authority of the great Cullen on my ſide, who has expreſſed ſimilar ſentiments, in his new publication, Firſt Lines of the Practice of Phyſic; and I ſhall therefore cover my remarks with the paſſage alluded to, when treating of the plague. He expreſſes himſelf thus:

"With reſpect to quarantines, we are per-
"ſuaded, that the quarantine of perſons may
"ſafely

" ſafely be much leſs than forty days; and if " this was allowed, the execution of them would " be more exact and certain, and the tempta- " tion to break them would be in a great mea- " ſure avoided."

Chance threw in my way an excellent opportunity of examining into the merits of this opinion, by conſulting the Phyſicians and Surgeons of the Ruſſian army, lying in the conquered Turkiſh provinces of Moldavia and Walachia, where the plague ever obtained more or leſs during the whole war, and at the beginning raged with deſtructive violence; and on addreſſing myſelf to Baron Aſh, Phyſician-general, I had an anſwer that met my ideas on the ſubject.

I ſuggeſted to him a doubt of the poſſibility, that the very active contagion of the plague could remain ſo long latent in the body as the quarantine of perſons ſeemed to imply, and that it appeared to me to be founded on an imperfect knowledge of the diſeaſe, drawn from a period of ignorance, or of general conſternation and terror.

His anſwer was, that he did not think it poſſible that the contagious matter of this violent diſeaſe

diſeaſe could lurk longer in the body than fourteen days, without declaring itſelf on or before that period; but that, from his own obſervation and experience, he could not take it upon him to ſay that it could be concealed ſo long. Such were likewiſe the anſwers I received from the other medical gentlemen whom I conſulted upon the ſubject. Some gave a little more latitude, and ſome leſs, (as it can only be a matter of opinion), but none exceeded fourteen days, and few came up to it.

The difficulty of aſcertaining the exact time when the infection is received, and conſequently the interval that takes place before the attack of the peſtilential fever, muſt appear upon the face of the caſe, except experiments were to be made on purpoſe, which is ſcarcely to be expected. However, the intrepidity of a ſingle man has thrown ſome light upon the matter.

This was Mathias Degio, one of the ſurgeons of the hoſpital at Buchareſt, a building appropriated to the cure of the plague in the Ruſſian army. He, perceiving the gentlemen of his profeſſion condemned, in a manner, to death, if punctual in their duty, had the reſolution to inoculate himſelf for the plague, in the full con-

fidence

fidence of its efficacy, and ever afterwards found himſelf invulnerable, whilſt his companions around him were falling victims to its fury.

He produced the diſeaſe, by inſerting with the point of a lancet, under the epidermis of his arm, matter from a peſtiferous abſceſs, and followed the cold regimen obſerved in the ſmall pox, as he had imitated its mode of inoculation. On the fourth day of the puncture the fever declared itſelf, and he being perfectly devoid of fear, got through the diſeaſe, without feeling more inconveniency than if it had really been that which he imitated. He drank freely of cold water, with vinegar, or a little wine, and kept generally out of doors. This beverage was the only remedy that had the appearance of medicine, which he had recourſe to; and he relied for the reſt on air and Providence. Now this caſe ſeems to point out the fourth day after inſertion, as the period that the diſeaſe ſhews itſelf; however, it is a pity that this fact reſts upon one experiment. I have made alſo particular enquiries concerning the plague and quarantines amongſt my profeſſional brethren, that ſurvived the deſtruction of the faculty at Moſcow; and I am inclined to think, from the whole of their

their information, that this dangerous diſeaſe finds entrance into countries either by means of goods, or by men purchaſing the connivance of quarantine guards, to paſs at an early period, without having undergone ſufficient purification, with the very garb that they wore in the infected kingdom, and probably with other property concealed in their pockets, and about their perſons; for here I ſuppoſe the real danger lies, as inanimate matter may conceal contagion for a length of time, without any criterion to judge of its preſence; and I am told this accident has ſometimes happened in this country, from the natural impatience of men on the proſpect of ſo long a reſtraint, hazarding every thing, and laviſhing their money to elude it. Now, it is probable, that inſtead of the diſtant period of forty days, (diſtant indeed to a man returning to his friends and country, after a long journey and abſence), if the duration of purification was reduced to three weeks, and made more effectual by bathing and well cleaning the body with ſoap and water, ſo as to remove every adhering particle, and afterwards dreſſing them in clean clothes, that had never run the riſk of infection, inſtead of the inadequate and ineffectual ceremony

mony of ſmoaking. Whilſt all ſorts of perſonal property ſhould remain to be aired and purified with the other goods, except money, which might undergo the operation of ſcrubbing with its poſſeſſor, before being allowed to circulate through the hands of the public. I ſay, that with theſe precautions, I am convinced in my own mind, that the quarantine of perſons might be much ſhortened, without danger to the ſtate; nay, that the danger would be much leſſened, by ſuch alteration in the law, from the temptation to break it being in a great meaſure removed; but that government, at the ſame time, cannot be too careful in airing and purifying goods, and even perſonal property; although I ſhould think that this alſo might be effected in leſs time, as it probably depends more upon the means employed, and the frequently preſenting of different ſurfaces to the air, than in the duration of ſuch labour. I ſuſpect that religious ſuperſtition has had ſome ſhare in pointing out exactly forty days.

I ſhall now give you what particulars I learned with regard to the plague, from the medical gentlemen at the Ruſſian army, and from other practitioners well verſed in the diſeaſe.

Subſtance of Notes taken at the RUSSIAN ARMY.

Symptoms of the Plague.

The Phyſician-general informed me, that on the attack of the diſeaſe, the patient was ſeized with a dull pain in the head, reſembling the effect of phlogiſton from charcoal *, accompanied with a ſhivering and univerſal weakneſs, a bitter taſte in the mouth, nauſea and a heavy inflamed eye. Theſe ſymptoms were ſucceeded by a vomiting, and a bubo or bubos made their appearance in the inguinal or ſubaxillary, and ſometimes parotid glands, but always lower down than where the venereal bubos appear. After thoſe glandular ſwellings, there ſometimes followed livid-coloured carbuncles on different parts of the body, even on the bubos themſelves; but it is remarked, that if the hands or feet were the ſeat of them, the patient ſeldom or never recovered. Dr Aſh alſo obſerved them to be

* I have endeavoured to deſcribe the effects of phlogiſton from charcoal on the human body, in a letter to Dr Prieſtly, an extract of which is publiſhed in the 69th volume, I believe, of the Tranſactions of the Royal Society; and have adjoined the mode of cure, as practiſed in Ruſſia, where the accident is very common.

be attended with the greateſt danger, when ſeated on the dorſal ſpine.

If medicine did not relieve the patient ſoon after this period, a delirium came on, attended with a ſmall quick pulſe, and convulſions put an end to the patient's life. Such were the principal ſymptoms of the plague, in the hot climate where the army lay.

The mode of cure which they found the moſt effectual, was beginning with a vomit on the appearance of the firſt ſymptoms, and working it off with acid drinks. If the nauſea and bitter taſte in the mouth was not removed by the firſt, they gave a ſecond, and ſometimes a third and fourth; nay, if the ſymptoms were very urgent, they gave two or three in the ſpace of twelve hours, as there is no time to be loſt in this diſeaſe; for they did not find this ſpecies of evacuation ſubject to the ſame objections as briſk purges, which a man in the plague is unable to ſupport; nay, they are even dangerous, although he bears briſk vomits, and a repetition of them, when the nature of the caſe require it. The ſtomach thus cleared, they gave the following powder every morning: ℞. Pulv. rhei elect. flor. ſulph. aa ſcrup. i. ipecac. gr. iii. M. f.

pulv.; and every hour, ℞. Camphor gr. ii. nitr. pur. gr. v. M. f. pulv.; and if coſtive, a laxative glyſter was adminiſtered every evening, compoſed of decoct. flor. chamomel. cum acet. vini, with or without ſoap, according to circumſtances.

The head, temples and bubos were frequently bathed with warm vinegar, and the laſt urged to ſuppuration, with emollient cataplaſms; but in caſe they were found to baffle all attempts to bring them forward, they were then ſcarified or extirpated, and the patient ordered to drink plentiful of aq. calcis. Bark was given after evacuation, joined to the flor. ſulph. in the proportion of one ounce of the firſt to one dram of the ſecond, divided into ſixteen powders, and taken in twenty-four hours. When delirium came on, bliſters were applied to the legs and arms, and camphor given largely. Vegetable and mineral acids were indiſcriminately uſed; but they found the vegetable to remain upon the ſtomach ſometimes, when the mineral was thrown up; and of the latter, they preferred the vitriolic. They gave acidulated drinks in quantity through the whole diſeaſe,

and

and the food conſiſted of acidulated water-gruel, and fruit when they could procure any.

The air of the room was kept charged as much as poſſible with acetous vapours; and the Doctor concluded this outline of their mode of cure, by remarking, that while the bitter taſte continued, there was little hopes of the diſeaſe abating.

The other medical gentlemen agreed ſo cloſely in their accounts with their chief, that I have thrown the whole into one narration.

Since my return to Peterſburg, I have got ſome information from gentlemen, who ſerved all the laſt war in the plague hoſpitals, but whom I did not meet with at the head quarters (Jaſſy) during my reſidence there.

One of thoſe gentlemen, Mr George Smyth, ſurgeon-major of the Imperial Land cadet-corps of Nobles, to which I am Phyſician, is a rare inſtance of a man ſurviving two different attacks of the plague, with all its characteriſtic ſymptoms, ſuch as bubos, carbuncles, *&c.* and for this reaſon, his account muſt be intereſting. The method of cure that twice ſaved Mr Smyth's life, and what he uſed to his patients, during near five years that he was employed in treat-

ing this diſeaſe, was beginning with a ſtrong vomit, compoſed of pulv. ipecac. dr. ſſ. tart. emetic. gr. i. tart. vitriolat. ſcrup. i. M. f. pulv. This was taken for a doſe, and repeated once or twice, as the caſe required, during the firſt two days, and, in the intervals, was given an opening ptiſan of fruct tamerendor, and manna, to prevent conſtipation. When theſe evacuations had been made for a couple of days, or ſooner, if the ſymptoms were urgent, he gave the bark in quantity, joined to the flour of ſulphur, without loſing time, (as he expreſſed it), with camphor and nitre. The reſt of his practice agreed ſo exactly with what is given above, that I ſhall only add ſome remarks he made upon the diſeaſe.

He obſerved, that the carbuncles are a more advanced ſymptom of the plague than the bubos, and a ſign of the peſtiferous virus being in a more active and malignant ſtate; and as for the petechiæ that ſometimes appear towards the end of the diſeaſe, they are regarded as a mark of the higheſt poſſible degree of malignity, and as heralds of approaching death. However, this is a ſymptom that we are accuſtomed to ſee in putrid diſeaſes of inferior note, where I believe

lieve bubos and carbuncles would alarm a practitioner much more. He alſo obſerved with Dr Aſh, and the other gentlemen at the army, that the peſtiferous bubo is particularly marked by its ſituation from thoſe that appear in other diſeaſes, and is perhaps the ſureſt method of diſtinguiſhing the plague in ſome caſes from the putrid malignant fever in its worſt aſpect in warm climates; although it muſt be allowed, that the plague ſometimes appears without this characteriſtic mark; and then the Phyſician can only judge from the violence and rapid progreſs of the ſymptoms. He alſo ſaid, he had ſeen men in apparent good health, inſtantaneouſly drop down, as if ſhot with a muſket-ball, by the ſudden action of the peſtiferous miaſma, and upon duty again in twenty-four hours, perfectly recovered by the operation of a ſtrong vomit: This looks as if the contagious matter exiſted in a very looſe ſtate in the firſt paſſages, at the beginning of the diſeaſe.

The Surgeon-major of the Imperial Convent of Noble Ladies, is alſo a veteran army-ſurgeon, and made a few additional remarks to me upon the diſeaſe. He ſaid, that the carbuncles which he had ſeen in that diviſion of the army where

he ſerved, were of two ſizes; one as big as a pigeon's egg, and the other ſomething ſmaller; they likewiſe had the form of an egg, cut longitudinally, with the flat ſurface applied to the body. They are attended with more or leſs danger, according to their colour, red, or livid; the laſt is more dangerous than the firſt; but neither the one nor the other is attended with ſo much, if they ſuppurate, as when dry. That there is a line moſt diſtinctly drawn between the plague and malignant fever, by the impetuoſity and violence of the ſymptoms, when even no bubos appear; for he ſays, the patient will be in perfect health in the evening, and in the morning you find the nervous ſyſtem, in ſuch a ſtate of debility and diſorder, that with difficulty you can get anſwers to the neceſſary medical queſtions.

His own practice, and that of the hoſpital which he attended, conſiſted in giving a cold turbid infuſion of the bark in vinegar in large doſes of two drams (ſubſtance) every two hours, as ſoon as the firſt paſſages were cleared; and he ſeldom gave purges, except when the vomit did not procure a ſtool, which was ipecacuanha in ſubſtance.

You

You will obſerve, that thoſe gentlemen lay a ſtreſs upon diſtinguiſhing the plague from the worſt ſort of malignant fever in hot countries; and it is not without reaſon, as bad conſequences have attended confounding of them on the breaking out of the plague. I am credibly informed, that the great havock made in Moſcow was principally owing to this circumſtance; for it obtained ſome time before diſcovered by gentlemen unacquainted with the diſeaſe, and before they would acknowledge its exiſtence, although ſome veteran army practitioners recognized its appearance, under one of its forms, and endeavoured to alarm their brethren, but in vain for a time.

As an appendix to theſe few outlines of the Ruſſian plague, I ſhall give ſome paſſages of a ſpeech that I heard Baron Aſh deliver laſt year, on being elected a member of our Imperial Academy of Sciences, as it falls into my ſubject. This harangue was on the advantages that ſcience in general, and medicine in particular, have acquired from war.

He ſaid, that at the Ruſſian army laſt war, the medical gentlemen had, by long obſervation, and repeated experiment, aſcertained, that the

the plague does not depend upon any particular conſtitution of the air, but is communicated only by contact; and they had repeatedly ſucceeded in ſuppreſſing it in different diviſions of the army, by the immediate ſeparation of the infected with their attendants, and burning every thing belonging to them, or that they had touched.

That they found the greateſt advantage accrue to the army, from keeping the ſoldiers in ignorance of its exiſtence, till ſuppreſſed; for, by this means, they preſerved their peace of mind, and health of body; and they found an exact military diſcipline, the beſt preſervative againſt the diſeaſe. For the cure of thoſe infected, they found the cold regimen, a free circulation of air, vegetable and mineral acids, ipecacuanha, rhubarb and bark, to be the propereſt remedies. That to purify the air in hoſpitals appropriated for their reception, gunpowder was found moſt efficacious, probably from the commotion given to the air in exploſion, over and above its action in common with other fumes.

To reſiſt infection, courage and fortitude of mind is neceſſary, as conſternation and terror

ſeem

ſeem to prepare the body for the reception of the diſeaſe.

In heated rooms, the diſeaſe is ungovernable; it is only in free air that it is to be treated.

The Baron then ſaid a great deal in favour of inoculation of the plague, in caſes of danger from infection, and ſupported his opinion with the caſe of Mathias Degio given above; and the analogy that has been obſerved between the plague, ſmall-pox, and the contagious diſeaſe that ſo often attacks horned cattle, a ſpecies of animals ſo neceſſary to agriculture, and the general uſe of man; he ſaid, that a number of enlightened men had endeavoured to find a remedy for theſe different evils, and that they had as yet found nothing to anſwer equal to inoculation; and mentioned a ſet of fortunate experiments made laſt year by Mr Schumacher, in different parts of the dutchy of Mecklenburg, to inoculate horned cattle for the contagious diſeaſe ſo fatal to them, which are well worth the attention of the public, and to be found in a treatiſe, written in the German language, and publiſhed at Berlin 1779, in 8vo, entitled, "A "Method of ſtopping the Danger directly on "the

" the Appearance of the Diſeaſe amongſt horn-
" ed Cattle, illuſtrated by Experiments and
" Facts."

And ſome time before, the late learned Profeſſor Erxleben of Gottingen, had alſo publiſhed another upon this ſubject, in German, at Gottingen, entitled, " The Art of curing the Diſ-
" eaſes of Cattle." Gottingen 1771. 8vo.

Such, good Sir, is the information I have been able to obtain in this country, of a diſeaſe that Providence has been pleaſed to keep at a diſtance from ours, for a number of years; and that very reaſon, is the only one I ſhall offer for ſending it, as Phyſicians, like other natural philoſophers, require a number of well atteſted facts, to form opinions upon thoſe your good fortune has denied you at home on this ſubject; and conſequently, I preſume they muſt be acceptable from abroad. And if my Ruſſian news can give you any ſatisfaction, I ſhall take a pleaſure in communicating them, when opportunity offers, in return for the real advantages I reap from the peruſal of your uſeful Commentaries, which are particularly ſo to us, who live abroad, and are, at the ſame time, anxious to know what

what paſſes at home in the line of your profeſſion.

P. S. There is a curious fact, which I recollect in the Baron's ſpeech; and as it poſſibly may not be generally known in Great Britain, I ſhall mention here: "That the Surgeons of "the Pruſſian army laſt war, have diſcovered "applications with cold water, to be the moſt "effectual remedy in violent concuſſions of "the brain." This application, I have repeatedly uſed with ſucceſs.

This ſpeech will be printed, I ſuppoſe, in the acts of the Academy, according to cuſtom, as the harangue of a new member.

SECT.

SECT. III.

Medical News.

DR FITZPATRICK of Dublin, in a letter to Dr Duncan, gives the following remarkable inſtance of convulſive affections in two young ladies, being induced from a very uncommon cauſe:

"I was called to a Mrs Bolger, in Shipſtreet, in the year 1779, who was violently attacked with a nervous colic. Its violence was ſo great as to equal, by her own deſcription, the pains of labour, but of much longer duration, being completely remittent; for ſhe was ſcarce ever free from pain for two days; but at times, the paroxyſms were ſo ſevere, as to render it difficult to keep her in bed.

Having

Having occaſion to viſit two young ladies of the name of Noy, about two hundred yards from Mr Bolger's houſe, who were then highly feveriſh, and in the eruptive ſtage of the meaſles; immediately on entering their chamber, I attempted to feel one of the young ladies pulſe, when ſhe ſcreamed out, and ſaid ſhe got a violent pain, on which I let her hand looſe, and went to the other ſide of the bed, (imagining ſhe was joking), to feel the other lady's pulſe; and by the time I was on the other ſide, and feeling the ſiſter's pulſe, the firſt lady was completely convulſed, and the ſecond cried out in the ſame manner. Their limbs were drawn up, and their arms diſtorted, hands clinched, *&c.* But the ſecond lady's attack was very trifling, when compared to that of the lady's whoſe pulſe I firſt felt; for the ſecond lady rather joked on the matter, after four or five minutes; whereas the firſt was ſo ill, and her limbs ſo convulſed for near an hour, as to render it neceſſary to hold them, and to adminiſter aſſafœtid, valerian, and ſome thebaic tincture, before the parts were quieted; from which time, there never was any ſimilar attack, nor did it ever happen before.

The

The following conjecture may perhaps afford ſome explanation of this ſingular affection.

I ſuppoſe, that a redundance of electrical fluid, or animal ſpirit, was irregularly circulating in Mrs Bolger, and that I became the conductor of that fluid, being, as it were, inſulated on dry or parched flags, which continue all the way from Mrs Bolger's to Miſs Noys; and that ſo ſoon as I arrived there, and had applied my finger to the lady's wriſt, that ſhe was immediately affected; but that on going to the other ſide of the bed, the matter was likewiſe conveyed, but not ſo ſtrong, as it was in ſome meaſure exhauſted in the touch of the firſt lady. I have heard, that the application of live pigeons to the navel of children labouring under convulſive complaints of the bowels, has relieved them, and that the pigeons have inſtantly become convulſed; but it is neceſſary to remove the feathers from the part of the pigeon that is to be applied: I ſuppoſe becauſe feathers are non-conductors. If this be a fact, may we not ſuppoſe, that the redundant electric fluid, or animal ſpirit, is conveyed to the pigeon, and ſo cauſes the convulſed motion in him, whilſt the infant

infant is freed from the diſorder? And may not this be an uſeful hint to Phyſicians, in reſpect to cautioning them againſt what I was guilty of? Or might not the eruptive ſtage of the meaſles diſpoſe the Miſs Noys to be affected, as we ſometimes obſerve a ſimiliar ſymptom in the eruption of the ſmall pox? Or might not the general irritability, heightened by the fever, diſpoſe them to be attacked?"

* * * *

Dr Pearſon, Phyſician at Doncaſter, in a letter to Dr Duncan, gives the following account of the reſult of a number of experiments which he has made on the air contained in the Buxton waters. Although we have reaſon to hope that Dr Pearſon may ſoon publiſh the experiments themſelves, yet as his ſentiments are very different from the opinions which have hitherto been entertained on that ſubject, the following ſhort view may in the mean time be of ſome uſe, both in gratifying curioſity, and in prompting others to exert their induſtry on the ſame ſubject.

"From the ſpaces between the pavement of the floor of the bath at Buxton, through which the water ſprings into the bath, a vapour or air is

ſeen pretty frequently to ariſe in bubbles of a larger or ſmaller ſize, and in a larger or ſmaller number, that paſs immediately through the body of water to the ſurface, and there burſt and eſcape.

Theſe bubbles of air may be collected in great quantities, by placing inverted bottles and funnels full of water, and immerſed in the bath, over the parts of the floor of the bath where they are apt to ariſe.

The air ſo collected has the following amongſt other properties:

1. If to two meaſures of this air be added one meaſure of nitrous air, there will be no colour, turbid appearance, or heat produced by ſuch mixture; nor any diminution take place immediately or by ſtanding together.

2. It is fatal to animals the inſtant they breathe in it.

3. It extinguiſhes flame immediately.

4. It will not combine with water or with cauſtic ley, although the combination be aſſiſted by heat and agitation.

5. It does not diſturb the tranſparency of lime-water.

6. Vegetables

6. Vegetables *live* in greater health and vigour, and *grow* more luxuriantly, than in common reſpirable air, either in the open air, or under ſimilar circumſtances of confinement, *&c.*

7. It has no power of diminiſhing or removing the fœtor of putrid animal muſcles.

8. After being transfuſed through water, or lime-water, or cauſtic ley, thirty or forty times, its quantity is not diminiſhed, nor its properties changed.

I ſhould have obſerved, that the water, when freſh drawn from the well or bath, exhibits ſmall beads or bubbles, that adhere to the ſides of the glaſſes, and which eſcape or diſappear by ſtanding in the ordinary heat of the air. Theſe beads are the above air. This air has been hitherto affirmed, in the moſt poſitive manner, to be fixed air.

Air is alſo ſeparated from Buxton water by boiling.

Air ſo ſeparated,

1. Does not combine with water or cauſtic ley.

2. Does not render lime-water turbid.

3. Two meaſures of this air added to one meaſure of nitrous air, always produces an

orange-colour, turbid appearance, and heat for a few ſeconds, and a diminution of quantity. Sometimes the diminution is, after a few days ſtanding, two meaſures and one ninth; at others, two meaſures and ſix or ſeven ninths.

4. Animals always live a much ſhorter time in this air than in common air, and ſometimes are killed by it in a few minutes.

The water that affords this air by boiling, and which has been boiled ſome time after it ceaſes to yield this air, precipitates lime from lime-water as copiouſly as before, and requires as large a proportion of lime-water to ſeparate the fixed air in the water as before boiling.

Matlock water, another warm mineral water in Derbyſhire, contains about two ounce-meaſures of air, of greater purity than common air, in eight wine-quarts of water; and ſeven or eight ounce-meaſures of fixed air in the ſame quantity of water. The firſt is ſeparated by boiling the water; the latter, by ſaturating the fixed air with lime-water, and afterwards decompoſing the ſediment by acids."

* * * *

Dr Biſſet, Phyſician at Knayton, in a letter to Dr Duncan, gives the following account of ſeveral

veral remarkable particulars reſpecting an old woman in that neighbourhood.

" On the 24th of Auguſt 1781, I called at the poor-houſe in Borrowby, a village ſituated on the declivity of a hill in this neighbourhood, to ſee Mary Wood, a poor woman, who is ninety-eight years and five months old. After taking the outlines of her face, and a half length, I aſked her ſeveral queſtions, her anſwers to which afforded the following information. Her mother, who lived at Kirby Steven, in Weſtmoreland, attained the age of 112 years; and Mary Wood expects to live preciſely to the ſame age. She does not remember her father, who died young. Mary has been affected with a cough as far back as ſhe can remember; but ſhe thinks it began in the fifteenth year of her age; about the ſame time, or in ſome time after the onſet of the chronic habitual cough, her miſtreſs, who chewed a little tobacco, adviſed Mary to adopt the ſame remedy for her cough, which, I ſuppoſe, was moiſt, or attended with an expectoration of ſome phlegm, as it is now. She has chewed tobacco ever ſince, and has a ſmall chew always in her mouth, except when ſhe eats or ſleeps. Though an immoderate or frequent

uſe of tobacco, either by chewing or ſmoking, eſpecially when it is attended with a copious ſpitting of ſaliva, generally palls the appetite, and occaſions ingeſted food to deſcend into the ſmall inteſtines before it is ſufficiently digeſted, and by conſequence debilitates the body, and in proceſs of time gives riſe to many bad effects; yet its effects with Mary Wood are preciſely the reverſe: For, if from poverty ſhe happens to be deprived of tobacco during the ſpace of two or three days, ſhe becomes low-ſpirited, dejected, inappetent, and feeble, and is either unable or unwilling to get up; and ſhe would probably ſoon die, were ſhe to be totally deprived of it. But on being enabled, through the bounty of ſome curious viſitor, to reſume the chewing of her beloved tobacco, her fibres are again inſtantly braced up, her appetite, which is generally very good, returns, and her health is completely re-eſtabliſhed. Indeed, as ſhe is forced to be very frugal of her tobacco, ſhe takes but a ſmall chew into her mouth at a time; and it is probable that tobacco, on being uſed ſparingly in this manner, might prove ſerviceable in ſome caſes, particularly to perſons that are naturally ſtrong, but affected with a moiſt aſthma. I was informed

informed by an old man who had for many years been aſthmatic, that he had taken various medicines for the diſorder; but that the frequent chewing of a little tobacco, and ſwallowing a little of the ſpittle ſometimes, was the only remedy from which he reaped any benefit; and that he was accuſtomed formerly, on being greatly oppreſſed with the aſthma, to ſwallow as much of the ſpittle in a morning, faſting, as ſufficed to excite vomiting, which always afforded the moſt immediate relief. Mary Wood is not liable to ſpit ſaliva in chewing tobacco.

She was twice married, and had five children, who all died young. Half a year ago ſhe got twelve molar teeth, moſtly in the lower jaw, eight of which only are now remaining; and as they are all ſomewhat looſe, it is doubtful whether they originate from ſockets, or only from the gum or perioſteum. The gums of ſome old people become callous, ſo as to enable them to eat hard biſcuit; and it is well known, that the perioſteum is apt, in particular places, to oſſify. I felt, with my finger, two ſmall ſharp teeth in the anterior part of the gum of the upper jaw, that cut within a week paſt. She ſits up during the greater part of the day, and eats with a good

appetite, whether up or in bed, ſuch food as other poor people in the poor-houſe are ſerved with: She loves butchers meat, and delights in the fatteſt pieces: but ſhe lives moſtly on milk and bread, and oat-meal and milk; ſhe drinks butter-milk as often as ſhe can procure it, and her common drink is groundivy-tea. She has formerly been affected with a wandering rheumatiſm in a ſmall degree; and would certainly have been affected in a higher degree with it, or with a more grievous diſeaſe, if ſhe had been exempt from an habitual cough, with ſpitting of phlegm. About twenty years ago, ſhe loſt the ſight of her left eye, from a violent inflammation of it, which was attended with a vehement headach, being an ophthalmy of the whole ball of the eye, which is now ſunk. She imagines it was occaſioned by a large hail-ſtone which hit the eye. She now ſees but imperfectly with the right eye; but her hearing is tolerably good. She lies much in bed; but her ſleeps are neither long nor very ſound, as they are often interrupted by fits of coughing, which always terminate by the expectoration of ſome phlegm: Indeed long ſleeps would have diſagreeable effects, by ſuffering phlegm to accumulate.

At

At three o'clock in the afternoon, when I ſaw her, ſhe ſeemed cheerful, was healthy, breathed with perfect eaſe, and walked with great facility with the aid of a ſtick, her loins and head being pretty erect: but the dorſal vertebræ are ſomewhat prominent outward, but equally, in the form of an arch, no one vertebra being more prominent than another; but this curvature is not of an old date, as ſhe was formerly ſtraight; and ſhe has been rather tall for a woman, and ſtrong in proportion to her height.

She is affected in ſome degree with dizzineſs, a complaint moſt incident to old people; and though her breathing is perfectly free and eaſy, yet ſhe cannot lie with her head low, but is under a neceſſity of having it propped up, doubtleſs that ſhe may expectorate with more facility when attacked by a fit of coughing. Her pulſe is large, ſomewhat hard, and quick, and the ſtrokes are ſtrong, free, and equal. When I firſt felt her pulſe, it beat near a hundred ſtrokes in a minute; but as I thought ſhe might be fluttered a little by my preſence, I called again in half an hour, and after ſitting down by her for ſome little time on a bench at the door,

and

and aſking ſome farther queſtions, when ſhe appeared calm and compoſed, I counted her pulſe again; it then beat eighty times in a minute; and this I take to be the common ſtandard of her pulſe. Her thirſt has in general been greater than uſual; owing, I ſuppoſe, partly to the conſtant chewing of tobacco, and partly to the quickneſs of her pulſe; but her tongue is moiſt and well-coloured, as it is generally in catarrhal affections with ſpitting. She is ſo temperate in her body, notwithſtanding the uncommon quickneſs of her pulſe, that ſhe never requires any laxative medicine. The tobacco is probably conducive towards promoting this good effect. As her face is rather plump, it is not greatly wrinkled, her forehead excepted. On the whole, may it not be inferred, that Mary Wood has been in ſome degree phthiſical from the fifteenth year of her age, that is, during the ſpace of eighty-three years? I make no doubt but ſhe has an hereditary latent ſcrophulous taint, which has been repreſſed by ſtrong fibres, joined with temperance; and it is probable that one or more of her children, had they lived to a more advanced age, would have been

been affected with a ſcrophula, or died conſumptive."

* * * *

A botanical ſociety at Lichfield, have undertaken to publiſh a literal tranſlation of the Genera and Species Plantarum of Linnæus. Our readers will be able to form ſome idea of this Work from the following preface of the tranſlators.

"The future improvements in agriculture, in medicine, and in many inferior arts, as of dying, tanning, varniſhing, with many of the more important manufactures, as of paper, linen, cordage, muſt principally ariſe from the knowledge of *botany*. For how can we aſcertain the more recondite properties of bodies, without firſt being enabled to diſtinguiſh them from each other? From the want of this ſcience, almoſt all the medicines, and many of the arts of the ancients, have been loſt to their deſcendents.

The labours of Linnæus are generally acknowledged to have beſt ſupplied this great ſource of future improvement, and yet his works have not hitherto properly appeared in the Engliſh language. Mr Lee indeed, in his introduction to botany, has well tranſlated and explained many parts

parts of the Philoſophia Botanica; Dr Berkenhout has given a lexicon of terms extracted from the ſame work; and Mr Milne has diſpoſed a great part of it with other botanical knowledge into the form of a dictionary. All theſe labours have their merit; but why ſhould not the works themſelves be tranſlated into our language? The conciſe and beautiful arrangement, for which they are ſo remarkable, is loſt in theſe diffuſe explanations of them.

Dr Withering has given a Flora Anglica under the title of Botanical Arrangements, and in this has tranſlated parts of the Genera and Species Plantarum of Linnæus; but has entirely omitted the ſexual diſtinctions, which are eſſential to the philoſophy of the ſyſtem; and has introduced a number of Engliſh generic names, which either bear no analogy to thoſe of Linnæus, or are derived from ſuch as he has rejected, or has applied to other genera; and has thus rendered many parts of his work unintelligible to the Latin botaniſt, equally difficult to the Engliſh ſcholar, and loaded the ſcience with an addition of new words.

We propoſe to give a literal and accurate tranſlation of the Genera and Species Plantarum

rum of Linnæus, which unfold and deſcribe the whole of his ingenious and elaborate ſyſtem of vegetation. The terms which he invented, or appropriated to thoſe parts of vegetables, which he either firſt diſcovered, or on which his ſyſtem is erected, are retained in the tranſlation with Engliſh terminations. As new ideas require new words to repreſent them, and muſt therefore be explained to the young botaniſt, it is of no conſequence from what language they are derived. Thoſe therefore already in uſe are preferred to ſuch as might be found in our own language, though ſimilar in their primitive ſignification; as ſuch words would be liable to preſent to the mind their vulgar meaning, which is not ſufficiently preciſe for the purpoſes of ſcience. Thus, *calyx* is uſed by Linnæus for the green cup beneath ſome flowers, for the ſheath from which others burſt longitudinally, for the leaves beneath the umbels of others, for the huſks of graſſes, the catkins of willow, nettle, *&c.* the veil over the flowers of moſſes, and the ſkin beneath the heads of muſhrooms. All this muſt be explained, whether it is repreſented by the word *calyx*, or by the word *impalement;* which latter, though uſed by ſome of the writers

writers above mentioned, is as difficult to the Engliſh ſcholar, as the word *calyx;* is not underſtood by thoſe who are already acquainted with the language of Linnæus; and does not aſſiſt the young botaniſt in his ſtudy of the original.

So the word *legumen* means a pod, in which all the peas or ſeeds are attached to the upper edge or ſuture; *ſiliqua*, a pod in which they are alternately attached to the upper and under one. If the former ſhould be termed *ſwad*, and the latter *pod*, they muſt ſtill be defined; and thus the meaning of them would be as difficult to acquire by the Engliſh reader, as that of the words *legumen* and *ſiliqua;* and would be ſo unintelligible to the Latin botaniſt, that they could not converſe together.

Hence we have retained the words *calyx* for flower-cup; *corol* for bloſſom; *ſtamen* for chive; *piſtil* for pointal; *pericarp* for fruit-veſſel; and ſome other technical words; ſuch as would neceſſarily be uſed in an Engliſh converſation by botaniſts acquainted with the original of Linnæus: For the explanation of theſe we muſt refer the reader to the books above mentioned; and muſt beg leave here to appriſe him of the following

following abbreviations of them: Cal. for calyx; cor. for corol; ſtam. for ſtamen; piſt. for piſtil; per. for pericarp. And as the diminutives of ſome of theſe are ſo perpetually neceſſary through the courſe of the work, we have endeavoured to form them ſo as to be eaſily familiarized to an Engliſh ear, and equally intelligible to the Latin botaniſt: as leaf, leaflet; ſtalk, ſtalklet; valve, valvelet; tooth, toothlet; ſpathe, ſpathelet; tube, tubelet; crown, coronet; corol, corollet; calyx, calycle; diviſion, ſubdiviſion: Of ſuch diminutives the words tablet, ringlet, rivulet, icicle, particle, *&c.* are in daily uſe.

Linnæus has arranged individual vegetables into families, and to theſe families or genera he has given names; and, as there are perhaps no generic names in our language, we have univerſally adopted thoſe of our author; thus, the words *triticum*, *hordeum*, *avena*, *ſecale*, are family names; which include variety of other graſſes, as well as the wheat, barley, oats, and rye, which we cultivate for our food; the generic name *amygdalus* includes the peach as well as the almond; *prunus* includes the cherry, apricot, and laurel, as well as the plumb; and *pyrus* the apple, ſweet-flowered crab, and quince,

as

as well as the pear; whence it would have been productive of much confuſion, to have given any of theſe Engliſh names to families, which belong to individuals. But in reſpect to the ſpecies or individuals of plants, where the trivial name is expreſſive of ſome peculiarity of the plant, we have tranſlated it by an equivalent Engliſh word; where it is merely a cognomen, the word uſed by Linnæus is retained: The quotations from other works are placed in the index-form, *as our author has diſpoſed them:* And the beſt received Engliſh names are added in their proper places, from Miller, Hudſon, Lightfoot, and referred to in the index of ſynonimes.

The learned reader will perceive, that we have made a ſlight change in the conſtruction of the ſexual diſtinctions of the claſſes, on account of the greater delicacy of modern language; hence the words, one male, and one female, are uſed in preference to one virility, one feminality. In regard to the general language, we have endeavoured to copy that of Linnæus with the moſt ſcrupulous exactneſs; for as this illuſtrious naturaliſt may be ſaid to have made a language, rather than to have found one, ſuitable to his purpoſe; and appears

to

to have ſtudied every part of his work, from the great outline of the ſyſtem to the moſt minute circumſtance of conſtruction and arrangement, with induſtry and ſagacity almoſt peculiar to himſelf, we have tranſlated it as far as might be, page for page, and line for line: And in forming the many neceſſary compound words, have laboured their conciſeneſs and diſtinctneſs, as our author has done, rather than the elegance of their combinations: And as our language allows of various kinds of compounded words, and thoſe terminating either as ſubſtantives, adjectives, or participles both active and paſſive, we were happy to find it as well adapted to our purpoſe as the Latin, though leſs ſo than the Greek. Thus, a wolf-dog, a ſky-lark, a ten-pound bill, a one-horſe chair, a two-man beetle, a ſix-penny loaf, five-card loo, a moth-eaten garment, a three-footed ſtool, a four-wheeled carriage, cloud-compelling, ever-living, are words uſed either in familiar converſation, or by reſpectable writers; and give us authority for ſimilar kinds of combinations.

We further propoſe to add as an appendix, the deſcriptions of ſuch new diſcovered plants as may come to our knowledge; and to give

a few plates for the aſſiſtance of the young botaniſt; and to publiſh the whole as ſpeedily as may be, in monthly numbers; wiſhing, as far as is in our power, to propagate the knowledge of this important branch of natural hiſtory amongſt all ranks of people."

* * * *

Mr Henry of Mancheſter, who lately publiſhed a tranſlation of Lavoiſier's Eſſays, Phyſical and Chemical, and who is juſtly celebrated for many important publications and diſcoveries in chemiſtry, is at preſent engaged, and has made conſiderable progreſs in tranſlating Mr Baumé's Chymie Experimentale et Raiſonnée, which he intends to publiſh with notes as ſoon as his other avocations will permit.

* * * *

A very important anatomical work, is at preſent in the preſs at Edinburgh, and will ſoon be publiſhed, entitled, Obſervations on the Structure and Functions of the Nervous Syſtem; illuſtrated with fifty-five copper-plate tables, containing one hundred and ſeventy-four figures. By Alexander Monro, M. D. Preſident of the Royal College of Phyſicians, and Profeſ-

for

ſor of Anatomy, Surgery, and Medicine in the Univerſity of Edinburgh.

The editor of this work, Mr Creech, bookſeller in Edinburgh, in an addreſs to the public, gives the following account of it:

"The above work is, without exception, the moſt ſplendid that has ever been produced from the Scottiſh preſs, and is ſo intereſting to philoſophy and ſcience, that it requires a farther explanation than can be given in a title page.

What has obtained the denomination of the *nervous ſyſtem*, is known to be that medium which is interpoſed between the living principle, and the different organs of which the bodies of animals are compoſed. The nerves are the inſtruments of ſenſation, and it is by their influence that all animal action is performed. They are the ſource of feeling, and they prompt all our propenſities, inſtincts, and movements. Hence a knowledge of their ſtructure, diſtribution, and functions, muſt be extremely important, both to the Philoſopher and the Phyſician, in the ſtudy of nature.

Though experiments, diſcoveries, and obſervations on the brain, medulla oblongata, ſpinal marrow, and nervous fibres, occupy the Au-

thor's chief attention in this work, yet the reader will find many uſeful and curious diſquiſitions with regard to the circulation of the blood, nutrition, ſenſation, muſcular motion, comparative anatomy, and many other articles neceſſarily connected with the general ſubject.

But, to give a more explicit idea of the nature of this publication, the editor has ſubjoined the contents of the chapters.

Contents of the Work.

Introduction.

Chap. I. Of the circulation of the blood within the head.

Chap. II. Of the membranes of the brain and cerebellum in general.

Chap. III. Of the communication of the ventricles of the encephalon with each other, as deſcribed by former authors.

Chap. IV. Of the communication of the ventricles of the encephalon with each other, by the author.

Chap. V. Of the abſorbent veſſels of the encephalon, and of the infundibulum and glandula pituitaria.

Chap.

Chap. VI. Of the uſe of the ventricles of the encephalon.

Chap. VII. Of the cineritious and medullary ſubſtances of the brain and cerebellum.

Chap. VIII. Of the ſuppoſed origin or formation of the nerves.

Chap. IX. Of the ſtructure of the ſpinal marrow.

Chap. X. Of the pia mater, the colour and texture of the nerves.

Chap. XI. Concluſions from the three laſt ſections.

Chap. XII. Order of the ſubſequent chapters mentioned.

Chap. XIII. Of the appearance of the nerves in their courſe, and particularly of their folds or joints.

Chap. XIV. Of the connection of the nerves in their courſe in general.

Chap. XV. Of the plexuſes of the nerves.

Chap. XVI. Of the connection of the nerves which run in oppoſite directions, ſo as to be joined by their ſmall branches.

Chap. XVII. Of the connection of the ſeveral cords which compoſe each of the nerves.

Chap. XVIII. Of the external covering of the trunks of the nerves, and of the cords or funiculi of which they conſiſt.

Chap. XIX. Of the ganglia of the nerves.

Chap. XX. Of ſpheroidal bodies, which, in ſome animals, make part of the nervous ſyſtem.

Chap. XXI. Of ſome principal nerves which have not been traced by authors with ſufficient accuracy.

Chap. XXII. Of the appearance of the nerves viewed with the microſcope.

Chap. XXIII. Of the nature of the energy of the nerves.

Chap. XXIV. Of the uſes of the nerves in general.

Chap. XXV. Whether the nerves convey the nouriſhment to our organs.

Chap. XXVI. Of ſenſation.

Chap. XXVII. Of the termination of the nerves in muſcular organs, and, whether the muſcles poſſeſs a vis inſita different from the vis nervea.

Chap. XXVIII. Of the manner and cauſes of the actions of the muſcular organs.

Theſe

Theſe ſubjects are illuſtrated with 55 copper-plates, containing 174 figures."

* * * *

An ingenious correſpondent at Paris, in a letter to Dr Duncan, gives the following account of ſome intended publications at that place.

"Mr Vicq d'Azyr is preparing an anatomy of the brain. It will be a large work, conſiſting of near ſixty plates. Thoſe which I have ſeen are very beautiful, and I am told are exact. He propoſes, but that I believe is rather a diſtant ſcheme, giving plates of other parts of the human body, and perhaps of giving a complete ſyſtem. In a few months, M. Romeo de Liſle intends giving a new edition of his Criſtallography, which will be greatly enlarged, conſiſting of four volumes, and enriched with a great number of new plates. M. Daubenton alſo is going to publiſh. It is to be a Minerallogy, and I ſuppoſe is to ſuperſede the uſe of thoſe which are extant. I do not recollect hearing of any other publications.

Chemiſtry is the ſubject which is paid moſt attention to in this place; but I do not know of any new diſcovery in it which is conſiderable. M. Lavoiſier has made uſe of dephlogiſticated

air, for producing very great heats, and has invented a very ſimple machine, which ſupports a blaſt for an hour and a quarter. Platina is melted in a few ſeconds; and by continuing the heat, he has melted ſome of the moſt refractable precious ſtones. Mr Bertholet, another of our chemiſts, has lately wrote a paper upon the deſtructibility of vegetable acids, which he has read, or is going to read before the academy. He has obtained, by the ſpontaneous decompoſition of cream of tartar, the ſame quantity of alkali which is obtained by means of fire; ſo that it ſeems certain, that none is produced by that operation. He found that this acid was leſs deſtructible than that of vinegar, by expoſing ſimilar ſolutions of this ſalt, and of the ſal diureticus; and that the acid of the ſal acetoſella was ſtill leſs ſo than the cream of tartar; and alſo, that the antiſeptic qualities of theſe ſalts were in inverſe proportion to their deſtructibility; ſo that meat kept much longer in a ſolution of the latter, than in that of either of the former ſalts."

* * * *

Mr Andrew Bell, engraver in Edinburgh, to whoſe induſtry and profeſſional abilities, the medical

medical world is much indebted, for his edition of Albinus's tables of the muſcles, has been, for ſome time, engaged in preparing for publication, another important anatomical work. It will conſiſt of anatomical tables of the blood-veſſels and nerves, the brain, viſcera, and parts of generation of the human body. Theſe organs will be repreſented in above fifty copper-plates, including the elegant faſciculi of the celebrated Baron Albertus Haller, together with other neceſſary figures from Euſtachius, Ruyſch Trew, Du Verney, Monro, Zin, Walterus, *&c.* The plates ſelected from theſe elegant and very expenſive works have, we are told, been executed and arranged under the direction of Dr Monro. All of them are brought to ſuch a ſcale, as to be of the ſame ſize with Mr Bell's edition of Albinus; which, although of a much ſmaller ſize than the original, is ſtill a large folio. When therefore the preſent work is conjoined with the former, they will probably form one of the moſt complete, uſeful and accurate ſyſtems of anatomical tables that have yet been publiſhed.

* * * *

Dr Alexander Hamilton, Profeſſor of Midwifery in the Univerſity of Edinburgh, who has lately

lately been preſented with an honorary diploma of Doctor of Medicine from the Univerſity of St Andrews, is preparing for publication, a ſecond edition of his Elements of the Practice of Midwifery, in which we are informed, there will be many alterations and additions, particularly in the practical part.

* * * *

A third volume of Dr Cullen's Firſt Lines of the Practice of Medicine, has been for a conſiderable time paſt in the preſs at this place, and will probably be ſoon publiſhed.

* * * *

A new edition of the Pharmacopœia of the Royal College of Phyſicians in Edinburgh, prepared when Dr Monro was Preſident of the College, is now almoſt printed off, and will be publiſhed in a few weeks.

* * * *

Mr John M'Nab, ſurgeon in the ſervice of the Hudſon's Bay Company, in a letter to Dr Duncan, dated at Fort Albany, 12th September 1782, gives the following information reſpecting a ſubject which has of late much engaged the attention of philoſophers.

"Laſt

"Laſt winter, the degree of cold at which mercury freezes was aſcertained here with very great accuracy, by inſtruments ſent from the Royal Society. This curious phænomenon occurred regularly at forty degrees below the cypher in Fahrenheit's ſcale.

On the 7th of January 1781, a very aſtoniſhing and ſudden degree of cold was obſerved at Eaſt Mains-houſe, in Hudſon's Bay. At eight o'clock in the morning, when the barometer ſtood at 30, 46, a thermometer graduated to 250 degrees below the cypher, was obſerved to ſtand at 70 below the cypher. But in leſs than half an hour, it ſunk completely into the bulb. In a ſhort time, however, it began to riſe again, and in a few minutes after nine, it was obſerved at 250, the bottom of the ſcale; in the ſpace of half an hour, it roſe gradually ſo as to reach within forty degrees of the cypher."

* * * *

The medical practitioners at Liverpool have lately eſtabliſhed a plan for the inoculation of the poor, which, if properly imitated over the kingdom in general, would unqueſtionably be productive of very great national advantages. To demonſtrate this, we ſhall here preſent our readers

readers with the following addreſs, which was circulated among the inhabitants of Liverpool, on the ſubject of general inoculation:

"There is perhaps no diſeaſe that has made more dreadful ravages among the human ſpecies than the ſmall pox. On its firſt introduction into Europe, its progreſs was almoſt every where marked by death; every rank of ſociety was thinned, whole armies were cut off, and provinces depopulated. In the ſucceſſion of ages, experience, by introducing a more proper treatment of the diſorder, has taught us to diſarm this peſtilence of part of its force; but its operation is yet ſo fatal, as to entitle it to the firſt place in the liſt of thoſe diſeaſes which are moſt deſtructive to human nature.

By calculations formed from the bills of mortality at Cheſter in the year 1778, it was proved, that nearly a ſixth part of all the deaths which happened in that city, was to be aſcribed to the natural ſmall pox. Similar calculations made at Leeds, in the beginning of the preſent year, have demonſtrated, that this malady has been ſtill more fatal there, having cut off one-fifth of all thoſe who have died in that town, whether from diſeaſe or old age. And the calculations

of

of Dr Dobſon ſhew, that the deaths to be aſcribed to the natural ſmall pox in Liverpool, have even exceeded the proportion of one in five.

Theſe facts are truly alarming, and more eſpecially when we conſider, that this deſtruction is not made among the aged and infirm, who, in the ordinary courſe of nature, could not long ſurvive, but among thoſe who are advancing towards maturity, on whom the hopes of their parents are founded, and on whom the future ſtrength of the community depends. Happily for mankind, Providence has not left us without defence againſt the havock of the ſmall pox. The practice of inoculation has been found to remove almoſt all the danger ariſing from the diſeaſe; and to make this practice univerſally adopted, it would ſeem, that nothing more is neceſſary, than to make its ſalutary influence univerſally known.

It is evident, from obſervations made in every part of the kingdom, that we ſhall not overrate the mortality of the natural ſmall pox, if we calculate that one in ſix of all whom it attacks is carried off in the courſe of the diſorder. But the moſt unfavourable account does not eſtimate more than one death in every hundred

caſes

caſes in which the infection is communicated by inoculation; and, according to many computations, there has not happened one in five hundred. Theſe truths, eſtabliſhed on the moſt extenſive obſervations, require no comment; they ſpeak more powerfully in favour of this practice, than any arguments that could poſſibly be urged.

The wealthier inhabitants of this town have, in general, for many years paſt, availed themſelves of the advantages of inoculation; but it has made little progreſs among the poor, for reaſons which are ſufficiently obvious. Many of them are ignorant of the benefit reſulting from it; many of them, no doubt, are prejudiced againſt it; and ſome of them, it is to be feared, have been prevented from inoculating their children, by a doubt of procuring proper medical aſſiſtance. If, from ſuch cauſes, the progreſs of inoculation among the lower claſſes has been obſtructed, the misfortune to the community has been of no trifling nature. In the town of Leeds, containing eighteen thouſand inhabitants, it has been found, that one hundred die yearly of the natural ſmall-pox; and we may conclude, that this diſeaſe cuts off two hundred

at

at leaſt every year in this town, which contains double the number of inhabitants, and where the contagion may be ſaid to be always preſent, from the great communication with other parts, and from the partial practice of inoculation among the higher ranks. This reaſoning is confirmed by facts, Dr Dobſon having found, in the courſe of three years obſervations, that upwards of two hundred die annually in Liverpool of the natural ſmall pox. According to this computation, four thouſand perſons at leaſt have been carried off by the natural ſmall pox in the town of Liverpool within the laſt twenty years. And when we conſider that ſcarcely one in two hundred dies under inoculation, we cannot but lament over thoſe four thouſand victims, moſt of whom might have been reſcued from the grave, and, by their labour, and by the increaſe of their offspring, have added to the ſtrength and opulence of the nation. Theſe obſervations may be extended from the town of Liverpool to the nation at large. In London alone, within the laſt fifty years, nearly one hundred and ten thouſand perſons have died of the natural ſmall pox; and it is probable, that Great Britain, during the ſame period, has ſuffered

fered the loſs of a million of inhabitants from this dreadful diſeaſe.

Truths of ſo important and ſo melancholy a nature, it is hoped, will ere long attract the attention of the legiſlature; but in the mean time it is certainly the duty of every individual to exert his abilities in promoting, within his own circle, the general practice of inoculation; by which means alone we ſhall be able to prevent the mortal ravages which have been deſcribed.

The attention which has been paid in Liverpool to the relief of the poor, when afflicted by diſeaſe, reflects the higheſt honour on the charity and munificence of its inhabitants. And there is every reaſon to believe, that the humanity of the more opulent part of the community will induce them to promote, by every proper method, a plan for a *general inoculation of the poor*, from whoſe labour and induſtry their wealth and conſequence are derived. If the facts now advanced be founded on truth (and the public are invited to examine them thoroughly), it is hoped that no good man will remain unintereſted in the ſucceſs of ſuch a propoſal. As the matter now ſtands, inoculation in Liverpool is confined almoſt excluſively to the higher

higher ranks. But this practice, though beneficial to them, it is much to be feared, proves a ſerious misfortune to the inhabitants at large; for by this means the contagion is never ſuffered to be extinguiſhed, and the children of the poor, catching the infection in the natural way, fall victims to the diſeaſe. To imagine that any perſon, who approves of inoculation in his own family, ſhould oppoſe its being extended to every claſs of men, is to ſuppoſe a degree of cruelty and injuſtice that few would chuſe to avow. From the enlightened inhabitants of Liverpool a conduct more liberal may be expected. They will wiſh that the bleſſings which they themſelves reap from this practice may be diffuſed among the poor and helpleſs; for this purpoſe their active influence will be neceſſary, and there is every reaſon to hope that they will be forward in promoting ſo generous and ſo uſeful a plan.

It is not the deſign of this addreſs to examine all the objections which may be made to a general inoculation. Moſt of theſe will, on conſideration, appear to be founded on prejudice and error. There is one only which deſerves to be particularly mentioned: It may be ſaid, that

ſince ſome perſons, from miſtaken principles, may obſtinately refuſe to be inoculated, or to inoculate their children, who yet cannot remove themſelves or their families from town, it would ſeem unjuſt, without their conſent, to expoſe them to the danger which they might incur during a general inoculation. But this objection is likewiſe founded on a miſtake, which it will be proper to explain. Such perſons as are unhappily prevented from being inoculated, cannot reaſonably expect, in the preſent ſtate of things, long to eſcape the natural ſmall pox. They muſt be ſeized with the diſeaſe, without warning, and without preparation. But if the plan for a general inoculation at ſtated periods be adopted, they will be aware of their danger, and have it in their power to prepare for the diſeaſe before it commences. They will likewiſe, if they catch the infection, have the ſmall pox in the moſt favourable ſeaſon of the year; whereas now they are liable to be infected in every ſeaſon. The quantity of contagion generated is thought to be in proportion to the number of the puſtules; and it is well known, that, taking one patient with another, the number of puſtules is ten times greater when the diſeaſe is contracted

in

in the natural way, than when it is communicated by inoculation. If this be true, there will be as much danger from a hundred patients in the natural ſmall pox, as from a thouſand under inoculation.—And hence, if there be twelve hundred perſons ſeized with the natural ſmall pox in Liverpool in the courſe of the year (and the number cannot be eſtimated lower), theſe will produce as much contagious matter as twelve thouſand who have been inoculated. But it cannot be ſuppoſed that there are now ſix thouſand of the inhabitants of Liverpool who have not had the ſmall pox; and if inoculation become once general, the perſons to be inoculated yearly will not exceed a fifth part of that number.

Thus, ſhould there remain a few perſons who are prevented by prejudice from reaping the benefit of inoculation, it will be their intereſt to promote the general practice of it in the town; ſince, by ſuch means, the quantity of contagious matter will be greatly diminiſhed, the danger of contracting the infection will be leſſened by being foreſeen, and their ſecurity will be exceedingly increaſed when there ſhall remain only a few perſons in Liverpool liable to be affected by

the diſeaſe. To theſe reaſonings it may be added, that plans for a general inoculation at Cheſter and Leeds have been carried into execution with the moſt ſalutary effects.

The gentlemen of the medical faculty in this town having, at a general meeting, taken this important ſubject under conſideration, were unanimouſly of opinion, that the general practice of inoculation in Liverpool, at ſtated periods, would be of the utmoſt advantage. They therefore conſidered themſelves bound, as good men and good citizens, to lay their opinion, and the grounds on which it is founded, before the public. And to give this ſcheme every aſſiſtance in their power, they offer their attendance gratis to all who are unable to pay for it. They know that a propoſal which aims at ſaving the lives of their fellow-creatures will come with peculiar propriety from them; they are ſenſible that ſuch a propoſal will at all times be favourably received; but they hope it will meet with particular attention at this important period, when the ſtrength of the nation is waſting under the calamities of war, and our countrymen are periſhing by the ſword, or by the more deſtructive

ſtructive influence of climate, in every quarter of the globe."

* * * *

A large and important botanical work is at preſent carrying on in Ruſſia under the protection of the Empreſs. To give our readers a proper idea of the nature of this undertaking, we ſhall here preſent them with the following account of it, written by Profeſſor Pallas, under whoſe direction it is to be executed.

Annonce d'un Ouvrage Botanique ſur les Arbres, Arbuſtes et Plantes de l'Empire de Ruſſie, qui ſera publié par Ordre et ſous les Auſpices de ſa Majeſté Impériale.

TANDIS que l'Auguſte Legiſlatrice du Nord s'occupe du bonheur de ſes ſujets, par l'introduction de nouvelles-loix, d'une adminiſtration de juſtice et de finance plus analogue à ſes grandes vuës, par la reforme de l'eduçation nationale, l'encouragement des ſciences, des arts et du commerce, par ſes ſoins enfin de former l'eſprit des Princes qui doivent un jour devenir les émules de ſa grandeur; cette Souveraine ſage et eclairée ne dedaigne pas les details qui peuvent tendre à la perfection de ſon ouvrage.

Sa Majeſté Imperiale s'occupant entre autres d'un nouveau reglement pour la conſervation des forêts de ſon empire, et deſirant en même tems de perfectionner l'economie rurale et de ſoulager l'humanité par une connaiſſance preciſe des plantes utiles que le ſol de ſon vaſte empire produit; elle a conçu l'idée d'un ouvrage botanique qui put remplir ce but: Idée digne de l'eſprit createur de l'Auguſte Protectrice des Sciences, dont la munificence pour l'avancement des connaiſſances humaines a brillé depuis ſon avenement au trône, par le renouvellement de l'academie des ſciences et l'inſtitution de celle des arts; par ces voyages diſpendieux d'obſervateurs, tant aſtronomes, que naturaliſtes, dont le nombre et l'importance a ſurpaſſé tout ce que les autres nations ont fait dans ce ſiècle; par les encouragements accordés ſans nombre aux ſavans etrangers et regnicoles; par l'emploi de ſommes annuelles conſiderables pour la traduction des meilleurs ouvrages de tout genre en langue nationale; enfin par l'illuſtre exemple qu'elle a donné elle même dans la carrière des lettres.

Sa Majeſté Imperiale voulant que l'ouvrage projetté ſoit entierement executé à ſes depens, dans

dans l'intention ſeule de contribuer au bien-être et à l'inſtruction des hommes; on n'a ni ſouſcription, ni autre engagement à propoſer au public; mais puiſque tous ceux, que ce grand ouvrage intereſſera, doivent, en y applaudiſſant, deſirer d'avance quelque notion de ce qu'on doit en attendre, j'ai crû qu'il était de mon devoir de ſatisfaire la curioſité du public par l'eſquiſſe ſuccincte que j'en vais donner. Voici en peu de mots le plan, tel qu'il à été approuvé par ſa Majeſté Imperiale.

L'ouvrage pour lequel ſa Majeſté Imperiale a fait aſſigner les fonds neceſſaires, ſera executé avec tout le luxe typographique qui convient à la magnificence d'une telle enterpriſe. Les planches qui doivent repreſenter les plantes de grandeur naturelle, ſeront du grand format des beaux ouvrages botaniques de Mr Jacquin, legerement gravées et coloriées avec tout le ſoin poſſible ſur des originaux faits d'après nature. Le texte qui contiendra les deſcriptions et details neceſſaires ſur la nature et l'uſage de toutes les plantes indigenes, paroitra en Ruſſe et en Latin, de la même grandeur & ſur le même papier de Hollande que les planches.

L'objet principal de l'ouvrage que ſa Majeſté Imperiale veut genereuſement donner à ſon

peuple et à la republique des lettres étant l'utilité publique, les plantes immediatement utiles à l'humanité tiendront donc le premier rang dans l'execution. Pour ne pas rendre l'ouvrage inutilement volumineux, on retranchera d'abord de la ſuite des planches les arbres et les plantes les plus generalement connues par des noms vulgaires, ſurtout lorſqu'il ne ſauroit reſulter de cette omiſſion aucune mepriſe dangereuſe pour l'humanité. Le texte n'en donnera pas moins les details utile à connaitre ſur la nature et l'uſage de ces eſpeces vulgaires. Le même ſera obſervé pour les eſpeces auſſi communes en Europe qu'en Ruſſie, dont on trouve les figures dans les ouvrages botaniques les plus connus, et qui n'annoncent d'ailleurs aucune vertu particulière.

On s'attachera au contraire à donner des gravures auſſi parfaites que poſſible de toutes les eſpeces affectées à l'empire, ou dont l'utilité n'eſt que peu connue dans le pays qui les produit, & qui ſouvent par cette raiſon même n'ont pas de noms uſités. Les eſpeces purement curieuſes & rares ſeront un objet ſecondaire, qu'on aura ſoin de remplir à la ſatisfaction des botaniſtes.

D'après ce plan j'eſtime que cinq à ſix cent planches gravées epuiſeront à peu près, dans le

total

total des vegetaux indigenes de l'empire Ruſſe, toutes les eſpeces utiles & rares dont on pourra deſirer les figures. De toutes celles qui peuvent remplir une planche de la grandeur ci-deſſus enoncée, on ne fera repreſenter qu'une ſeule eſpece par planche, ayant ſoin d'en donner non ſeulement les fleurs, mais auſſi le fruit, & les varietés accidentelles qu'on aura obſervées. Mais pour les plantes naines & petites, qui ſont d'un même genre, par exemple; les ſaxifrages, les mouſſes, *&c.* on ſe permettra de placer pluſieures eſpeces ſur la même planche, pour mieux la remplir.

Dans un ouvrage de la nature de celui-ci il n'eſt pas poſſible d'obſerver aucun ordre methodique. Mais on tachera du moins de placer enſemble les eſpeces d'un même genre & les premiers cahiers contiendront ſurtout les arbres & arbuſtes remarquables. Chaque cahier ſera de cinquante planches, dont deux pourront avec le texte former un volume. On ne peut encore fixer le terme quand le premier cahier pourra être achevé; mais on tâchera d'en fournir du moins un par an & de preſſer l'ouvrage autant que le nombre d'artiſtes exercés pourra y ſuffire.

Le choix que ſa Majeſté Imperiale a daigné faire de moi, pour executer, ſous ſes auſpices,

un

un ouvrage de cette importance & d'une utilité ſi generale m'honore infiniment; auſſi employerai-je tous mes efforts pour m'en rendre digne; & ſi l'execution pourroit egaler mon zèle, j'oſerois eſperer d'enfaire un monument digne de la protection & du ſiècle de Catherine Seconde. *S. Péterſbourg, ce* 28 *Juillet v. St.* 1782.

* * * *

The annual prize of the year 1781, given by the Harveian Society of Edinburgh, with the view of promoting experimental inquiry among the ſtudents of medicine at that place, was adjudged to a diſſertation, to which was prefixed the following motto:

Valeat quantum valere poteſt.

Upon opening the ſealed letter which accompanied this diſſertation, it was found to be written by Dr Jonathan Stokes of Worceſter-ſhire. The prize was publicly delivered to Dr Stokes, in the hall of the Diſpenſary of Edinburgh, by Dr Webſter, with a ſuitable addreſs, recommending to the ſucceſsful candidate, and to every diligent medical ſtudent, either ambitious of obtaining literary honour, or anxious to improve his profeſſion, the inveſtigation of truth on the ſure baſis of experiment. Dr Webſter at the

ſame time announced as the prize-queſtion for 1782, "An inquiry concerning the nature and properties of milk." At the above annual meeting, inſtituted in honour of the illuſtrious Dr Harvey, and held on the anniverſary of his birth-day, the Harveian oration for 1782, the ſubject of which was an account of the life, writings, and character of the late Dr Robert Whyte, was delivered by Dr Duncan.

Among the diſſertations given in to the Secretaries of the Harveian Society by the 1ſt of January 1783, on the ſubject of milk, the judges being divided in opinion as to the comparative merit of two diſſertations, it was determined that an equal prize ſhould be beſtowed on each. To the one was prefixed, for a motto,

Lac mihi non æſtate novum, non frigore deſit;

to the other,

Quem ſi non tenuit magnis tamen excidit auſis.

Upon opening the ſealed letters which accompanied them, the firſt was found to be written by Mr Samuel Ferris of Wiltſhire, and the laſt by Mr Richard Kentiſh of Yorkſhire. The prizes will be delivered to theſe gentlemen by Dr Duncan after the Harveian oration for 1783, which will be given by Dr Webſter.

The

The ſubject propoſed for the prize of 1783, is "An inquiry concerning the nature and properties of the Peruvian bark, and the comparative powers of the red and quilled Peruvian bark." Diſſertations on this ſubject, competing for the prize, muſt be delivered to Drs Duncan or Webſter, Secretaries to the Harveian Society, on or before the 1ſt of January 1784. To each of the diſſertations a motto muſt be prefixed, and the ſame motto muſt be put upon the back of a ſealed letter containing the name of the author. All the diſſertations, excepting thoſe to which prizes are adjudged, will be returned to any place that may be directed, with the letters which accompany them unopened. Thus the names of unſucceſsful candidates are known only to thoſe to whom they may themſelves communicate it.

* * * *

On the 13th of March 1782, died at Edinburgh, Mr Jacob Pattiſſon, ſtudent of medicine. His unwearied induſtry, extenſive knowledge, happy genius, and amiable manners, conciliated to a very high degree the affection and eſteem of all who had the pleaſure of his acquaintance. His remains are interred in the church-yard of

St

St Cuthbert's chapel at Edinburgh, near thoſe of the late ingenious Mr Charles Darwin, in the burial-ground which belongs to Dr Duncan. An elegant monument is erected to his memory by the companions of his ſtudies, his fellow-members in three literary ſocieties, in all of which he made a very diſtinguiſhed figure. They have expreſſed their regard for his memory in the following inſcription, which is cut on a marble tablet in the baſis of the monument.

Hoc in agello funeſto ſepultæ ſunt reliquiæ
JACOB PATTISSON de WITHAM in comitatu de ESSEX,
Qui, in Academia Edinenſi,
Non minus fauſte quam diligenter, in rem medicam incumbebat:
Florentem ætate,
Ob ingenii acumen, moreſque imprimis amabiles,
Omnibus quibus notus cariſſimum,
Febris lethalis aggreſſa,
Procul patria domo, inter lachrymas ac ſuſpiria ſociorum,
Subito oppreſſit.
Hocce monumentum, tres Societates,
REGIA MEDICA nempe, SPECULATIVA, et PHYSICA,
Quarum omnium ſimul Præſes fuit,
Non ut famæ ejus conſulerent, quippe illius parum indigæ opis,
Sed ut animos, nec amicitiæ, nec meriti inſignis,
Immemores oſtenderent,
Conjunctim exſtruendum curarunt.
Obiit III. Idus Martii, A. D. 1782. An. Æt. 23.

The

* * * *

The Royal Society of Medicine at Paris, have propoſed the following prize-queſtion: What are the diſeaſes that prevail moſt commonly among the troops during the ſummer, and in very hot weather? What is the moſt ſimple and leaſt expenſive method of treating them? And *laſtly*, What are the means to be employed for preventing or moderating their effects in very hot climates, as the Windward or Leeward Iſlands? The diſſertations of competitors, written in the Latin or French languages, muſt be ſent to M. Vicq d'Azyr, ſecretary to the Society, by the 1ſt of December 1783.

* * * *

The Royal Academy of Sciences at Paris, have offered a premium of 2400 livres to the perſon who ſhall diſcover the eaſieſt and cheapeſt proceſs for decompoſing ſea-ſalt, and extracting the alkali that ſerves as its baſis, free from any acid or other combination, provided the value of this mineral alkali does not exceed the price of that which is procured from the beſt foreign ſoda.

The diſſertations on this ſubject, written in French or Latin, muſt be ſent to the Marquis de

de Condorcet, ſecretary to the Academy, before Eaſter 1783.

* * * *

The Dutch Society of Sciences at Haerlem, have propoſed the following inquiry as the ſubject of a prize-diſſertation: 1. Une deſcription de l'appareil le plus propre à faire des experiences ſur l'air condenſé, de la façon la plus commode et la plus aſſurée. 2. De rechercher avec cet appareil l'action de l'air condenſé, dans de cas differens de s'occuper entr' autre de la vie animale, de la croiſſance des plantes et de l'inflammabilité des differentes eſpeces d'air. Et 3. D'expoſer quelles ſuites, ou quelles nouvelles connoiſſances, on pourroit en deduire.

Diſſertations on this ſubject muſt be tranſmitted to Mr C. C. H. Vander Aa, ſecretary to the Society, by the 1ſt of January 1785.

By the ſame Society, the following queſtion alſo is propoſed:

Par quelles regles de conduite, fondées ſur la theorie, & confirmées par l'experiences, pourroit-on conſerver la ſanté de ceux, qui, faiſant le voyage des Grandes Indes, eprouvent les effets pernicieux d'un changement extreme de climat, & de façon de vivre? Independamment des

des regles generales, pourroit-on en indiquer des particulières que varieroient ſuivant les differentes claſſes des individus, aux quelles on devroit les appliquer?

* * * *

Dr Hawes, at the cloſe of his lectures on animation, propoſed the following queſtions for two prize-medals, ſubject to the uſual regulations.

Are there any poſitive ſigns of the extinction of life? If ſo, what are they? Or if there are not, is putrefaction a certain criterion of death?

The diſſertations on this ſubject were directed to be left, before the end of September 1782, with Dr Fothergill, at his houſe in Harpur-ſtreet, Red Lion Square, who, together with Dr Letſom, Jebb and Whitehead, were appointed to adjudge the medals. We have not heard whether theſe prizes have yet been beſtowed on any competitors.

* * * *

The Royal Academy of Sciences at Paris have propoſed the following ſubject for an extraordinary prize-diſſertation for the year 1783.

De determiner la nature et les cauſes des maladies aux quelles ſont expoſés les doreurs au feu,

feu, ou ſur métaux; et la meilleure manière de les préſerver de ces maladies, ſoit par des moyens phyſiques, ſoit par des moyens méchaniques.

Diſſertations on this ſubject are ordered to be tranſmitted to the Secretary of the Academy by the 15th of February 1783.

* * * *

We hear, that an improved edition of Dr Lewis's New Diſpenſatory will be publiſhed in Edinburgh during the courſe of this year. The improvements in chemiſtry ſince his time are numerous and important. The Edinburgh Pharmacopœia has been twice materially reformed. Several new medicines have been thought worthy of a place in the Materia Medica; others have been expunged; and the operation of many medicines on the human body are now explained in a very different manner. Theſe conſiderations render it very deſirable, that a book on ſo good a plan, and ſo univerſally read, ſhould be improved to the utmoſt. This edition is alſo to have ſeveral uſeful tables, and a ſet of extemporaneous preſcriptions, uſed by the moſt eminent practitioners in London and Edinburgh, after the plan of Dr Berkenhout's Pharmacopœia.

* * * *

On the 19th of January 1782, died at London, in the ſeventy-eighth year of his age, Sir John Pringle, Bart. Phyſician-extraordinary to the King, and Phyſician to the Queen. During a life ſpent in active induſtry, Sir John Pringle not only arrived at the head of his profeſſion in the metropolis of Britain, but obtained the eſteem of every genuine lover of ſcience; and, as an indubitable teſtimony of the reſpect in which he was held by the philoſophical world, he was elected Prefident of the Royal Society of London. The duties of this important and honourable office he diſcharged for ſeveral years with the moſt faithful punctuality. But finding that the approaches of old age rendered the fatigues of buſineſs greater than he could eaſily accompliſh, he not only retired from the practice of medicine, but alſo from the preſidentſhip of the Royal Society, with the intention of ſpending the evening of life among a circle of ſelect friends. This circumſtance, as well as his judicious laſt will, is a ſtronger proof of unimpaired judgment, than if he had continued to fill an office to which his years had rendered him unequal. He bequeathed among his relations a conſiderable

conſiderable fortune; which was ſo diſtributed, that, while his neareſt relations had no ground for complaint, it will ſerve to afford comfort during the remainder of life to ſome others to whom fortune had been leſs favourable. He has left to the College of Phyſicians in Edinburgh, his Medical Annotations, conſiſting of ten volumes in quarto, principally written with his own hand. But theſe are intended ſolely for the private uſe of the members, and are given on the expreſs condition, that they ſhall never be publiſhed: Not that he could have any deſire of with-holding from the medical world what would in any degree tend to the improvement of the profeſſion; but becauſe he judged ſeveral caſes and obſervations which they contained, in different reſpects unfit for the public eye. The obſervations which he publiſhed on army diſeaſes many years ago, have extended his fame through Europe, and will tranſmit his name to poſterity as a learned and intelligent phyſician.

* * * *

On the 29th of April, died at Hackney, near London, Dr Thomas Dawſon, formerly Phyſician to the London Hoſpital, and deſervedly celebrated for ſeveral uſeful medical publications.

* * * *

On the 13th of May, died at London, Dr Daniel-Charles Solander. He was a native of Sweden, and educated at the univerſity of Upſal, where he obtained the degree of Doctor of Medicine. That of Doctor of Laws was afterwards conferred upon him by the univerſity of Oxford. Dr Solander's ſtrong propenſity for the purſuit of natural knowledge was probably not a little increaſed by the patronage and encouragement of his preceptor the celebrated Sir Charles Linnæus; while the zeal which he ſhewed for theſe branches of literature, particularly for botany, conciliated the eſteem and affection of that eminent profeſſor. When Dr Solander went from Upſal to London in the proſecution of his ſtudies, Linnæus furniſhed him with introductory letters to thoſe learned men who were his principal correſpondents in the metropolis of Britain. In theſe letters, among other ſtrong expreſſions of regard, he is ſaid to have employed the following ſentence: "*Omnium* "*diſcipulorum, quos unquam habui, dilectiſſi-*" *mus.*" The footing thus obtained, Dr Solander ſoon improved by agreeable manners and extenſive knowledge. In no long time he contracted

tracted intimacies with the moſt eminent philoſophers in London, particularly with Sir Joſeph Banks, the Preſident of the Royal Society, and one of the firſt literary characters in Europe. He was the companion of Sir Joſeph in thoſe different voyages which he made for the ſole purpoſe of extending natural knowledge, and which will do immortal honour to the memory of both. When he was not thus engaged, his time was principally ſpent in the Britiſh Muſeum, where he had obtained an appointment in every reſpect ſuited to his philoſophical diſpoſition. And in diſcharging that part of the duties of his office which led him to ſhow that moſt valuable collection to different viſitors, it was hardly poſſible to conceive a more agreeable union of the manners of the gentleman with the knowledge of the philoſopher. While he was engaged in converſation with his uſual chearfulneſs at the houſe of his friend Sir Joſeph Banks, he was ſuddenly attacked with a fit of apoplexy, which, in a few days, notwithſtanding the beſt medical aſſiſtance, terminated in his death; an event ſincerely regretted by all who had the honour of his acquaintance, and by which the lite-

rature and philoſophy of London ſuſtained a real loſs.

* * * *

On the 16th of May, died of a pulmonary conſumption, at Reading in Berkſhire, on his way to Ireland, Dr Dennis Ryan, late aſſiſtant Phyſician to the Military Hoſpital in Jamaica, a young man of great genius and uncommon induſtry. He communicated to the public, through the channel of this work, and of the London Medical Journal, ſeveral important obſervations; and while he proſecuted his ſtudies at Paris, he made a Latin tranſlation of Dr Duncan's Medical Caſes, which, we hear, will ſoon be publiſhed under the direction of Dr Sandifort of Roterdam, brother to the eminent Profeſſor Sandifort of Leyden.

* * * *

On the 13th of Auguſt, died at Naples, Dr Alexander-Monro Drummond, a young Phyſician of great learning and very uncommon talents. He was born and educated at Edinburgh. After the neceſſary inſtruction in the languages, and other preliminary branches of knowledge, he betook himſelf to the ſtudy of medicine; and during the courſe of ten years, he was peculiarly

ly remarkable for the moſt regular attendance to every medical teacher, both public and private, and for unremitting attention in the purſuit of all the branches of medical ſcience. In the year 1771, he obtained the degree of Doctor of Medicine from the univerſity of Edinburgh, with uncommon marks of diſtinction from that learned body. On that occaſion, he publiſhed an elegant and elaborate inaugural diſſertation, entitled, *Commentarius de Febribus arcendis diſcutiendiſque.* Upon leaving Edinburgh, after remaining ſome time in London, where he cultivated the acquaintance and obtained the eſteem of many learned men, he went to the continent of Europe in company with the celebrated Dr Ingenhouze. After viſiting Paris, Leyden, Goettingen, Vienna, and other places moſt remarkable for eminent ſchools of medicine, he joined the Earl of Winchelſea and Lord Algernoon-Percy on a tour into Greece, Egypt, and other parts of the Turkiſh dominions. About the time when he was leaving Italy on this expedition, he received information that he was elected Profeſſor of the Theory of Medicine in the univerſity of Edinburgh, which had become vacant by the death of Dr Gregory, and the advancement of

Dr Cullen to the practical chair. This, however, he did not conſider as an object ſufficient to interrupt his intended plan. And the patrons of the univerſity, unwilling to loſe ſuch an addition to their medical college, reſolved to keep the place vacant till his return. They appointed Dr Duncan to fill the theoretical chair as an interim teacher; and for two years he diſcharged the duties of that office much to the ſatisfaction of audiences uncommonly numerous for the lectures on the theory of medicine even in the univerſity of Edinburgh. Upon Dr Drummond's return to Europe, having formed greater plans, he declined accepting of the profeſſorſhip at Edinburgh. He communicated to his friends an intention of ſettling in London; but, for private reaſons, he reſolved to reſide for ſome time in Naples. There he was very highly eſteemed, and practiſed medicine, both among the natives and Britiſh viſitors, with ſuch ſingular ſucceſs, that his advice was ardently ſought for in caſes of the greateſt difficulty and danger. But although his own circumſtances were very narrow, he could never be prevailed upon to accept of a fee even from the moſt opulent of his countrymen.

countrymen. Among other literary purſuits at Naples, Dr Drummond is ſaid to have been engaged in writing an account of his travels. But an accidental fall from his horſe, by which his ſkull was fractured, proved the cauſe of his death at an early period of life, and has probably deprived the world of ſome valuable publications.

* * * *

On the 3d of January 1783, died ſuddenly, at Edinburgh, Dr Thomas Young, profeſſor of midwifery in the univerſity, and a practitioner of the firſt eminence in that city. When Dr Young was firſt appointed profeſſor, he was one of the members of the College of Surgeons in Edinburgh. But afterwards reſolving to join the College of Phyſicians, he took the degree of Doctor of Medicine; on that occaſion he wrote an excellent experimental diſſertation *De Lacte*, in which are contained many important and uſeful obſervations reſpecting that fluid. He taught and practiſed midwifery for many years with great reputation. He wrote ſeveral ingenious papers on different medical ſubjects, particularly on the puerperal fever, which were read in the Philoſophical

Philoſophical Society of Edinburgh, and may probably be publiſhed in courſe of the future volumes of their tranſactions, the Phyſical and Literary Eſſays. Dr Young, ſome years before his death, finding that his academical duties and private practice were a greater fatigue than he could eaſily overtake, and being deſirous of introducing into the univerſity, as his coadjutor and colleague, Dr Alexander Hamilton, who had acquired very high reputation in the line of midwifery, both as a teacher, a practitioner, and an author, he reſigned his profeſſorſhip, and was in a few days afterwards again elected to that office in conjunction with Dr Hamilton. In this, while he demonſtrated that liberality of ſentiment which eminently diſtinguiſhed his character, by overlooking a former rivalſhip, he conſulted in a high degree the intereſt of the univerſity and the public, by introducing among the number of profeſſors a man whoſe reputation was already eſtabliſhed, and who had given abundant proof of uncommon abilities as a teacher, by having for ſeveral years given private lectures with great ſucceſs.

Dr Young, when apparently in a ſtate of the beſt health, was ſuddenly attacked with a fit of apoplexy,

apoplexy, in the houſe of an acquaintance, and died in a few hours. He had not, however, left to the laſt the deſtination of a very ample fortune which he poſſeſſed. Having no children, by a will found in his repoſitories, he directed, after a handſome proviſion for his wife, the diviſion of it among his relations; and, with no leſs good ſenſe than humanity, he made particular proviſion for thoſe who ſtood moſt in need of his aſſiſtance.

* * * *

About the middle of February, died at Liſbon, where he had gone for the recovery of his health, Dr Peter Duguid-Leſlie, phyſician at Durham, where he had practiſed with reputation for ſeveral years, and lived with much eſteem. He was a young man of genius and induſtry, and ardent in the purſuit of medical and philoſophical knowledge. Upon taking the degree of Doctor of Medicine in the univerſity of Edinburgh, in the year 1775, he publiſhed an inaugural diſſertation *De Caloris Animalium Cauſa*, in which he adopted and defended a hypotheſis concerning animal heat propoſed and taught by Dr Duncan. His obſervations on this ſubject he afterwards preſented to the public

in

in an Engliſh dreſs, entitled, A philoſophical Inquiry into the Cauſe of Animal Heat, with incidental obſervations on ſeveral philoſophical and chemical queſtions connected with the ſubject. From that work Dr Leſlie acquired conſiderable reputation in the philoſophical world; and not long after it was publiſhed, he had the honour of being elected a member of the Royal Society of London. He was engaged in another literary work, on the ſubject of fire, when he was attacked with the influenza, about the beginning of June 1782. This terminating in phthiſis pulmonalis, at length proved fatal.

* * * *

On Monday the 31ſt of March, died at London, Dr William Hunter, Phyſician-extraordinary to the Queen, Teacher of Anatomy in London, and member of many different learned ſocieties for the advancement of uſeful knowledge.

This celebrated anatomiſt was a native of Kilbryde in the county of Lanerk. His father, deſigning him for the church of Scotland, ſent him, at a proper age, to the college of Glaſgow; but having ſpent five years in regular academical attendance there, he began to feel ſtrong objections to theological ſtudies; and happening to become

become acquainted with Dr Cullen, the preſent celebrated Profeſſor at Edinburgh, who was at that time juſt eſtabliſhed in practice at Hamilton, he was perſuaded by Dr Cullen to apply himſelf to phyſic. Dr Cullen's friendſhip made it eaſy to obtain his father's conſent. He was taken into the Doctor's houſe, where he lived two years. Dr Cullen at all times was happy in communicating knowledge to his pupils, and ſtill more remarkable for inſpiring them with an enthuſiaſtic love of ſtudy. This was a moſt fortunate circumſtance for Mr Hunter, whoſe uncommon application and improvement in the line of his profeſſion, in a ſhort time recommended him to the notice and patronage of profeſſors of the firſt anatomical celebrity.

In Scotland, if we except Edinburgh, there is not that diſtinction between the branches of phyſic that prevails in England. The phyſicians generally diſpenſe their own medicines, and likewiſe practiſe ſurgery. Dr Cullen, though an enthuſiaſtic cultivator of phyſic and chemiſtry, had always a diſlike to the chirurgical part of his practice. It was therefore agreed between him and Mr Hunter, that the latter ſhould go firſt to the college at Edinburgh, and then

to

to London, in order to ſee the practice of the hoſpitals, and improve himſelf in anatomy and ſurgery, and that, at his return to Hamilton, a partnerſhip ſhould take place between them.

Mr Hunter brought with him to London a letter of introduction to his countryman Dr James Douglas, who was at that time in high reputation as a phyſician and man-midwife, and who is well known by his Treatiſe on the Muſcles, and other works.

Dr Douglas recommended it to him to attend St George's hoſpital, and Dr Nicholl's lectures, as a perpetual pupil, for the opportunity of learning all his arts in making anatomical preparations. And at the end of the ſeaſon, when he was preparing to ſet out on his return to Hamilton, Dr Douglas perſuaded him to change his propoſed plan, and prevailed on him to go to Paris and to Holland with his ſon, at that time a ſtudent of phyſic, and afterwards to ſettle in London, and to teach anatomy. Mr Hunter communicated this propoſal, and the arguments which Dr Douglas uſed, to Dr Cullen, who, believing that it was a fairer proſpect, with his uſual generoſity, readily gave his conſent.

After

After the death of his patron Dr Douglas, Mr Hunter began to teach anatomy in London. His eaſy, agreeable manner of lecturing, the new and clear points of view in which he placed the different parts of his ſubject, added to the number, and, till then unknown, elegance of his preparations, drew to him a great number of pupils. He ſoon became eminent in his profeſſion, enriched the art with many important diſcoveries, and for many years ſhone unrivalled in the wide and fruitful field of anatomy.

In or about 1747, Mr Hunter was admitted a member of the Surgeons Company. His anatomical reputation ſoon procured him an extenſive practice, particularly in midwifery; and when he came to be eſtabliſhed, the Univerſity of Glaſgow, proud to reckon him amongſt her ſons, complimented him with the degree of Doctor of Medicine. In 1756, he was admitted a member of the College of Phyſicians, and ſoon afterwards was elected Fellow of the Royal Society, having made himſelf known by an ingenious paper, "on the Structure of Cartilages," publiſhed in the Philoſophical Tranſactions ſo early as 1743. He has ſince that, at different times, communicated

communicated ſeveral other valuable papers to the Society.

When our preſent amiable Queen became pregnant, Dr Hunter was conſulted, and, at the ſame time, honoured with the appointment of Phyſician-extraordinary to her Majeſty. When the Royal Academy of Arts was founded, he was nominated Profeſſor of Anatomy to that inſtitution; and lately, upon the death of one of the eight foreign aſſociates of the Academy of Sciences at Paris, he was elected to ſupply the vacancy. To conſider him as a teacher, is to view him in his moſt amiable character; perſpicuity, unaffected modeſty, and a deſire of being uſeful, were his peculiar characteriſtics; and he was moſt happy in blending the *utile* with the *dulce*, by introducing appoſite and pleaſing ſtories, to illuſtrate and enliven the more abſtruſe parts of anatomy; thus fixing the attention of the volatile and the giddy, and enriching the minds of all with uſeful knowledge.

Employed, as Dr Hunter had been, for a long ſeries of years, by perſons of the higheſt diſtinction, and conſulted as an anatomiſt in difficult caſes of ſurgery by all ranks of people, and from every part of the kingdom, his gains muſt have been

been immenſe; and he employed them in a manner the moſt liberal, for the improvement of ſcience. Having never married, and being averſe to oſtentation and luxury, he always conducted his domeſtic expences on a plan adapted to his profeſſion; and his accumulated fees were expended in erecting and furniſhing a muſeum, which, conſidered in every point of view, is certainly not to be equalled in Europe. We ſhall ſay nothing of the anatomical preparations it contains, becauſe it will be eaſily conceived, that a perſon of the Doctor's diſpoſition, who had ſpent near half a century in the purſuit of a favourite object, muſt have amaſſed every thing moſt curious and valuable on that ſubject. But the ſpecimens of human and comparative anatomy, form only a ſmall part of the *Hunterian Muſeum*. His collection of ſcarce and valuable books is to be equalled only by royal libraries; and his cabinet of medals, particularly Greek and Roman, is far more valuable than even the imperial collection at Vienna.

The expence of building his houſe and muſeum in Windmill-ſtreet, and furniſhing the latter, is ſaid to have approached near to 100,000l. His Plates of the Gravid Uterus, and his other

publications, ſufficiently evince his profound knowledge and unwearied induſtry; and the Deſcription of his Greek Coins demonſtrates his boundleſs munificence. It is much to be feared, that the other works he had in hand at the time of his death, are left too incomplete for the public eye. Thus he toiled through a long life for the good of mankind; and it may be truly ſaid, that he did not live and toil in vain. His amuſing and inſtructive talents, his facetiouſneſs, his eloquence, his ſcience, his good œconomy in acquiring wealth, his well-directed liberality in employing it, are all ſecured by durable monuments.

Dr Hunter had been ill for ſome time, and had ſo far recovered as to be able to ſit up. While in this ſtate, his anxiety for his pupils made him wiſh to give the introductory lecture to the operations of ſurgery; he accordingly gave it, and the fatigue he underwent occaſioned a relapſe of his diſeaſe, which terminated fatally notwithſtanding the utmoſt ſkill and attention of his Phyſicians.

Dr Hunter has bequeathed his very valuable muſeum to the Univerſity of Glaſgow. But the uſe of it for thirty years is reſerved to the ingenious Mr Cruikſhank, who has been for ſome time

time his partner as an anatomical teacher, and to his nephew Mr Matthew Baillie, who has of late alſo been his aſſiſtant in the ſame department. He has alſo left to the Univerſity of Glaſgow the ſum of L. 8000, which is to be paid them within two years. One half of the intereſt of this ſum is to be applied for ſupporting the muſeum while it remains in London. The other half, together with the whole capital, is at the immediate diſpoſal of the Univerſity of Glaſgow, for the purpoſe of buying ground and erecting proper buildings for the reception of his muſeum, and of making ſuch eſtabliſhments as they think may tend to promote medical and natural knowledge. The object which Dr Hunter evidently had in view by the above deſtination, was to perpetuate thoſe ſignal benefits which the public derived during his life, from his uncommon abilities and unremitting ardour in the purſuit of learning, ſcience, and medical diſcoveries. And there is no reaſon to doubt, that his two immediate ſucceſſors in the line of anatomy, Mr Cruikſhank and Mr Baillie, as well as the Univerſity of Glaſgow, will endeavour to diſcharge the truſt repoſed in them, in ſuch a manner as will reflect the higheſt honour on the memory of Dr Hunter.

SECT. IV.

Liſt of New Books.

OBSERVATIONS on the ſtructure and functions of the nervous ſyſtem, illuſtrated with tables. By *Alexander Monro*, M. D. Preſident of the Royal College of Phyſicians, and Profeſſor of Phyſic, Anatomy and Surgery in the univerſity of Edinburgh. Folio. Edinburgh.

Conſpectus medicinæ theoreticæ, in uſum academicum. Auctore *Jacobo Gregory*, M. D. Med. Theoret. in Acad. Ed. Prof. Vol. II. 8vo. Edinburgi.

Pharmacopœia collegii regii medicorum Edinburgenſis. Editio ſeptima. 8vo. Edinburgi. 1783.

A ſyſtem of ſurgery. By *Benjamin Bell*, Member of the Royal College of Surgeons in Edinburgh,

burgh, and one of the Surgeons to the Royal Infirmary of that city. Illuſtrated with copper-plates. Vol. I. 8vo. Edinburgh.

Firſt lines of the practice of phyſic, for the uſe of ſtudents in the univerſity of Edinburgh. By *William Cullen*, M. D. Profeſſor of the Practice of Phyſic in the univerſity of Edinburgh, firſt Phyſician to his Majeſty for Scotland, *&c.* Vol. III. 8vo. Edinburgh.

Philoſophical Tranſactions. Vol. LXXII. 4to. London.

A ſyſtem of the practice of medicine, from the Latin of Dr Hoffman; in two volumes. By the late *William Lewis*, M. B. F. R. S. Reviſed and completed by *Andrew Duncan*, M. D. 8vo. London.

A narrative of a ſingular gouty caſe, with obſervations. By *John Lee*, M. D. 8vo. London.

The valetudinarian's companion; or obſervations on air, exerciſe, and regimen, with the medical properties of the ſea and mineral waters of Brighthelmſton. By *Loftus Wood*, M. D. 8vo. London.

A deſcription of the influenza, with its diſtinction and method of cure. By *R. Hamilton*, M. D. 8vo. London.

Memoirs of the life, and a view of the character of the late Dr John Fothergill. By *Gilbert Thompſon*, M. D. 8vo. London.

Obſervations on the ſulphur-water at Croft near Darlington. By *Robert Willian*, M. D. 8vo. London.

An inquiry into the ſtate of medicine, on the true principles of inductive philoſophy; with an appendix, containing practical caſes and obſervations. By *Robert Jones*, M. D. 8vo. London.

A letter to Dr Robert Jones of Caermarthenſhire, in anſwer to the account which he has publiſhed of the caſe of Mr John Braham-Iſaacſon, ſtudent of medicine, and to the injurious aſperſions which he has thrown out againſt the phyſicians who attended Mr Iſaacſon. By *Andrew Duncan*, M. D. 8vo. London.

New thoughts on medical electricity; or an attempt to diſcover the real uſes of electricity in medicine; including a very remarkable caſe; in two letters to a friend. 8vo. London.

An inquiry into the nature of the venereal poiſon, and the remedies made uſe of to prevent its effects, principally with reſpect to lotions, pomades, and injections; addreſſed particularly

to

to young men. By *J. Clubbe*, Surgeon at Ipſwich. 8vo. London.

A letter addreſſed to Dr Stevenſon of Newark, occaſioned by a poſtſcript publiſhed in the ſecond edition of his medical caſes; with remarks on four letters written by Philip Thickneſſe, Eſq. By *Edward Harriſon*, Member of the Royal Medical Society at Edinburgh.

A medical and philoſophical eſſay on the theory of the gout. 8vo. London.

An epiſtle to Dr Falconer of Bath. By *Philip Thickneſſe*. 8vo. London.

Short ſtrictures on the method of treatment recommended by Dr Dawſon, in the acute rheumatiſm. By *Thomas Sanden*, M. D. 12mo. London.

An hiſtorical ſketch of medicine and ſurgery, from their origin to the preſent time; and of the principal authors, diſcoveries, improvements and errors. By *William Black*, M. D. 8vo. London.

Elements of the theory and practice of medicine and ſurgery. By *John Aitken*, M. D. 8vo. London.

An account of ſome experiments on mercury, ſilver and gold, made at Guildford in May 1782, in the laboratory of James Price, M. D. F. R. S.

To which is prefixed an abridgment of Boyle's account of a degradation of gold. 4to. Oxford.

Lettre ſur les expériences des frictions glaciales, pour la guériſon de la peſte et autres maladies putrides. Par *D. Samoilowitz*, M. D. 8vo. Paris.

Catalogue ſyſtematique des arbres et arbuſtes etrangers, la plupart de l'Amerique ſeptentrionale, cultivé dans le jardin Americain, à la terre de Madame la Comteſſe de Hohenheim, et qui paſſent l'hiver en plein champ. 16mo. Studgard.

Deſcription, uſage, et avantages de la machine pour reduire les fractures des jambes, inventée par Dom. Alb. Pieropan de Vicence. Par *M. Mongez*. 8vo. Paris.

Notions elementaires de botanique, avec l'explication d'une carte, compoſée pour ſervir aux cours publics de l'academie de Dijon. 8vo. Dijon.

Diſſertation chemique ſur les eaux minerales de Lorraine. Par *M. Nicolas*. 8vo. Paris.

Traité des eaux minerales de Chateldon, de celles de Vichy et de Hauterive en Bourbonnois, avec le detail de leurs proprietés medicinales et leur analyſe. Par *M. Debreſt*, M. D. 12mo. Moulins.

Eſſai ſur les alimens, pour ſervir de commentaire aux livres dietetiques d'Hippocrate. Par *C. Lory*, M. D. *&c.*, 12mo. Paris.

Traité des proprietés et uſage de la douce amere, ou ſolanum ſcandens, dans la traitement de pluſieurs maladies, et ſurtout des maladies dartreuſes. Par *M. Carnere.* 8vo. Paris.

Memoires ſur les obſervations meteorologiques, faites à Franeker en Friſe, pendant l'année 1779. Par *M. Van Swinden.* 8vo. Amſterdam.

Traité general des pêches, et hiſtoire des poiſſons, ou des animaux qui vivent dans l'eau. Par *M. Duhamel de Monceau.* Vol. III. Sect. ix. 4to. Paris.

De l'electricité du corps humain dans l'etat de ſanté et de maladie;—ouvrage couronnée par l'academie de Lyon; dans lequel on traite de l'electricité de l'atmoſphere, de ſon influence, et de ſes effêts ſur l'economie animale. Par *M. l'Abbé Bertholon* de S. Lazare. 12mo. Paris.

Diſſertation ſur les avantages de l'allaitement des enfans par leurs meres; ouvrage qui a eté couronné par la faculté de medecine de Paris, dans ſa ſeance publique, le 9 Decembre 1779. Par *M. Landais.* 8vo. Paris.

Diſſertatio

Diſſertatio medica de ſenſibilitate oſſium morboſa, quam, Præſide Adolpho Murray, ſuſtinuit *Laurentius Brandelius*, M. A. 4to. Upſal.

Henrici Palmatii Levelingii, Philoſ. et Med. Doctor. Anat. Chirurg. et Inſtit. Medic. in Univerſitate *Anglipolitana* Prof. publ. *&c.* Obſervationes anatomicæ rariores, de valvula Euſtachii et foramine ovali, quas pro gradu Doctoris defendit. *Franc. Xavier de Buglioni.* 4to. Anglipoli.

Diſſertatio inauguralis practico-medica, de mercurii ſublimati corroſivi in ſiphylide efficaci tutoque uſu. Auctore *G. Wiſſikelly*. 8vo. Vienna.

Schonh. Lud. Fink de morbis bilioſis anomalis, occaſione epidemiæ, cujus hiſtoria præmiſſa eſt, ab anno 1776 ad 1781 in comitatu Teclinburgenſi obſervatæ. 8vo. Munſter.

Faſciculus animadverſionum, phyſiologici atque mineralogico-chemici argumenti. Auctore *Carolo-Henrico Koſtlino*, Phil. et Med. Doct. *&c.* 4to. Stuttgard.

Ignatii A. Born, Equ. Acad. Imp. Nat. Cur. Petropolit. Lond. *&c.* Sodalis, index rerum naturalium muſei Cæſarei Vindobonenſis. Pars prima. Teſtacea. 8vo. Vienna.

Teſtacea

Teſtacea muſei Cæſarei Vindobonenſis, quæ juſſu Mariæ Thereſiæ Auguſtæ diſpoſuit et deſcripſit *Ignatius A. Born*, Eques, *&c.* Folio. Vienna.

De limitanda laude librorum medicorum practicorum uſui populari deſtinatorum. Auctore *J. A. Murray*, M. D. et Prof. 4to. Goettingen.

Auctuarium ad *Alb. Halleri* elementa phyſiologiæ corporis humani, excerptum ex nova editione, et adaptatum veteri. 4to. Leipſic.

Chemiſch phyſiſche ſchriften, *i. e.* chemico-phyſical eſſays. By *Francis-Charles Achard*, Profeſſor of Chemiſtry and Member of the Academy of Sciences at Berlin. 8vo. Berlin.

Von der wurkung des mohnſaffts in der luſtſcuche, *i. e.* of the effects of opium in the venereal diſeaſe; to which is added ſome obſervations relative to the diſeaſes and natural hiſtory of North America. By *John-David Schæpff*, M. D. Phyſician to the troops of Anſpach-Bayreuth. With a preface by the editor, *T. Delius*, M. D. and Profeſſor. 8vo. Erlangen.

Sammlungen zur phyſik und naturgeſchichte von einigen Leibhabern deiſer Wiſſenſchaften, *i. e.* a collection of tracts on natural philoſophy and natural hiſtory. Vol. I. 8vo. Leipſic.

Aryneykundige

Aryneykundige abhandlungen herauſgegeben von dem collegio des aerzte in London, *i. e.* Medical tranſactions publiſhed by the College of Phyſicians in London. Tranſlated from the Engliſh by *D. C. Chr. Krauſe*. 8vo. Leipſic.

Verhandelingen van het Batavinaſch genootſchapen, *i. e.* Memoirs of the academy of arts and ſciences at Batavia. 8vo. Batavia.

Der aryt fur liebhaber der ſchoenheit, *i. e.* The phyſician for the lovers of beauty. 8vo. Heidelberg.

Gerichlich mediciniſche beobachtugen, *i. e.* Caſes relative to medical juriſprudence. By *M. Metzer*, M. D. *&c.* 8vo. Koningſberg.

Einleitungin die pharmacie, *i. e.* An introduction to pharmacy. By *John-Frederick Gmelin*, M. D. Profeſſor of Chemiſtry in the univerſity of Goettingen, *&c.* 8vo. Nuremberg.

Auſerleſne vollſtoendige abhandlungen von der colik von Poitou, *i. e.* Select diſſertations on the colic of Poitou. Tranſlated into German from the Latin of De Haen, Graſhuys, Tronchin, and Strack, by *C. F. Schweder*. 8vo. Copenhagen.

Tratado teorico-practico de materia medica interna y externa, que explica los medicamentos naturales

naturales o ſimples aſi como las præparaciones chimicas las mas uſuales, ſus doſis, ſu modo de obrar, los coſos donde convienn, y ſus formulas, con un ſupplemento a lo ultimo. Par Don *Juan Rance*, M. D. 4to. Barcelona.

Diſſertacion ſobre el ſen de Eſpana, pruebaſe come eſpecificamente no es diſtinto del Alexandrino ü oriental; y explicanſe ſus virtudes en la medicina, ſu cultivo, *&c.* a que ſe annade la lamina de la planta. Par Don *Salvador Soliva*, M. D. 8vo. Madrid.

Lettere ſopra A. Corn. Celſo, al celebre Abate Girolamo Teraboſchi. 8vo. Rome.

Parere medico-legale ſopra un fetoa, *&c. i. e.* a medico-legal conſultation concerning a fœtus that came into the world after a pregnancy of 196 days. By *Lewis Beſſi*, M. D. 4to. Florence.

P. M. Auguſti Brouſſonet, Medicinæ Doctoris, Societatis Regiæ Londinenſis et Monſpelienſis Socii, Ichthyologia, ſiſtens piſcium deſcriptiones et icones. 4to. London.

Torberni Bergman, Chemiæ Prof. Upſ. et Equitis aurati regii ordinis de Waſa, Opuſcula phyſica et chemica, pleraque ſeorſim antea edita, jam

ab

ab auctore collecta, reviſa, et aucta. Vol. II. Cum tabulis æneis. 8vo. Upſal.

Nicol. Rigler, Phyſici Ducatus Bielicenſis in Sileſia Auſtriaca, Conſtitutio epidemica annorum 1775, 1776, 1778, 1779. Adjectis nonnullis ſelectioribus caſibus practicis. 8vo. Breſlaw.

Diſſertatio inauguralis de ſanguinis miſſione in febribus putridis. Auctore *Wernero-Erneſto Rudolpho*. 4to. Gottingæ.

Obſervationum obſtetriciarum de partu, clunibus præviis peracto decas. Auctore *Georgio-Gulielmo Spangerberg*. 4to. Gottingæ.

Pharmacopœia pauperum in uſum inſtituti clinici Hamburgenſis, edita a Societate Medica. 8vo. Hamburgh.

Acta Societatis Jablonovianæ, varii argumenti, ab anno 1775 ad annum 1779. Tom. V. 4to. Leipſic.

Diſſertatio phyſica de aqua. Auctore *Chriſt. Fred. Parrot*. 4to. Erlangen.

Tentamen phyſiologicum de motibus voluntariis. Auctore *Claudio Franciſc. Blaize*. 4to. Nancy.

Chriſtiani Theophili Kraſzeinteinii, Prof. Phyſices in univerſitate Haffnienſi, Tentamen reſolvendi problema ab academia propoſitum: Qualis

lis ſit natura et character ſonorum litterarum vocalium, a, e, i, o, u? an conſtrui queant inſtrumenta, quæ ſonos illos exprimant? 4to. Petropoli.

Diſſertatio inauguralis de ſterilitate humana. Auctore *Baſil. Klutſchatew.* 4to. Fribourg.

Diſſertatio inauguralis medica, exponens vulnerum, cum deperditione ſubſtantiæ, medelam. Auctore *Ottone Philippo Wiedenfeld.* 4to. Gottingæ.

Diſſertatio inauguralis medica, exhibens de morbis nervorum obſervationes quaſdam ſingulares. Auctore *F. J. Bruckmann.* 4to. Gottingæ.

Medicina clinica. Auctore *Chriſtian-Gottlieb Selle*, M. D. 8vo. Berlin.

Acta academiæ ſcientiarum imperialis Petropolitanæ, pro anno 1778. Pars prior et poſterior. 4to. Petropoli.

Hiſtoire de l'academie royale des ſciences, année 1777; avec les memoires de mathematique et de phyſique pour la meme année. Tirés des regiſtres de cette academie. 4to. A Paris.

Hiſtoire de l'academie royale des ſciences, année 1778; avec les memoires de mathematique

et

et de phyſique pour la meme année. Tirés des regiſtres de cette academie. 4to. A Paris.

Noveaux memoires de l'academie royale des ſciences et belles lettres, année 1780; avec l'hiſtoire pour la meme année. 4to. A Berlin.

Diſſertationes medicæ inaugurales, quas ex auctoritate Reverendi admodum Viri Gulielmi Robertſon, S. S. T. P. Academiæ Edinburgenæ Præfecti, nec non ampliſſimi Senatus academici conſenſu, et nobiliſſimæ Facultatis medicæ decreto, pro gradu Doctoratus ſummiſque in medicina honoribus et privilegiis rite et legitime conſequendis, eruditorum examini ſubjecerunt, ad diem 12 Septembris 1781.

Jacobus Home, Britannus, de ſcorbuto.

Gulielmus Harriſon, Britannus, de lue venerea.

Joannes Johnſton, Scoto-Britannus, de apoplexia ſanguinea.

Archibaldus Lindſay, Britannus, de plantarum incrementi cauſis.

Gulielmus Liſter, Britannus, de fermentatione.

Georgius Maclenachan, Hibernus, de vino.

Carolus Stuart, Britannus, de ſyſtematis nervoſi officiis.

Joannes

Joannes Winterbottom, Anglus, de vaſis abſorbentibus.

Ad diem 24 Junii 1782.

Gulielmus Corp, Anglus, de phthiſi pulmonali.

Jo. Radulphus Fenwick, Anglus, de plethora.

Gulielmus Gourlay, Scotus, de eryſipelate.

Harper Hall, ex inſula Barbada, de melæna.

Edvardus Hart, Hibernus, de morbis mammarum.

Georgius Paton, Scotus, de typho graviore petechiali.

Andreas Sayers, Hibernus, de menorrhagia.

Jonathan Stokes, Anglus, de aere dephlogiſticato.

Ad diem 12 Septembris 1782.

Daniel Bryan, Hibernus, de animi affectibus.

Georgius Daniel, Anglus, de cynanche typho.

Samuel de Butts, Hibernus, de aeris affectibus.

Thomas Evory, Hibernus, de febre puerperarum.

Jacobus Forſythe, Hibernus, de pneumonia.

Henricus Garde, Hibernus, de catarrho.

Jacobus Hare, Scotus, de ſyncope.

Philippus Holland, Anglus, de mente.

Jacobus Hutchinſon, Britannus, de febrium mutatione.

Andreas Marſhall, Scotus, de militum ſalute tuenda.

Ricardus Vaughan, Anglus, de rheumatiſmo.

FINIS.

INDEX.

A.

ABDOMEN, obſervations on opening, Page 99
Aery, Dr Thomas, hiſtory of a caſe of hydrocephalus ſucceſsfully treated by mercury, 332
Agues, cure of, 167, 250
Air contained in Buxton waters, 367
Affections, convulſive, induced from uncommon cauſe, 364
Antipathy, obſervations on, 150
Anthelmintics, applied to earth-worms, 336

B.

Bath, vapour, its uſe in hydrocephalus internus, 106
Bell, Mr Andrew, preparing anatomical tables, 391
Berkenhout, Dr, his pharmacopœia, new work on the plan of, 415
Biſſet, Dr, account of remarkable particulars reſpecting an old woman, 371
Black, W. obſervations medical and political on the ſmall pox, 141
Blackall, Andrew, account of his death, 113
Bohadſch, Jo. diſſertation on medical electricity, 7
Borthwick, Mr George, account of the ſucceſsful operation of the trepan, 322
Botanical Society, their tranſlation of the genera and ſpecies plantarum of Linnæus, 377
Botanical work to be publiſhed in Ruſſia, account of, 403
Bougie, method of preparing, 33

Brugmans, Antonius, obſervations on magnetiſm and magnetic affinity, Page 202
Bubo, cure of, 30, 48
Buxton waters, experiments on, 367

C.

Cæſarian operation, remarks on, 102
Cairncroſs, Mr Andrew, account of the ſurpriſing recovery of a private ſoldier in Gibraltar, 296
Camper, Monſ. P. diſſertation on the advantages of inoculation, 129
Canine madneſs, obſervations on, 304
Chancre, cure of, 50
Chordee, cure of, 47
Clap, treatment of, 27, 42
Concretion, calcareous, diſcharge of, 329
Convulſive affections, induced from uncommon cauſe, 364
Cranium, fracture of, 296
Cullen, Dr, third volume of his Firſt Lines of the Practice of Medicine, 392

D.

Dandelion, medicinal virtues of, 35
Dawſon, Dr Thomas, death of, 417
Deaſe, Mr William, obſervations on the different methods of treating the venereal diſeaſe, 25
Delius, Henr. Fridr. diſſertation on the medicinal virtues of taraxacum, 35
Diſpenſatory, Dr Lewis's improved edition, 415
Dropſy, new method of treatment, 83

Drowned

Drowned perſons, diſſertation on, Page 162
Drummond, Dr Alexander, account of, 426
Duguid-Leſlie, Dr Peter, account of, 425
Dura and pia mater, ſenſibility of, 22
Dyſentery, remarks on, 286
——— twenty caſes of, 291

E.

Eaſon, Dr Alexander, caſe of hydrocephalus ſucceſsfully treated by mercury, 325
Electricity, its uſe in rheumatiſm, 314
Extraction of a ſplinter by the trepan, 322

F.

Febrile ſympathy and conſent, remarks on, 150
Fever, jail, account of, 190
Fitzgerald, Dr Samuel, hiſtories of two caſes: The diſcharge of a calcareous concretion, and the extraction of the bones of a fœtus by the rectum, 329
Fitzpatrick, Dr, account of convulſive affections, 364
Fœtus, extraction of, by the rectum, 329
Fowler, Dr Thomas, experiments on anthelmintics applied to earth-worms, 336
Fracture of the cranium, 296

G.

Gaubius, Hieronymus David, account of his death, 111
Glaſgow univerſity, legacy from Dr Hunter, 433
Gleet, cure of, 28
Gold, experiments on, 176

Gonorrhœa, cure of, Page 27, 42
Guthrie, Dr Matthew, obſervations on the plague, quarantines, &c. 345

H.

Hamilton, Dr Alexander, treatiſe of midwifery, 52
——————— preparing a ſecond edition of his elements of the practice of midwifery, 391
Harveian ſociety, annual prize for 1781, 408
——————— annual prize for 1782, 409
Heiſham, Dr John, account of the jail-fever, 190
Henry, Mr, tranſlating Baumé's chemiſtry, 384
Henry, Thomas, method of preſerving water at ſea from putrefaction, &c. 63
Houlſton, Dr, obſervations on canine madneſs, 304
Hunter, Dr William, account of, 426
Hydrocephalus ſucceſsfully treated by mercury, 325, 332
——————— internus, treatment of, 106
Hydrophobia, obſervations on, 304

I.

Jackſon, Dr Seguin-Henry, treatiſe on ſympathy, 150
Jail-fever, obſervations on, 190
Inoculation of the poor, plan for, eſtabliſhed at Liverpool, 393
Inoculation, obſervations on, 129, 133, 211, 213
Journal, medical, at Stockholm, account of, 109

K.

Kilgour, Mr Thomas, hiſtory of a caſe in which worms in the noſe were ſucceſsfully removed by the uſe of tobacco, Page 75

L.

Lanphier, Dr Simon, hiſtory of a caſe of rheumatiſm cured by electricity, 314
Lewis, Dr, improved edition of his diſpenſatory, 415
Lieutaud, Dr Joſeph, account of his death, 112
Linnæus, Sir Charles, account of tranſlation of his genera and ſpecies plantarum, 377
Lues venerea, treatment of, 25
——— ——— forty-ſix caſes of, 267

M.

M'Cauſland, Mr R. facts and obſervations on different medical ſubjects, 247
M'Nab, Mr John, letter reſpecting the degree of cold which freezes mercury, 393
Madneſs, canine, obſervations on, 304
Magnetic affinity, obſervations on, 202
Makittrick-Adair, Dr James, obſervations on regimen and preparation under inoculation, and treatment of natural ſmall pox in the Weſt Indies, 211
Medical and political obſervations on the ſmall pox, 141
Medical journal at Stockholm, account of, 109
Medical ſubjects, obſervations on, 247
Medical electricity, diſſertation on, 7

Mercury, experiments on, Page 176
——— its uſe in hydrocephalus, 325, 332
——— its uſe in canine madneſs, 270
——— ——— in lues venerea, 34, 273
Midwifery, treatiſe of, 52
Monro, Dr Alexander, account of his works, 384
Muſeum, Dr Hunter's, how left, 432

N.

Nachtigal, Jo. Wences, diſſertation on drowned perſons, 162

O.

Old woman, remarkable particulars reſpecting, 371
Operation, Ceſarian, remarks on, 102

P.

Paris, medical and anatomical publications at, 389
Pattiſon, Mr Jacob, account of his death, 411
Paxton, Mr Richard, obſervations on opening the abdomen and thorax, 90
Pearſon, Dr, account of experiments made on Buxton waters, 367
Perioſteum and pericranium, ſenſibility of, 20
Peruvian bark, red, uſe of, in agues, 167
Pharmacopœia, new edition of, 392
Pharynx, caſe where wounded, 319
Phymoſis and paraphymoſis, cure of, 29
Plague, obſervations on, 345

Plague, ſymptoms of, Page 352
Pleura and peritoneum, ſenſibility of, 23
Pox, ſmall, obſervations on, 129, 133, 141, 211
—— French, treatment of, 25, 267
Price, Dr James, account of experiments on mercury, ſilver, and gold, 176
Pringle, Sir John, account of, 416
Prize-queſtions propoſed by the Royal Society of Medicine of Paris, 412
———— propoſed by the Harveian Society for 1781, 1782, 1783, 409, 410
———— propoſed by the Society of Sciences at Haerlem, 413
———— propoſed by Dr Hawes, 414
Pubes, cutting ſymphyſis of, 95
Publications, new, 377, 384, 389, 390, 391, 392

Q.

Quarantines, obſervations on, 345

R.

Radniczky, Ig. on the inſenſibility of tendons, 16
Rectum, extraction of the bones of a fœtus, 329
Ring, John, new method of treating the dropſy, 83
Rheumatiſm, cured by electricity, 314
Royal Academy of Sciences at Paris, premium for diſcovering proceſs for decompoſing ſea-ſalt, 412
———————————— prize-diſſertation for the year 1783, 414
Ryan, Dr Dennis, account of, 420

Ryan, Dr Dennis, caſe where the pharynx was wounded, Page 319

S.

Saunders, Dr William, obſervations on the ſuperior efficacy of red Peruvian bark in the cure of agues, 167
Silver, experiments on, 176
Simmons, Samuel-Foart, obſervations on the cure of the gonorrhœa, 42
Small pox, inoculation of, 129, 133, 141, 211
——— natural, 215
Solander, Dr Daniel, account of, 418
Splinter, extraction of, by the trepan, 322
Strangury, venereal, cure of, 32
Swelled teſticle, cure of, 30, 46
Sympathy, treatiſe on, 150
Symphyſis of the pubes, cutting of, 95
Siphylis, treatment of, 25
——— forty-ſix caſes of, 267

T.

Tables of vermifuges, 342
——— forty-ſix caſes of lues venerea, 267
——— twenty-ſix caſes of dyſentery, 291
Taraxacum, medicinal virtues of, 35
Tartar emetic, uſe of, in agues, 250
Tendons, inſenſibility of, 16
Thorax, obſervations on opening, 90
Tobacco, medicinal uſe of, 75

Trepan, ſucceſsful operation of, Page 322
Typhus carcerum, obſervations on, 190

W.

Water, method of preſerving it at ſea, 63
——— method of impregnating it with quicklime, 65
Waters, Buxton, experiments on, 367
Weſt Indies, treatment of ſmall pox in, 211
Worms, earth, anthelmintics applied to, 336

V.

Vapour-bath, its uſe in hydrocephalus internus, 106
Variola, obſervations on, 129, 133, 141, 211
Venereal diſeaſe, obſervations on the different methods of cure, 25
Vermifuges, tables of, 342

Y.

Yeaſt, artificial, method of preparing, 72
Young, Dr Thomas, account of, 423



