Surgeons Royal .. 1809

THE

MEDICAL AND PHYSICAL JOURNAL;

CONTAINING

THE EARLIEST INFORMATION

ON SUBJECTS OF

Medicine, Surgery, Pharmacy, Chemiſtry,

AND

NATURAL HISTORY,

AND A CRITICAL ANALYSIS OF ALL NEW BOOKS IN THOSE DEPARTMENTS OF LITERATURE.

CONDUCTED BY

T. BRADLEY, M.D.

AND

A. F. M. WILLICH, M.D.

—— Ex medicina nihil oportet putare proficiſci, niſi quod ad utilitatem corporis ſpectat, quoniam ejus causâ eſt inſtituta.

CICERO, *de Inventione*, Lib. I.

VOL. II.

FROM AUGUST TO DECEMBER, 1799.

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ADVERTISEMENT.

THE Editors have ſo many opportunities of addreſſing their literary friends, correſpondents, and the public, that the formality of a Preface might well be diſpenſed with: they are, however, happy to avail themſelves of this occaſion, to expreſs their ſenſe of gratitude for the numerous and conſtant proofs of the general approbation with which their labours are received.

The increaſing demand for the MEDICAL AND PHYSICAL JOURNAL, ſince the completion of the Firſt Volume, as well as the unprecedented ſupport by original communications, are the moſt unequivocal teſtimonies of public ſanction.

The Conductors of the work embrace this opportunity of aſſuring the profeſſional Reader, that the frequent hints they have received, concerning the protraction of controverſies, and inſertion of anonymous communications, ſhall not be neglected. Indeed, the public mind ſoon decides on conteſted points, if at all intereſted in the inquiry; while the Diſputants themſelves generally become more and more attached to their original opinion.

DECEMBER 1, 1799.

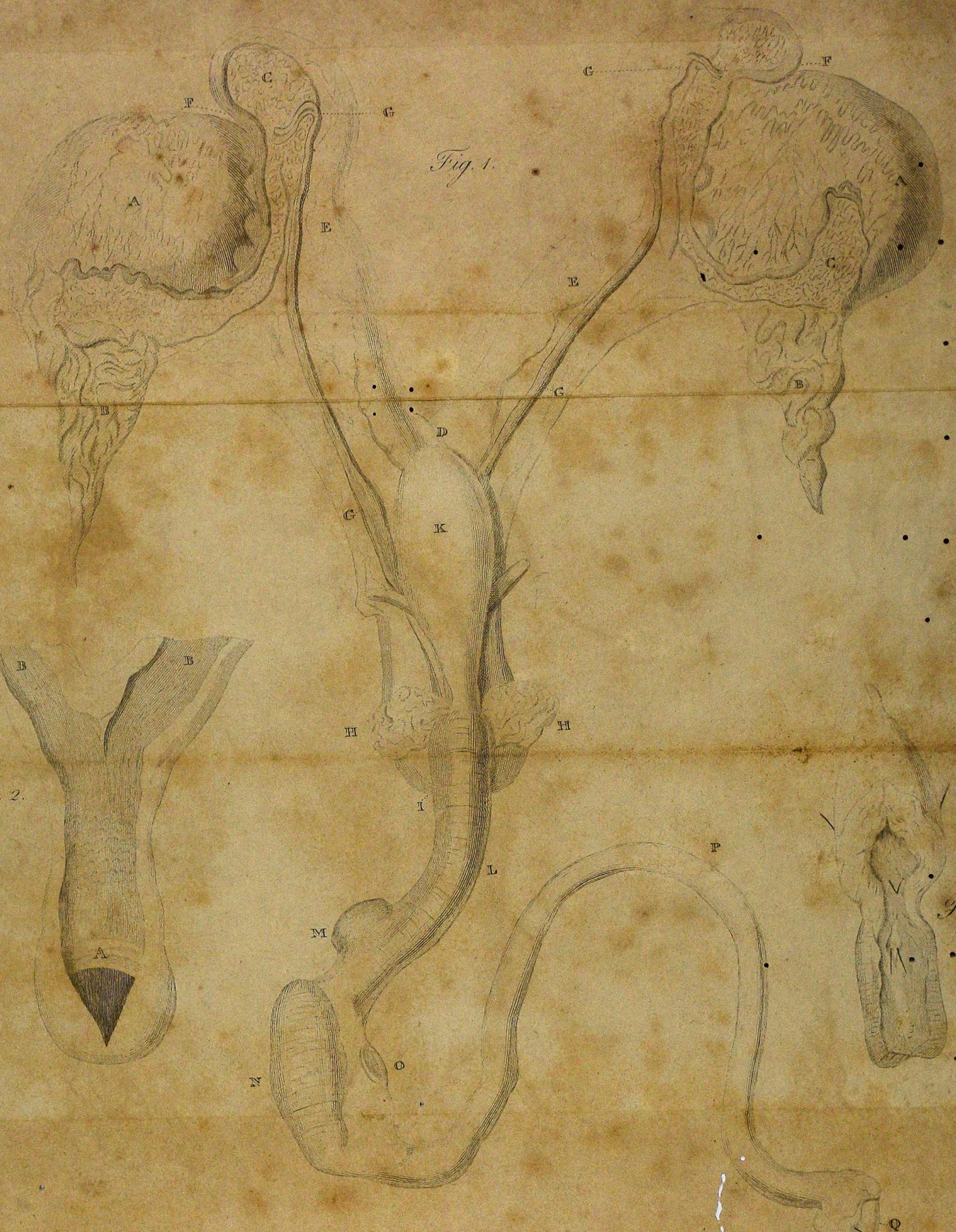

Fig. 1.

Fig. 2.

Fig. 3.

THE

Medical and Physical Journal.

VOL. II.] AUGUST, 1799 [NO. VI.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IF the following description of an hermaphrodite comes within the views of your useful publication, you have my permission to insert it whenever you think proper.

I remain, Gentlemen,
Your's very respectfully,
H. LEIGH THOMAS.

LEICESTER-SQUARE,
July 21st, 1799.

Deviations from the natural structure in animals do not frequently lead to any immediate improvements in the practice of medicine; but they tend to enlarge our knowledge of the animal economy, and may, in this way, be said to contribute remotely to the advancement of the healing art.

The smaller deviations from the natural structure in man, and in other animals are very numerous; but even those in the most important organs not unfrequently occur. That species of deviation or monstrosity, called hermaphrodite, has hardly ever been known to happen in the human species; but, in some other animals, as in the bull and the ram, it has been occasionally remarked.

The one which has lately occurred to me, and which I shall now attempt to describe, is very complete in its kind, and is different in most respects from what has been published by Mr. HUNTER, in his book, upon certain parts of the animal economy.

The lamb, the subject of the following description, was not more than two months old; it had the external characters of a ram, as far as is common at that age, except a deficiency of the scrotum; having been purchased amongst a number of others in a public market, no account of it, previous to dissection, could be procured. Upon opening into the abdomen, the uterus appeared to occupy its usual position, with respect to the urinary bladder and the rectum; the peritonæum was reflected over it in the usual manner, forming its ligaments; the blood vessels; (which were afterwards filled with

a coloured fluid) took the common route, and the uterus divided into two horns, which, externally, had the usual appearance. The Fallopian tubes arose out of them, and terminated in a tortuous, convoluted manner upon the body of a substance exactly resembling the testicle of a ram. The body of the uterus possessed the common rugose structure, but the horns were only lined by a smooth membrane; those glandular bodies which are observable in the perfect uterus being altogether wanting. At the anterior extremity of the fundis uteri, a thick semi-lunar valve passed across, which seemed to correspond to the os tincæ, and hardly allowed a fine probe to pass over its upper edge. The vagina scarcely existed, forming only a short pouch beyond the valve, which was lined by a smooth membrane, without any appearance of a fallicular structure.

The testes occupied the place of the ovaria, and were inclosed by the same reflection of the peritonæum which formed the broad ligaments of the uterus; they were of the common size, and in form a little more globous than usual, which, perhaps, may be explained from their never having been pendulous. The blood-vessels, after being filled with the red injection, appeared to take the usual circuitous route, communicating with those of the uterus; and the lymphatics also seemed to arise, and pass out by the spermatic chord in the usual order. A longitudinal section being made through one of the testicles, its internal structure was precisely the same with what is natural to that organ; and, upon maceration in water for a certain time, it put on the usual shaggy appearance formed by the tubuli seminiferi. The remaster muscle was wanting, as well as the tunica vaginalis; the latter could not be obtained unless the testicle had passed the abdominal ring. The epidymis belonging to each testicle presented the common convoluted structure, and the canal was pervious throughout its whole length, quicksilver freely passing along it from the vas deferens to the testicle. The vas deferens, after leaving the epididymis, passed down upon the outside of the floras of the uterus, between the duplication of the peritonæum, and opened on each side of the caput gallinaginis; the vesiculæ seminales lay upon the short pouch corresponding to the vagina, still preserving their relative situation with respect to the uretha; they were of the common size and structure, and their ducts opened into the urethra, along with the vasa deferentia, at the usual place. The internal surface of the urethra was studded with pellicles, as is usually the case; the penis too, and the parts immediately connected with it, appeared every way complete and perfect. The urinary bladder was connected to the uterus by cellular membranes and its peritonæal covering; it had no connection with the vaginal pouch, but was joined to the penis in the common way.

It

It has been an opinion received amongst many phisiologists, than when an animal of a perfect order* is brought forth an hermaphrodite, that it must have been the consequence of a double impregnation, and that such a production will be incapable of propagating its species.

With respect to the birth of the animal above described, no information could be procured, nor can we be more certain with regard to its fecundating powers; but if we may be allowed to form some judgment from the exact resemblance of its male organs (in every essential particular) to those of a perfect ram at the same age, then there does not seem to be any reason, from the structure of the parts, why the animal, if it had grown up, should not have had the natural propensities of the ram. When the testicles are detained in the abdomen, Mr. Hunter considered them as being always imperfect†, but in all those cases which came under his observation, both the size and structure of the testes were evidently defective; but in the present case no deficiency in the size, or deviation from the natural structure was apparent, and their close connection with the Fallopian tubes, by the reflection of the peritonæum, will sufficiently explain the reason why they did not descend into the scrotum. The early death of this animal is to be regretted, for had it arrived at maturity, it might have taught us whether such a species of monstrosity can ever shew partiality for the female, and how far it could have been able to propagate its species. The probability is, that the presence of the uterus, imperfect as it is, would so far have checked or interfered with the natural propensities of the male, that the animal would have shewn little or no partiality for either sex.

EXPLANATION OF THE DRAWING.

FIG. 1st.

A. A. The testes.
B. B. The spermatic vessels, injected.
C. C. The epididymis, filled with quicksilver from the vas deserens.
D. D. The uterus.
E. E. The horns of the uterus.
F. F. The Fallopian tubes, terminating in a convoluted manner, and opening upon the testicle on each side.
G.G.G.G. The vasa deferentia, arising out of the epididymis, and pressing upon the outside of the horns of the uterus.

H. H.

* I only allude to the bull and the ram, not having had an opportunity of seeing any account of the like monstrosity taking place in any other animal.

† Observations on certain parts of the animal economy, page 18.

H. H. The vesiculæ seminales of the usual size, their ducts entering the caput gallinaginis, along with the vasa deferentia.

I. The vagina, terminating in a cul de sac.

K. The urinary bladder.

L. The membranous part of the urethra, encircled by a sphincter muscle.

M. One of Cooper's glands.

N. The bulb of the urethra.

O. The right crus of the penis, separated from the pubis.

P. The penis.

Q. The glans, with a bristle introduced into the urethra.

FIG. II.

The vagina and uterus laid open, shewing the internal rugose appearance usually met with in the perfect uterus.

A. A broad semi-lunar valve, somewhat corresponding to the os tincæ.

B. B. The horns of the uterus lined by a smooth membrane, wanting the glandular bodies constantly found the perfect uterus.

FIG. III.

The membranous part of the urethra laid open into the bladder, shewing bristles introduced into the occuli gallinginis; also two other bristles in the ureters.

FOR THE MEDICAL AND PHYSICAL JOURNAL.

Extract of a Letter from Mr. THOMAS CHRISTIE, *Surgeon of the* 80*th Regiment, to Dr.* SAUNDERS, *New Broad Street, London; dated Trincomale, Island of Ceylon, May* 21*st*, 1798.

"ON our first arrival at this station, which is accounted one of the most unhealthy in India, we were very sickly: of late, however, we are become extremely healthy, have not many sick, and but few casualties.—During my residence, although short, in India, I have had considerable experience in the endemic diseases of the country, particularly in hepatitis, and have had frequent opportunities of observing, in my own practice, the great justice and accuracy of your valuable remarks on that complaint.

"As I had for some time the care of the whole garrison here, I had then an excellent opportunity of observing the comparative frequency of the disease, and violence of the symptoms, among the men lately arrived from Europe, the Europeans long in India, and the native troops.

"I

" I found, that among the men of the 80th regiment, for the first six or eight months, the disease was much more frequent, much more violent in its symtoms, shewed more tendency to suppuration, and was more sudden in its crisis, than with the Company's European troops, who had been long in India, although the latter were the most debauched. Among the natives, hepatitis does not so often occur; out of the thousand native troops, I did not, in the course of three months, meet with more than two cases of liver complaints, which is, comparatively, a very small proportion.

" The following instance is strongly a proof of your proposition (part 5. sect. 1. chap. 5), with respect to the propensity of the inflammation to the stomach, causing a constant reaching; it also seems to shew, that all the supposed pathognomic symptoms are not present in every instance of hepatitis: Corporal POTTER, of the 80th regiment, a healthy young man, was attacked about the 6th of November, 1797, with symptoms of pyrexia, attended with pain at the pit of the stomach, dyspnœa, and almost constant vomiting. As he had no cough, or affection of the bowels, he was treated as for an affection of the liver, although no tumour or particular pain was observable upon pressure of the right hypouchondim, nor did he complain of the pain extending to the shoulder till within three days of his death, which happened on the 20th of November.

" Upon opening the abdomen after death, and raising the sternum, I found the liver of its natural size, and in its usual situation, without any adhesions between its convex surface and the abdominal perinæum, so that I began to conceive I had been mistaken in my opinion of the case, till observing the stomach particularly prominent, and some adhesion between it and the concave surface of the liver, I separated these with my fingers when I found nearly a quart of well-formed pus contained between the stomach and the concave surface of the liver, a part of which latter was corroded, but the rest of that organ, as well as the stomach and other viscera were in a sound state.

" I have made a point of opening every person who has died of the liver-complaint, while under my care; and amongst the men of the 80th regiment, who were lately arrived from Europe, I did not find one out of twelve instances in which suppuration had not existed in some part or other of the liver. Suppuration, I have every reason to believe, is not near so frequent amongst the natives, or Europeans who have been long in the country; and, indeed, amongst the men of the 80th regiment, who have now been above fifteen months in India, I find that, already the disease puts on a different form, becomes less frequent, more slow in its progress, and shews much less tendency

tendency to run into suppuration. On my first coming here, I had originally sixteen or seventeen men in the hospital with hepatitis—I have now seldom more than six or seven, and have not lost a man from the complaint for the last two months, although we are now stronger in men than we were at that time, having been reinforced with drafts from some old regiments. From the mode of recruiting the army here, it seldom happens that the care of so many Europeans (about 800), just arrived in India, falls to the charge of one person, at one time; I therefore thought that these few remarks, as they relate to Europeans lately arrived in India, might be acceptable to you.

"There are many marshes, and much brush-wood in the vicinity of the fort; the atmosphere is moist; and most of the diseases here are those of debility—to which I find the private men, as living worse, are much more subject than the officers. The fever-complaint has, however, I think, attacked a greater proportion of officers than men.

"I ought to observe, that the fever-complaint is a familiar phrase in India for hepatitis; from inadvertancy I make use too often of that indefinite term; but I always mean hepatitis, both of the acute and chronic kind.

"In agues, which are very frequent here, I have had an opportunity of making a comparative trial of the pale red, and yellow bark, and from my own experience, have not the least hesitation in giving the preference to the last."

FOR THE MEDICAL AND PHYSICAL JOURNAL.

Additional Facts and Observations relative to Opium applied externally, so as to be absorbed by the Lymphatics.

By M. WARD, *Surgeon to the Manchester Infirmary.*

HAVING endeavoured to excite the attention of medical practitioners to this interesting subject*, it appears to be a duty incumbent upon me, to communicate any farther cases or observations which may have occurred to me; tending either to elucidate or extend the practice.

The following, I trust, will not be deemed entirely unworthy their attention.

June 7, 1799, John Jackson, at 53, was admitted into the Infirmary, with a simple fracture of the tibia and fibula of the left leg. An eighteen-tailed bandage, moistened in aq. litharg. ace tat. comp. was applied, and the limb was

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* See the Medical and Physical Journal for July.

was placed on its outer side, with the knee bent. He was unusually loquacious whilst we were reducing the fracture. A low diet and a laxative medicine were prescribed.

June 11. He has had very little sleep last night, and was found this morning in a maniacal state, lying across the bed without any of the bandages upon his leg. He talks incoherently: his tongue is white, and his countenance flushed: pulse 108 and soft. Circular rollers steeped in aq. lith acet. co. were applied upon the limb; and as soon as a strait waistcoat could be procured, he was placed on his back, and his leg was confined in a fracture box, of such a construction as to allow his knee to be in a bent position, and the limb to be raised. His leg was secured in the box, and the potus acid. vegetab. directed to be drank ad libitum.

June 12. He found means in the night to extricate himself from the strait waistcoat and has been so noisy the two last nights, as to disturb the patients in the neighbouring wards: he never ceases talking; generally mutters to himself; but sometimes is extremely noisy: his eyes are blood-shot, a constant tremulous motion prevails in every part of his frame; his tongue and gums are much furred (the former has brown streaks upon it;) pulse 120.

℞. Amon. præp. gr. xv; pulv. cort. Peruv. scrup. i; tinct. opii. gutt. v. syrup. sacchar. drachm i; aq. cinam. drachm ii; aq. pur. drachm vi.—M. s. haust. quarta quaque hora sumend. in effervescent. cum suc. limon. recens. unc. ss.—Contin. potus.

I visited him again at nine in the evening. He had taken two draughts. The tremor and delirium had not abated; I therefore directed the following liniment to be rubbed into the inside of his right thigh immediately, and to be repeated in four hours, unless sleep was procured.

℞. Opii. pulv. subtil. drachm ss. camphor: gr. iv. adip. suil: scrup. iv. ol. olivar. drachm i. M.—*

June 13. He slept well the whole of the last night. Tremor is gone and he is easy, composed and rational: his thirst is abated; but his tongue continues white: appetite good, pulse 88.

The strait waistcoat was taken off: he has no complaint left, except a slight maziness in his head. Two portions of liniment, each containing half a drachm of opium, were applied.

He has been harrassed with a great variety of incongruous ideas since the delirium came on; but that which seems to have made the strongest impression is, his imagining himself to have been conveyed with incredible velocity, from

* This formula seems to be absorbed with more ease than any other I have yet tried, but one drachm of lard and half a drachm of oil is sufficient, where the opium does not exceed a scruple, and so in proportion.

from one eminence to another. It will be unnecessary to continue the journal regularly. It did not seem safe at once to discontinue the opium; one portion of liniment was therefore rubbed in every night for three or four times; but each portion contained a smaller quantity of opium than the preceding.

On the 14th, in the morning, his pulse was 92 and regular; in the evening 80, 15th 84, 16th 76, 17th 84, 19th 80. Before the first portion of opium was applied, his pulse fluctuated between 100 and 120. July 4. His leg is as strait and as firm for the time, (28 days) as any fractured limb I ever saw, which is surprising, considering how restless he has been.

The mania has returned at intervals since the 20th ult. and he has taken two grains of opium every night lately, with apparent advantage; but has often been confined since the 20th, by the waistcoat in the night, and liberated in the day time. His appetite has been insatiable since the 18th ult. Only one person has visited him since his admission, and she is ignorant of his previous history. He says he never was insane before.

To guard against the indiscriminate application of opium externally, by absorption, in delirium accompanied with fever, it may be proper to observe, that in a recent instance of typhus, where petechiæ, a livid appearance of the eschar, occasioned by a blister, stupor, and an involuntary discharge of bloody urine, had taken place, and the patient had been delirious and had very little sleep for some time, a scruple of opium was rubbed into one thigh (15) grains had been rubbed in six hours before, and ten grains twelve hours before, without producing any sensible effect. The next day the patient was affected with coma, which went off in about 24 hours.

The stupor and putridity which prevailed in the system before the opium was employed, were probably amply sufficient to account satisfactorily for the occurrence of this symptom; but still, the external application of opium, except in small quantities, when there is any tendency to coma, seems likely to be ambiguous, if not hurtful in its effects.

Mary Caldwell did not seem to derive any material advantage from a continuance of frictions with opium; they were therefore discontinued; but they enabled her to leave off taking the pulv. ipecac. comp. which could not be accomplished till she had recourse to them. Since that time she is become an home patient to the Infirmary, and was no better the last time I heard of her.

Dr. Percival informs me, that since his last communication to me, he has tried the external use of opium in a chronic dysury, and in a case of the stone in the bladder, with very considerable ease to the patients, and without producing the vertigo, head-ach, and obstinate costiveness, which the internal use of laudanum had before occasioned. He has suggested to me the following experimental inquiries. 1. What

1. What is the smallest quantity of unguent required for combination with the opium, so as to render it readily admissible into the body? To ascertain this point, might tend to facilitate and shorten the operation of inunction.

2. Would the oleum e pedipus bovinis, or neats' foot oil, which, being remarkably lubricating, may be supposed to pass readily into the pores of the skin, be a commodious vehicle for the opium?

3. Would opium, combined with the yolk of an egg, gain a readier admission into the body than with an oily substance?

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AS I am extensively engaged in the medical application of electricity, if any observations I should be enabled to make should be deemed worthy of insertion in your Miscellany, I shall be happy to transmit to you, for your next, and every subsequent Number, the cases which occasionally come under my care.

I remain, Gentlemen,

Your most obedient,

No. 10, *Leicester Street, Leicester Square.* C. H. WILKINSON.

As my opinions of the influence of electricity on the human frame are in some respects, different from those generally entertained, previous to entering into any investigation of its medicinal powers, I shall beg leave to premise a few general observations.

All fluids yet known, except air and oil, contain more or less electricity, and will freely admit its ingress, as well as egress. As the human body is principally constituted of fluids, it is replete with electricity, and sensible of the least disturbance. A person insulated, giving a spark of electricity, communicates not identically the same portion he received from the machine, but an equal quantity, forced out of his body, by the impulse of that he received from the conductor. When thus connected with an electrical machine, a man becomes a part of the conductor—participates of the intensity—and equalizes with the whole.

Upon this consideration, we must regard the human body as a substance, throughout which electricity is diffused: such being the case, there can be no further addition, but an adequate portion will either be transmitted to some conductor, or form an electrical atmosphere round the body.

Obedient to the same general laws by which fluids are governed, the electric matter, upon any impulse, moves in that direction where it meets with the least resistance; and, being an elastic fluid, the force of the impulse will be in the inverse cubic ratio of the distance of any part from the line of direction.

If a person takes a very gentle shock, he only experiences an uneasy sensation at the tip of his fingers; if the shock is a little stronger, he feels it about his arms; if stronger, it agitates his body.

It is very easy to comprehend why we should experience a electrical sensation at the extremities, when connected with the Leyden phial.—The quantity of electricity entering the body has in that part to overcome the resistance of the electricity inherent in the fingers; from the fingers the impulse is transmitted through the body: the fingers which are in connection with the negative side of the bottle, in passing out, have to overcome the resistance of the egress.

In proportion as the impulse is more violent, its effects will be more extended.

In the human body, we can either increase or diminish the natural quantity of electricity, or disturb the relative situation of the whole.

The human body, like all conducting substances, is never found to possess in different parts, different stages of electricity, so as either, by a partial excess or diminution, to constitute a disease; hence the idea of equalizing the principle of electricity in the human frame, is unsupported by any logical experiment.

Electricity, unless from the impulse of shocks, or the irritation of sparks, never, either in a positive or negative state, influences the pulse; although KRATZENSTEIN, SAUVAGES, GERHARD, and CAVALLO assert the contrary. Their experiments were not very correctly conducted: it was accurately tried by the following gentlemen, viz. Drs. DEIMAN, VAN MARUM, VON TROOPSWYK, and CUTHBERTSON, with the powerful aparatus at Haarlem; the pulse of no one was in the least influenced either by negative or positive electricity. I have frequently tried myself, as well as others, in health or indisposed, yet have never observed any increase in the circulation.

The effect of electricity is by disturbing the natural quality inherent in any part of the human frame, and by thus altering the action of that part, inducing certain changes.

That

That such changes may be conducive to health, it becomes requisite for the administrator of medical electricity, to well ascertain the seat of the complaint, and to know the different sensibilities of the different parts, and the effect of electricity upon them.

There are many complaints which would be considerably aggravated by the imprudent use of electricity, and a great number of other affections which could no ways be benefited by this important agent, unless carefully applied.

If we were to apply electricity to the region of the diaphragm, in the same manner we would to a rheumatic affection of the extremities, what prostration of strength would be the consequence! That exquisitely sensible septum, by such an action, would be deranged in its functions, and respiration for a time impeded; it would not be again restored till the lungs were distended by a sighing inspiration, and the disturbance soothed by a flood of tears.

So in paralytic affections, in any derangement of the nervous system, to produce any good effect, the impulse must be made on the source of the complaint. In the palsied extremity, to apply electricity to the foot alone, no advantage could arise; we ought in this, as in every other case, to attend to the source of the disease before we can afford the wished-for relief.

Internal medicines are principally confined in their actions to the stomach some few can be communicated to the lungs; to all other interior parts we possess no power of determining any particular medicines, unless electricity be regarded as such. This principle we can direct in whatever manner we please. The muscles, ligaments, or even solid bones are, as it were, capacious vessels, affording easy transmission to this fluid; and, as we can regulate its power at pleasure, we are thus in possession of an active, penetrating principle, by which we can produce a variety of actions in different parts.

It is a law in the animal economy, that two different actions cannot exist in any one part of the human frame at the same time; when the natural action is any ways altered, it will be removed by inducing another that will counteract it. We ought to be extremely careful that the action we induce be exactly proportionate to the nature of the derangement. If a part affected should be in a state of great irritability, or should labour under any violent inflammatory action, these complaints would be aggravated by electricity. In all those cases which appear to be connected with diminished powers of life, as in dull, deep-seated, obtuse pains, or any interruption to the functions

of

of the nervous system, or by the increase of any secretion, electricity is frequently beneficial.

Electricity must be regarded as a medicine whose properties are not as yet well ascertained, and whose effects on different constitutions are not as yet determined; such require the united observations of many individuals, before its influence on our organization can be properly known. On this account, those cases where it fails should be particularised, as well as those where it succeeds. Such is the plan I shall presume to adopt with whatever cases I may send for insertion to the Medical and Physical Journal.

CASE. I—*Hydrocele cured by Electricity.*

About eight months ago, a gentleman applied to me respecting an hydrocele, with a view of trying electricity. The testis was enlarged, and apprehended to be so diseased, that any operation for its radical cure was noways advisable. For two months I tried the effects of electricity, without producing any other alteration than a diminution in the size of the testis; the dropsical accumulation appeared in some respects to be increased. He permitted me to puncture the scrotum with a small trochar. On the day after this operation, electricity was again had recourse to—a half-pint bottle, the electrometer at three-eighths of an inch. Shocks of this intensity, beginning at fifty, and gradually increasing to two hundred, were daily sent through the affected part: in the course of two months, the testis was reduced to the same size with the other. Electricity was suspended: no further tendency to accumulation has appeared.

N. B. Whenever the machine is not particularised, it is to be understood that a two-feet plate machine of Cuthbertson's was made use of; when any other size or form is employed, such will be particularised, as such very materially influences the intensity.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IN the fifth Number of your Journal for July, p. 509, I observe that you notice musk, and sal cornu cervi volatilis, in equal proportions, as a new and efficacious remedy in sphacelous, particularly in that species of it, "which is accompanied with convulsive symptoms, and has arisen from local external injury;" and you refer to a treatise on that subject supposed to have been written by a Mr. C. WHITE, of York.

Permit

Permit me to acquaint you, that you have been misinformed relative to the author of the treatise alluded to; Mr. C. WHITE, of Manchester, having first promulgated to the world an account of that remedy in the year 1790, in a pamphlet entitled, "*Observations on Gangrenes and Mortifications, accompanied with, or occasioned by, convulsive spasms, or arising from local injury, producing irritation.*"

Mr. White, however, was not the discoverer of the efficacy of musk and volatile salt in such cases, for the merit of the discovery is due to the late Dr. DARBEY, who casually hit upon it, in the treatment of a patient belonging to one of the other surgeons of the establishment, while he resided at the Manchester Infirmary, in the capacity of apothecary and house surgeon.

In the same year in which Mr. White published his pamphlet, and very soon after its publication, Dr. Darbey graduated at Glasgow, and he made choice of this subject for his thesis, the title of which is "*Dissertatio Medica quædum de moschi et salis alk. volat. usu in febre nervosa et gangrena proponens.*"

Since that time, musk and volatile alkali combined, have been a good deal used in gangrene and sphacelus, by some practitioners resident in this place, and I suppose with success, as the practice is still continued; but as I have found the bark to answer very generally in gangrene and mortification, I have had no experience of it myself.

I have been induced to send you this communication, in consequence of your remark, that "the effects of this medicine are stated to be such as deserve the greatest attention of practitioners; but we do not find that it has been generally employed, unless by foreign practitioners, who speak of it in the highest terms of commendation;" and also to do justice to the memory of the real author of the discovery, the history of which I have often heard him relate.

MANCHESTER, *July 22d*, 1799. W. SIMMONS.

STATE

STATE OF DISEASES IN LONDON.

Account of Diseases in an Eastern District of London, from the 20th of June, to the 20th of July.

ACUTE DISEASES.	No. of Cases.
Typhus	3
Quotidian	1
Measles	3
Scarlitina	2
Acute Rheumatism	3

CHRONIC DISEASES.	
Cough	4
Dyspnœa	5
Cough and Dyspnæa	6
Asthma	2
Fthisis Pulmonalis	5
Pleurodyne	2
Hæmoptoe	1
Hydrothorax	3
Ascites	5
Cephalagia	3
Apoplexy	2
Hemiplegia	3
Epilepsy	1
Vertigo	4
Epistaxis	3
Dyspepsia	6
Vomitus	2
Gastrodynia	8
Enterodynia	6

	No. of Cases.
Amenorrhœa	4
Menorrhagia difficilis	2
Chlorosis	3
Hæmorrhois	2
Calculus	1
Dysuria	6
Fluor albus	7
Scrophula	5
Hysteria	3
Palpitatio	2
Hypochondriasis	3
Chronic Rheumatism	11
Gout	1

PUERPERAL DISEASES.	
Dolores post partum	3
Enuresis	1
Mastrodynia	8
Abscessus Mammarum	2

INFANTILE DISEASES.	
Ophthalmia	3
Ophthalmia purulenta	2
Aphthæ	9
Convulsio	2
Tooth rash	2
Rachthis	2

The measles which have lately occurred, have proved a slight disease, so that in some instances the patient has hardly required any medical assistance. The fever has been very inconsiderable and the different catarrhal symptoms have been just sufficient to characterize the disease. The eruption has made its appearance at the time and has gradually disappeared, in some cases, without leaving any considerable degree of pneumonic affection. This termination does not always take place in the disease, when it is in other respects favourable; so that a caution is necessary against too soon taking it for granted, that all consequences of the disease are over, when it has gone through its regular stages. It has sometimes been observed that, where the disease has been of the milder kind, the succeeding symptoms of the inflammatory and pneumonic affection have been very severe, and have produced consequences that have ultimately proved fatal.

In

In the treatment of this disease the antiphlogistic plan must be observed. In some cases the free use of the lancet has been necessary; though in other this necessity has been superseded by administering the cooling purgatives and antimonial remedies, and observing a strictly antiphlogistic regimen. The cough may be palliated by demulcent remedies, to which, if there be not much fever, opiates may be added. Where the use of the lancet has been dispensed with, the application of leeches to the chest has sometimes been found an expedient practice, and a blister applied to the sternum has relieved under the prevalence of cough and difficult respiration.

Aphthæ in children have lately been more than usually prevalent, and in some cases have proved very obstinate. This disorder is very common, and very well known by those who have the care of infants. It appears on the lips, the tongue, and different parts of the fauces, in little white specks; which in some cases unite so closely as to form a kind of crust, covering the whole inside of the mouth and throat.

The first crop is sometimes succeeded by a second: this, though it may sometimes take place in the natural course of the disease, is often occasioned by an early and injudicious attempt to remove the crust by some topical applications. To keep the bowels open by gentle laxatives, and to correct the acidity which frequently prevails, by the testaceous powders, is perhaps the most proper plan of treatment.

Diseases admitted as In and Out-patients under the care of the Physicians of the Westminster Hospital, from the 20th of June to the 20th of July.

Typhus	1	Gastrodynia	5
Synochus	7	Hooping Cough	1
Hepatitis	1	Hypochondriasis	3
Measles	1	Hysteria	2
Amenorrhœa	4	Hydrocephalus	1
Asthenia	2	Impetigo	2
Asthma	1	Itch	7
Colic	1	Jaundice	1
Cough	8	Leucorrhœa	1
Diarrhœa	1	Phthisis	3
Dysuria	1	Quinzey	1
Dyspepsia	3	Rheumatism	12
Dysentery	2	Struma	2
Enterodynia	3	Urticaria	1
Erysipelas	1	Vomiting	1

As pectoral complaints, tending to phthisis pulmonalis, have been very frequent during the last and the preceding month, trials have been made of the lichen Icelandicus. An ounce is boiled in a pint and a half of water down

down to a pint; and two ounces of this decoction are taken three times a day. It does not appear to possess any antiphthisical virtues superior to other vegetable mucilages, but sits pleasantly on the stomach, and is gently laxative, if not boiled too long.

T. B.

List of Diseases from the 20th of June to the 20th of July; being the Result of the Public and Private Practice of a Physician at the West End of the Town.

ACUTE DISEASES.	No. of Cases.
Scarlatina Anginosa	7
Measles	6
Small-pox	2
Chicken-pox	1
Hooping-cough	2
Contagious malignant Fever	3
Acute Rheumatism	7
Catarrh	5
Ophthalmia	3
Inflammatory Sore-throat	3
Aphthous Sore-throat	4
Pneumonic Inflammation	1
Inflammation of the Bowels	2
Peritoneal Inflammation	1
Hæmorrhagy from the Bowel	2
Hæmorrhagy from the Lungs	7
Renal Hæmorrhagy	1
Epistaxis	2
Synochus, or Summer-fever	6
Child-bed and Milk-fever	3
Febrile Diseases of Infants	9
Hectica	6

CHRONIC DISEASES.	
Cough and Despnœa	32
Pleuretic Stitches	6
Pulmonary Consumption	7
Chronic Rheumatism	11
Lumbago and Sciatica	6
Asthenia	25
Paralysis	4
Head-ach and Vertigo	6
Melancholia	3
Chorea	1
Hysteria	1
Diarrhœa & Bilious vomiting	18
Dyspepsia	11
Gastrodynia	10
Enterodynia	6
Devonshire Colic	2
Chlorosis and Amenorrhœa	4
Menorrhagia	5
Abortus	2
Fluor Albus	5
Dysury	3
Renal Ischuria	7
Enuresis	1
Tabes Mesenterica	6
Dropsy	9
Scrofula	5
Worms	3
Rickets	3
Jaundice	4
Scirrhus of the Liver	1
Scirrhus of the Uterus	1
Stone and Gravel	3
Itch and Prurigo	7
Lepra	1
Scaly Tetter	2
Lichen	2
Impetigo	1
Eczema	1
Echthyma	3
Porrigo	2
Acne	2

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IF you think the history of the following cases not unsuitable to the design of your very useful publication, I beg the favour of you to insert it.

I am, Gentlemen,

Your very humble Servant,

July [illegible] 1798. THOMAS DENMAN.

CASE I. In July, 1798, I was desired to visit a lady, of whose case I received this account:—

On June 10th, she had been delivered of a dead child, between the seventh and eighth month of her pregnancy, when she suffered very acute pain in the extraction of the *placenta*, which was thought necessary. For several days previous to her delivery she had a considerable degree of fever, and much general uneasiness over the *abdomen*, for which she was bled, and took some cooling and quieting medicines. On the 12th (the second day after her delivery), she had a strong and violent rigor, succeeded by very severe pains in her left side, near the spine of the *ilium*, and fever, which continued for several days, when her milk, (before secreted) entirely disappeared.

Though the pain and fever were abated, they never entirely left her: and after another rigor on the 19th, with an increase of fever and pain in the part first affected, her friends were alarmed, and a physician of eminence was desired to see her. He prescribed what the situation and circumstances of the patient seemed to require, and she was much relieved. There were however, frequent exacerbations of fever; the pain of which she originally complained never entirely left her, and was sometimes violent. It was now perceived she had no power of moving her left leg or thigh, and she herself was sensible of a deep-seated swelling on the left side of the *abdomen*, though it could not be discovered by her attendants. A blister was applied to the whole of the pained side, and after some days farther attendance, the physician withdrew, recommending her to go into the country, and encouraging her to hope that, as she recovered her strength, her complaints would leave her. She was also advised to use as much exercise as she could, and accordingly attempted every day to walk with a crutch, and the help of her nurse; but every attempt gave her excruciating pain, and she was daily sensible of losing, instead of gaining strength.

I first saw her on the 18th of July. As there was an evident fulness on the left side of the *abdomen*, with much pain on pressure, loss of appetite, and other symptoms of fever, from some degree of which she was, in fact, never entirely free, I directed three or four leeches to be applied to the part affected, and to be repeated every other day, and such medicines as were likely to abate the fever, to keep the bowels gently open, and to moderate the pain. She was somewhat relieved by these means, and as she was very weak, I tried the *bark*, and some other tonic medicines, from which she did not apparently receive any benefit. From the contraction and wasting of the limb, and from the other circumstances before mentioned, thinking it probable that an abscess had begun to be formed in some part of the cavity of the *abdomen*, I requested to have a consultation, and Dr. BAILLIE was called in. After a mature deliberation on all the preceding circumstances, and the present state of the patient, it seemed most reasonable to think that an abscess was forming in the *psoas* muscle. Small doses of *cicuta* in the saline draughts were prescribed, and a soft plaister with *opium* was applied to the side; the case of the patient seeming to admit of little other relief than some alleviation of her suffering. In the middle of *August* she returned to her house in town, not in any respect amended in her general health, and she suffered more from her local complaints.

In a few days after her arrival in town, the pain being much increased, she went into the warm bath, and on the following day she was suddenly relieved by discharging a very large quantity of purulent matter, mixed with her urine. This was considered as a proof that an abscess had been formed, and discharged into the bladder, probably by means of an adhesion which had taken place, and a subsequent communication between this and the part first affected.

She continued to go into the warm bath for a few days, but suspecting that she was weakened, and feeling herself very much fatigued by it, she relinquished it altogether. At this time her medicines were changed for some of the milder turpentines in small doses, and still suffering considerable pain, opiates were given, and repeated as the case required.

When there was the greatest quantity of purulent matter discharged with the urine, and sometimes I think there could not have been less than four ounces at a single evacuation, she suffered the least pain; but when there was a suspension of the discharge, the pain was always most severe.

In the beginning of September, a swelling of a considerable size, with an evident fluctuation in it, was discovered on the inside of the thigh, without any appearance of inflammation or redness of the skin, as if the fluctuating matter

matter had been formed there; and, by a careful examination, the course by which the fluid had descended from the groin to the thigh, could be readily traced. The swelling gradually descended till it came very near the ham, varying in size, according to the position of the limb and body, and the patient thought she could distinctly perceive both the descent and rise of the fluid.

The night-sweats, and other hectic symptoms, were now extreme; but, after a trial of the bark, and other medicines of that class, which disagreed, she for many weeks took no medicine whatever, except small doses of *opium*, when the pain was violent, and some gentle laxatives when she was costive. She was allowed to drink porter at her meals, and at any other time, without restraint, when she wished for it, and always considered herself not only supported, but very much refreshed by its use.

In October she kept her bed altogether, unable to move, or help herself in any position, and frequently suffering much pain. I then proposed a consultation with Mr. CLINE, the surgeon of the family, to consider the propriety or expediency of making an opening in the tumour in the thigh, and by giving it an inferior vent, to prevent the matter from returning into the *abdomen*. Mr. Cline did not then think it justifiable to make an opening in the tumour, and I readily acquiesced in his opinion.

At the latter end of this month she was reduced to a state of extreme weakness, and exceedingly emaciated, but her appetite, which had never entirely left her, now began to improve. The tumour in the thigh daily lessened, and soon disappeared altogether; as did the quantity of matter discharged with the urine, till that also entirely ceased. In November she frequently voided small quantities of blood with her stools, and at the latter end of that month her health and strength were considerably improved. There was also about this time a return of some power of moving her limb; she soon became able to walk with crutches, the infirm leg being supported in a stirrup; and she had a return of the *menses*, which had not before appeared since the time of her delivery.

On the 20th of December she was lifted into the coach for the benefit of taking the air, and her health might at this time be said to be restored, as she had no complaint, and though weak and emaciated, was every day sensible of amendment.

In the beginning of the year she again proved with child, and went on to the full period of pregnancy, when she was safely delivered of a healthy boy; having recovered before the time of her delivery the perfect use of

her limb. She now walks, and performs all the offices of life with her accustomed ease, and has not the least remaining token of the complaint from which she had so severely suffered.

Case II.—The following statement of the case of a lady, was given me by Mr. *Thomas*, a very respectable surgeon at *Tunbridge Wells*; who had attended her from the commencement of her illness.

This lady, who had had several children, was brought to bed in *January* 1798; and had perfectly recovered her health, menstruated regularly till the following *June*, when she became sensible of a pain in the right side of the *abdomen*, near the groin, which, though not violent, prevented her from lying with ease, or sleeping on that side. About the middle of *January*, 1799, she was suddenly seized with a violent pain in her bowels, tension of the *abdomen*, and much soreness on pressure, accompanied with vomiting, constipation, and frequent faintings. These complaints were relieved chiefly by glysters and gentle purgative medicines, but not entirely removed without many repetitions of them. Before this attack, she had been much weakened by profuse discharges of blood from the *uterus*, and about ten days after, she suffered very violent pain in the lowest part of the back, seemingly near the extremity of the *sacrum*, which joins the *os coccygis*, extending to the loins and across to the hips, especially the right, and down that thigh. The slightest pressure on the *sacrum*, or hip, brought on excruciating pain in all the neighbouring parts, which continued for several minutes after the pressure was removed. This pain was considered as the *sciatica*, and it was relieved by the warm bath, and the occasional use of opiates. By a return of uterine hemorrhage, every six or eight days, together with loss of appetite and want of rest, she became extremely weak, irritable, and emaciated. On every return of uterine hemorrhage, the pains in the back were much increased, as they also were by the evacuation of a costive stool, for which reason glysters were daily injected. She never had much difficulty in voiding her urine, but frequent inclination to do it; yet there never was in it any distempered appearance.

About the middle or *February*, she could bear to be turned from her back to her side, but at those times she felt as if some heavy substance was contained in the *abdomen*, which shifted its place as she was turned. After a confinement of six weeks to her bed, the painful symptoms were mitigated, she was able to sit in a chair, with her feet raised high and her knees drawn up, but she was soon obliged by the pain in her back, to return to a recumbent position; nor was she able to suffer her right leg to approach the ground or bear the least weight upon it.

Her

Her health and strength however gradually improved, and in March she was able to move and walk a little, but instead of her former complaints, there was great tension and pain above the *os pubis*, and the whole hypogastric region was full and hard, but not sore to the touch, except on the right side, where the hardness was first perceived. One day about this time, while she was in the warm-bath, she discovered a large and hard tumour, extending to the right side of the navel, the increase of which was so rapid, that in the course of a few days it occupied the whole *abdomen*. She was then free from pain in all the parts contained in the *pelvis*, could turn herself in bed, and lie on either side, and not only move her legs, but walk much better. She frequently after this had slight shivering fits, and a sense of coldness down her back, followed by restlessness and feverish heat, especially in her hands and feet in the evening, which went off with a free perspiration towards morning. Her pulse was at all times very quick.

Though one or more stools had been regularly procured every day, an immense quantity of hardened fæces, of a large volume, were now discharged for three or four successive days, by which her size was much lessened. She was soon after able to bear a journey to *London*, her friends being solicitous that the nature of her complaint should be ascertained, as there had been various opinions and representations made of it, by different gentlemen who had seen her in the country.

On Sunday, *March* 31st, I visited this lady, and as it seemed of principal importance to discover in the first place, the seat and nature of her disease, it was necessary to be particular in my enquiries and examination. The whole *abdomen* was distended by a circumscribed tumour, evidently connected with, and springing from the right side, near the groin, thence extending across, and high up in the *abdomen*. This tumour, though not perfectly uniform over its surface, was distinctly circumscribed, and I thought I could perceive an obscure fluctuation in it. I could also feel an angle of the tumour in the posterior part of the *pelvis*, by which the *os uteri* was projected so high, and so far forwards, as to be almost beyond my reach, as is the case in a retroversion of the *uterus*. I could also ascertain that she was not pregnant. I did not therefore hesitate to give my opinion, that it was a *dropsy of the ovarium*; and by supposing this, early in the disease, to have dropped low down in the *pelvis*, and, afterwards to have risen according to its increase, all the symptoms which had occurred of the course of the disease, could be satisfactorily explained.

Having represented my opinion to the patient and her friends, though I could give but little hope of the disease being cured, I freed them from the fear and solicitude of any immediate danger.

The

The following draught was the only medicine I advised.

℞ Flor. Chamæmel. pulv. gr. xv.
Rhad. Rhei pulv. gr. v.
——Zingiber. pulv. gr. iij.
Aqu. Ment. sativ. unc. ij. m. f. Hustus
Sumat ter quottidie.

On the following day, she informed me that after suffering considerable pain in the bowels, she had had four or five copious motions, and that after every motion, she was sensible of her size decreasing. The motions were unusually offensive, and, before they came away, the desire to expel them was unnaturally urgent and painful. On examining them, I found that they almost wholly consisted of a gelatinous fluid, with many streaks of blood, and with little or no mixture of fæces.

The same medicines were repeated.

On *Tuesday*, after several other motions of the same kind, the distension of the *abdomen* was lessened more than one half, and instead of feeling weakened by the evacuations, the patient felt herself very much relieved, and cheered with the prospect of a speedy recovery. She took a sufficient quantity of nourishment, and continued the same medicine.

On *Wednesday*, I had nearly the same account of the number of motions, and of the gradual decrease of the swelling of the *abdomen*, which was now in fact wholly gone, except that I could feel the small tumour formed by the cyst, in which the fluid had been contained.

On examining this day *per vaginam*, the *os uteri* was found to be descended into its proper situation, and no tumour whatever remained in the cavity of the *pelvis*. The patient, in short, felt and considered herself as well, in which sentiment I encouraged her; concluding in my own mind, that, in consequence of preceding inflammation, an adhesion had taken place between the cyst of the tumour, and some part of the intestine, probably the *rectum*, the adhering portion of the bowel had given way, and, by that opening, the contents of the tumour had been evacuated.

At my request this patient stayed in town for a month, at the end of which time I saw, and examined her again; but I should not then, either from the state of her health, or any thing I could discover, have supected her ever to have suffered from any such complaint as that I have been describing.

Old Burlington-Street,
July 6, 1799.

FOR

FOR THE MEDICAL AND PHYSICAL JOURNAL.

Three Cases of Inoculation with the Variolæ Vaccinæ.

[Communicated by R. Redfearn, M. D. Lynn, Norfolk.]

Case I.

On the 20th of March, 1799, a boy named Ripper, aged three years and a half, being rather of a gross habit of body, was inoculated under my direction by Mr. Cr[illegible]sorth, jun. surgeon, with vaccine matter, which I had received the day before from Dr. Pearson, of Leicester square, London. A small incision was made upon the left arm, in the usual place of inoculation for the variolus infection; into this was inserted a piece of thread, thoroughly impregnated with the aforesaid matter, moistered with steam, and secured in a proper manner with sticking-plaster, and also a bandage to prevent its removal.

Monday, March 25th, being the sixth day after inoculation, upon removing the bandage and sticking-plaster from the incision, it appeared to be elevated, and in a state of inflammation, attended with small irritated eminences in its vicinity; but no constitutional illness from this local action had hitherto supervened. However, the following day, being the seventh after inoculation, upon re-examining the inoculated part, the inflammation and swelling were found to be much increased. A small flat vesication was also observed in the centre of the inflamed part, the boy being now seized with fever, viz. rigors, flushings of the face, quick pulse, head-ach, skin hot and dry, and accompanied with considerable languor and drowsiness. Those febrile symptoms continued during the four following days (the 27th, 28th, 29th, and 30th of March), being eleven days after inoculation, and five from the commencement of the fever. At this period, an eruption appeared upon the face, hands, and back, although not more than forty pustules were found upon the whole surface of the body.

Monday, April 1st, (being the thirteenth day), the eruption had increased in size, but not in quantity. On the appearance of the pustules, the fever subsided, and two or three very fine circular, elevated, flat pustules were also observed near the inoculated part, exhibiting to the eye a beautiful polish. A piece of thread was thoroughly impregnated with matter taken from them, and reserved for future inoculation.

Friday, April 5th (the seventeeth day), the eruption in many parts of the body seemed to be dying away, and a polished dark brown spot was visible in the middle of the pustules. The inoculated part was much contracted in size,

size, and a flat brown incrustation was observed in its centre. In all other respects the boy appeared to be perfectly well.

CASE II.—A girl, aged eleven months, labouring under dentition, *unweaned*, and rather of a delicate conformation, was inoculated in a similar way as the preceding patient, on the 20th of March, and with a piece of the same thread, impregnated with vaccine matter, as before described.

Sixth day, Monday, March the 25th, the inoculated part was a little inflamed and tumid: no pain of the axilla, and free from every symptom of constitutional indisposition.

The eighth day, Wednesday, March 27th, the inflammation upon the inoculated part was rather more increased, comparatively with its appearance, than on the sixth, and some slight febrile action was also obviously manifest.

On the eleventh day, March 30th, an eruption appeared upon the face, neck, hands and legs, extending itself also over the whole surface of the body, and the patient was extremely restless and uneasy.

Sixteenth day, April, 4th, the fever vanished soon after the commencement of the eruption. The latter now assumed a pustular form, and was perfectly analogous to the variolous disease. The palpebræ were quite closed, the eruption being in every respect as copious as generally happens in the uninoculated small-pox.

Seventeenth day, April 5th, the pustules were advancing rapidly to a state of suppuration, and appeared upon many parts of the body to be very circular, prominent, and full of matter. The palpebræ were not so much closed as on the preceding day.

Twentieth day, Monday, April 8th, on many parts of the body the pustules were dying away, particularly upon the face; and a dark, brownish spot, of a horny contexture, and glossy hue, was observable upon their apex. They were, indeed, so remarkably distinct and beautiful on the lower extremities, that I was induced to have a drawing taken of them by Mr. BUTCHER, of Yarmouth, an eminent portrait and landscape-painter.

CASE III.—Monday, April 4th, a girl of the name of PARTRIDGE, aged three years and a half, and of a full habit of body, was inoculated with matter taken from the boy, Ripper, on the thirteenth day of the disease, as has been already mentioned in the first case.

On the sixth day after inoculation (April 6th, there appeared a redness round the edges of the incision upon the inoculated arm, but no elevation or swelling

swelling was observable. The patient remained free from every symptom of fever.

Seventh day, April 7th, the edges of the inoculated part were rather more inflamed than on the preceding day. The patient complained of head-ach, chilliness, and flushings, with other symptoms of fever, manifestly arising from absorption of vaccine matter into the system, from the inoculated part. No pain of the axilla.

Tenth day, April 10th, the fever had continued since the seventh day, but in so slight a degree, that the child ran about the house as usual, making little or no complaint. However, at this period of the disease, being ten days after inoculation, and four from the commencement of the fever, a few eruptive spots were observed upon the face and hands, not more in number than five or six. When this took place, the fever almost immediately subsided; these spots made little progress in size, and died away in the course of a few days, having a darkish scab in their centre, as they evidently had contained nothing but lymph.

The three preceding cases of the cow-pox have been inoculated a second time with variolous matter, taken from the human system, and a greater quantity was introduced than is usually done on such occasions: but no morbid action, either local or general, ever commenced. Their arms were examined with the greatest attention on the seventh, eighth, tenth, and twelfth days after the variolous matter was inserted, yet the least discolouration of the incisions could not be perceived; and on the last mentioned day they appeared to be quite well, and the incisions were perfectly healed.

Remarks on the Cow-pox.

[Communicated by Mr. John Ring, Member of the Corporation of Surgeons.]

To the Editors of the Medical and Physical Journal.

Gentlemen,

THE introduction of the cow-pox into practice, as a substitute for the small-pox, at present engages a considerable share of the attention of medical men. Permit me, therefore, to insert in your very valuable publication, a few remarks on that disease.

Great praise is due to Dr. Jenner, for this improvement; and while I join in paying a just tribute of applause to his merit, I sincerely hope that

the preventive he proposes will prove successful, and at length exterminate one of the most dreadful scourges of the human race.

Of those whom I have inoculated, or seen inoculated, with vaccine matter, few have had any considerable eruption, and those few were inoculated with matter, which there is reason to believe was not taken from the original pustule on the arm; a circumstance which Dr. Woodville has proved to be of great consequence in this disease.—The rest scarcely appeared to labour under the least indisposition, except what arose from the inflammation of the arm; and even that was not worse than in cases of inoculation with variolous matter.

I have seen, at the Medical Society, a letter which was received by Dr. Jenner from a surgeon in the country, giving an account of his having inoculated above a hundred persons, with vaccine matter sent him by Dr. Jenner; and that only two or three had any pustules, which were few, and confined to the arm.

That eruptions, in this disease, are not peculiar to the metropolis, as Dr. Jenner supposes, other instances prove, besides those recorded by Dr. Woodville. The only two patients inoculated by me, who had many pustules, resided at Kensington till after the eruption had taken place; and the only one besides, whom I have seen, at Highbury place. A physician of Bath informed me, that he had inoculated two, both of whom had eruptions; and it is a little remarkable, that the matter of all the patients above mentioned came from a practitioner, who was in the habit of taking it from the secondary pustules; a circumstance which I have carefully avoided.

The success of the practice has on the whole, been such as to gratify every reasonable expectation; especially if allowance be made for the error of taking the matter from an improper pustule; an error easy to be avoided in future. Had all the patients inoculated with vaccine matter at the Small-pox Hospital, by Dr. Woodville, been in the house, and under his immediate care, it is probable his first report would have been still more favourable: but even from that, I should not hesitate to prefer the vaccine to the variolous disease.

In the short time which has elapsed since I began to write these remarks, I have heard of two families, plunged in the deepest affliction by the inoculated small-pox; while on the other hand, only one solitary instance is on record, of the cow-pox proving fatal; and we have reason to believe, from Dr. Woodville's subsequent report, that even that unfortunate event would not have happened, if the disease had then been as well understood as it is at present. Be that as it may, I hope no practitioner will in future inoculate

ate with any vaccine matter but what is taken from the original pustule, unless he thinks proper to inoculate himself. I deem it also a duty, in this age of experiment, to caution medical men not wantonly to expose the lives of their fellow creatures to any unnecessary danger; and not to inoculate with one kind of matter, till another has produced its final effect.

That two morbid actions cannot take place in the body at the same time, may pass uncontradicted in the schools, but not in the field of experience. One case of a complication of the small-pox and the measles, was read before the Medical Society; and others I could prove by the most respectable testimony.

Doctor Moseley, in his treatise on Sugar, lately published, expresses a suspicion, that the cow-pox, can only render the habit insusceptible of the small-pox "*for a time.*"—This is refuted by volumes of evidence, and a cloud of witnesses.---He says, "Inoculation has disarmed the small-pox of its terrors."---This is refuted by the whole world.

He asserts, that "accidents in the inoculated small-pox are uncommon." Would to God experience did not disapprove that assertion, and convince practitioners in general, that no care, no skill ever did, or ever can, tame that dreadful hydra---the small-pox!

He tells us, "We all know, from experience, that disease, properly treated, leaves nothing after it injurious to the constitution."---That we do not all know it, is certain: if Dr. Moseley has been so happy as to discover the secret, I hope his humanity will prompt him to disclose it.

It is well known, that the small-pox, whether natural or insititious, is one of the most common causes of scrofula; and my experience leads me to believe, that the absurd custom of giving carthartics after this and other eruptive disorders, by debilitating the habit, augments their tendency to produce that horrid disease.

Dr. Mosely tells us, "he wishes not to discourage inquiry," and admits, that "the object well deserves it;" yet, with some degree of inconsistence, he adds, that he wishes "to guard parents against suffering their children becoming *victims to experiment.*"---My wishes are not less ardent than his: he wishes to prevent children from becoming victims to *experiment;* I wish to prevent them from beoming *victims to the small-pox.*

Dr. Mosely intended his excentric remarks, which are introduced rather mal-a-propros in a Treatise on Sugar, as an antidote for what he calls the *Cow-mania.*--He himself seems to labour under the *Cow-phobia.*--He asks, if

any

any person can say, "what may be the consequence of introducing a *bestial humour* into the human frame, after a long lapse of years?---I beg leave to ask, in my turn, if any person can say, what may be the consequences, after a long lapse of years, of introducing into the human frame, *cow's milk*, *beef steaks*, or *a mutton chop?*

I hope medical men will in future be cautious, how they prejudice the public mind against a fair trial of a practice, warranted by observation, and recommended by a physician of distinguished abilities; and not spread a serious alarm, where even the vulgar and illiterate who are generally most averse to all innovations, and of course to all improvement in the practice of physic, have not hitherto hinted a suspicion.

Dr. Mosely argues, as if the cow-pox were a new disease in the human species; a supposition which it is unnecessary to refute. One of the advantages proposed by Dr. Jenner and Dr. Pearson, from the establishment of the new practice, is, that although the disorder in question is so common and has long been well known in many parts of the kingdom, *it never has been suspected to leave behind it any other disease.*

I am happy in being able to add my testimony to that of Drs. Jenner, Pearson, and Woodville, in confirmation of the efficacy of the new practice; having inoculated with variolous matter, twelve persons whom I had previously inoculated for cow-pox, all of whom escaped the infection of the small-pox.

Since most of the foregoing observations were written, I have seen Dr. Woodville's second report, confirming the opinion he expressed in the first; and acknowledging that he has lately been much more successful in his practice; in consequence of refraining from taking matter from patients who had the disease severely---a caution I have always observed.

It has been asserted, that the cow-pox cannot be communicated but by contact; and in the most positive manner, that it certainly cannot be communicated by means of effluvia, where there is no pustule but that of the arm. In this respect, I think, gentlemen have been rather too hasty in forming their conclusions, when the disorder has been so short a time under their immediate care and inspection. I have seen one instance, where the disease was communicated without a possibility of its being received by contact; and where the child, from whom the infection came, had no pustule but that on the arm; and from good authority I have heard of another instance, where the infection was caught from one who had a considerable eruption.

Dr. Jenner,

Dr. Jenner, having found some difficulty in communicating the infection of cow-pox, proposes a method which I think rather tedious and troublesome. I beg leave therefore to suggest, that if, instead of puncturing or scratching the skin in the ordinary way, the lancet, after liquifying the matter, if necessary, by steam, is laid almost flat upon the skin, and then inserted obliquely, so as to raise the cuticle, moving the point backwards and forwards a few times, to separate the matter from the lancet, and wiping it on the puncture,—the matter will in general be received and retained by the cuticle, as by a valve; and absorption be rendered almost certain.

The inflammation of the arm being a circumstance worthy of the attention of medical practitioners, I presume to recommend a simple poultice, to be applied cool; and, if any ulceration should take place and produce a sinus, a little lint, dipped in melted ung. ceræ, to fill up the cavity, and a poultice to be applied over. This plan I have never known to fail, in the worst cases I have ever seen.

Allow me to add to the preceding remarks, that the method of extinguishing quicksilver by means of stale lard, as proposed by Mr. PROCTOR, was communicated to me by the late Mr. WYATT, eight or nine years ago. He told me he had lard about twenty years old, which he used for that purpose.

The case of a person who lost his life by unskilful bleeding, inserted in your last number is deservedly recorded *in terrorum:* but I cannot agree with your correspondent Dr. VAUGHAN, of Rochester, that the fatal catastrophe could be occasioned by the juices of another person in health. I am rather inclined to attribute the melancholy event to the length of the orifice, and to a neglect of closing it properly, and promoting union by the first intention: hence inflammation and every other ill consequence, too often, alas! occasioned by the tribe of ignorant phlebotomists, and other charlatans, who are suffered in this country to wield the *instruments of death* with impunity.

NEW-STREET, HANOVER-SQUARE,
July 6, 1799.

Analysis of the Memoirs of the Medical Society of London, Vol. V. 8vo. *pp.* 470. Johnson, *London*, 1799.

THE preceding volumes of the Memoirs of this Society, which have been regularly continued since the year 1786, are too well known to medical readers to require any account of them in this place. The present volume appears

appears in no respect inferior to the preceding ones; it contains about forty articles of original communications, among which the following appeared to us particularly connected with practical utility:—

I. A case of hydrophobia, by WILLIAM GAITSKELL, surgeon.

The internal and external use of oil was tried in this case, without success: the patient however, is said to have lived to the eighth day from the appearance of hydrophobia, which is nearly double the usual time.

V. This article contains an account of the efficacy of the Zanthoxylon, both externally and internally applied.

The following account of the tree and its uses is supplied by Mr. W. CHAMBERLAINE, surgeon, F.M.S. and secretary to the Medical Society:—

"A botanical account of the Zanthoxylon, with an accurate drawing of it, and the history of several cases in which it had succeeded beyond expectation, Dr. Harris assures me, he committed to the care of a confidential friend, to be delivered to me for the purpose of being laid before the Medical Society; but the ship by which these articles were sent was captured.

"The part used is a powder from the bark of the root of a tree, which, from specimens of the root now in my possession, and from every other document, appears to be that called Prickly Yellow Wood, or Yellow Hercules, much used for making the heading of sugar hogsheads, for bedsteads, and many other purposes in Jamaica; it is a tall, strait tree, easily distinguishable from all others, in appearance not greatly dissimilar to our ash; the bark of the trunk is thickly beset with prickles, which, in the young trees are pointed, but obtuse in the more aged. The wood is of a very bright yellow colour, whence its name *Zanthoxylon*. The flowers, which bear some resemblance to the cassia fistula, are succeeded by a pod, flattish, & not much unlike in shape and size to a man's thumb; this pod is at first green, then red, and lastly turns black when ripe, and contains three or four compressed seeds.

"It is called by BROWNE*, *Zanthoxylum foliis oblongis obovatis* pinnatis *et leviter crenatis; floribus racemosis, caudice spinoso, ligno suberocco.*

"Dr. Harris, by a former ship, sent me a small box of the powder, which I have had opportunities of trying in three or four cases of very bad ulcers of the legs. In the first I had attended the patient from January to July, with very little success; but, on changing the dressings for the powder of Zanthoxylon, an almost immediate alteration took place; the wound was quite healed up by the end of September, and the patient has continued ever since perfectly well.

"My

* Nat. Hist. Jamaica, Sect. 4. *Pentandria Pentegynia.*

"My second patient had been in an hospital six weeks in May and June, and was discharged cured, but the ulcer soon after broke out again, and continued to increase to the extent of five inches and a half in length, and four in breadth, which were its dimensions when I was first called to look at it; I ordered that it should be fomented, and after washing it with milk and water, sprinkled the powder liberally all over the surface of the ulcer, and covered the whole with plantain leaves, rejecting all greasy ointments. This was persisted in twice a day, and a cataplasm of bread and milk laid over all, at each dressing. Internally she took hydrarg. cum sulph. et nitr. aa gr. xv. bis die. In a week the ulcer was less than half its former size, looked perfectly clean, and put on every appearance that could be wished for, and soon become perfectly well.

"A poor woman had one of the worst ulcers I ever saw; she was very much reduced through want of sleep, from the excruciating pain caused by the ulcer, which she suffered night and day, without intermission. I gave her some of the Zanthoxylon powder, and instructed her how to use it. In five days she walked to my house, and was able to come every morning to be dressed. I gave her no medicines, and enjoined no regimen, but the leg was perfectly healed by the application of the Zanthoxylon alone. in a month, and she now follows her business of a laundress, no vestige of any ulcer remaining, except a little redness.

On the Efficacy of the Zanthoxylon.

By THOMAS HENEY, *M. D. of St. David's, in the Island of Jamaica,*

[Communicated by JOHN HARRIS, M. D. of Kingston, Jamaica, C. M. S.]

Read JANUARY 20th, 1794.

To Dr. HARRIS.

"DEAR SIR, *St. David's Sept.* 12, 1791.

"I REGRET that the limits of a letter will not give you a minute account of the success of my experiments with the Zanthoxylon. The first intimation of its virtues I owe to you; and at the same time witnessed its surprising efficacy in the case of Mr. G——n's hæmatocele. However strong my reliance on your account of it at that period, and on the conviction of my own senses in Mr. G——n's case, yet the deceptions practised in the world by the exaggerated accounts of the *cicuta*, the *flammula jovis*, the *arnica*, the *digitalis purpurea*, and others, by authors of no inconsiderable name in the medical world, had infused so large a portion of the sceptic through my medical creed, that I determined nothing less than repeated *autopsia* should convince me. I therefore instituted my experiments with as unprejudiced and candid a mind as ever a son of Hippocrates did. I must sincerely own, I lost sight of the warning of that great master, "Experimentum periculosum; but never of the preceding text, "Judicium difficile," until, by repeated experience, I had the fullest conviction of its efficacy in numberless cases, and principally those I shall mention.

"You

" You well know how difficult it is to bring the foul ulcers, to which the unhappy children of Africa are in this climate subject, to such a condition as promises a speedy cure, particularly such as are attended with loss of substance, and how frequently we are obliged to have recourse to the unpleasant use of escharotics, to remove those fungous excresences which the habitual nastiness of the Negroes, and the irritation of insects (which in tropical countries inhabit every broken particle of animal and vegetable substance) produce. To remedy the inconveniencies arising from these causes, I determined to make trial of the Zanthoxylon, in manner and form as we had done in Mr. G——n's case. I therefore laid aside the tinctures of myrrh and guaiacum, Hungary water, phagædenic water, lime water, and every other usual application, and commenced the use of the Zanthoxylon, by bathing the ulcers with the decoction of that bark, and intermixing it with the dressings.

" For the purpose of more minutely ascertaining its efficacy, I confined the patients thus treated in the same place, with others whose ulcers were of the same date and condition, and whom I treated with the lotions, dressings, and poultices in common use.

" In addition to the external use of the Zanthoxylon, I ordered a couple of ounces of its bark to be boiled with the sarsaparilla, in lieu of the lignum vitæ, for their drink.

" The ulcers of my Zanthoxylon patients, in the course of a few days, invariably threw off the sloughs, and other foul appearances, and exhibited healthy and well-coloured granulations beneath, discharging laudable and well-conditioned pus. Their co-patients, whether treated with mild emollient applications, or with stimulant dressings, exhibited in their several situations such slow appearances of amendment, as finally urged me to use the Zanthoxylon to all.

" A negro woman, who had been affected for many years with several large phagænic ulcers, from the mid-thigh to the ancle, was put under my care. A fetid, sanious discharge, together with fungous, and almost gangrenous excrescences, had given to the ulcerated surface so horrid an appearance and stench, as was highly disgusting to every one who saw or approached it, and intolerable to the wretched patient herself.

" For six weeks after the first inspection of the ulcers, escharotics, warm stimulating dressings, tight bandages were tried to no purpose. In place of these I commenced the use of the Zanthoxylon, by bathing the sores with the decoction intermixing the powdered bark in the dressings, and giving the bark in decoction, in the place and proportion of the lignum guaiacum; the events answered my expectations, the discharge soon acquired the condition of laudable pus; well-coloured granulations, in the happiest form, appeared, and saturnine ointments finally effected the cure in eight weeks. Numberless were the experiments made by me and my assistant subsequent to this, in similar ulcers, with equal success.

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In every instance, however, of venereal taint in yaws, of crab yaws, I found it ineffectual, prior to the use of mercurials.

" I some time ago mentioned to you a few successful experiments, made with a view to determine its anti-febrile qualities, by administering it in the same scope and indication as the peruvian bark. Repeated trials have, however, since that period, convinced me, it is much more inactive than that celebrated febrifuge, unless its virtues are sharpened by the addition of some neutral salt or alcaline; then it really exhibits virtues little inferior to the China-China, and is unattended with the inconveniences usually experienced from the latter. This I account for by supposing its resinous parts to be rendered more readily miscible with the aqueous juices, by the addition of the salt.

" Another most singular quality the Zanthoxylon possesses in an eminent degree, which I presume you are unacquainted with, and to the knowledge of which I was accidentally led. A short account of this discovery will best explain it, and, at the same time, indirectly argues this salutary plant not to be a native of Jamaica.

" Mr. Crosdale purchased two negro wenches in the beginning of the present year; the younger of whom at different times since, has been afflicted with a dry belly-ach, or colica pictonum. About two months ago she was seized with it in so dreadful a degree, that every effort to remove the spasmodic constriction of the bowels, and procure some motions, proved ineffectual. To no purpose were emollient fomentations, anodyne, or carthartic glysters, mild and drastic purges, castor oil, and ultimately, blisters to the abdomen applied. That horrid symptom, a *vomiting of the excrements*, commenced, and banished every ray of hope. In this situation she desired to have her sister with her, who, on seeing her deplorable condition, signified a wish of giving a nostrum communicated to her by their mother, & employed to cure herself, on a similar occasion in Africa. I readily complied with the request. In the course of two hours she returned from the woods with the root and flowers of some plant, pounded together in a calabash. Two spoonfuls of the expressed juice of this she gave her sister twice, at an interval of two hours each. The first effect of this was a tranquil, profound sleep, of twelve hours duration, during which the pulse and breathing gradually returned to the natural state; after this, all sense of pain, and every bad symptom, disappeared, and no other inconvenience did she experience, save debility, and slight-soreness, from the pressing of the purgative medicine, which came away especially during the course of the following day. The sister was observed to boil the ingredients (after expressing the juice) in a large quantity of water and give it on the following day as common drink. No reward or menace could induce her to discover the plants, until stratagem brought it to light. We induced another negro to dissemble a similar complaint, and prevailed with the wench to seek for, and prepare the same cure; in complying

with this request, we had her so narrowly watched, as to discover the secret to be the fresh root of the zanthoxylon, in its infant state, intermixed with the saffron-coloured flower of the wild sage; which last I have since found to contribute nothing to its virtues. Having procured some of the sappy and smallest roots of the young trees, and expressed the juice, I began the experiment of its qualities on myself at tea-spoonful doses. From the first of these, I found no other effects than an unusual flow of spirits. By continuing the dose, drowsiness, nausea, head-ach, and, at length sleep ensued; from which I however awoke next morning perfectly refreshed, and had three copious easy motions. I preserved some of the juice with rum, and some with syrup. These preparations, as well as the juice, I have frequently since that period administered in complaints of the bowels (so frequent among the African race and their progeny) with every wished-for success. On the estate of Mrs. O'Bryan, an old man of eighty years, was lately seized with convulsive fits every hour, in every character similar to epilepsy, which continued, without intermission, twenty-four hours. To him, on being sent for, I immediately gave a wine-glassful of the juice preserved in rum; the fit which succeeded the first glass was unattended with strong convulsions, and the second was little else than a comatose state; after which, a sound sleep of ten hours removed every appearance of disorder, except lassitude.

"This last mentioned anti-spasmodic virtue the Zanthoxylon loses by being dried and powdered, its narcotic qualities being dissipated with the moisture of the plant.

These are the chief remarks my opportunities and leisure have hitherto enabled me to make on the Zanthoxylon. I shall continue to give it every candid and fair trial, and, from time to time, will send you the results of my experiments. Some other vegetables have fallen under my inspection from negro information, and I have really found much satisfaction from their use. My botanic information is too limited to attempt their description; yet, as soon as I learn it, you shall also know them and their virtues.

"I remain, dear Sir,

"Your obliged humble Servant,

"THOMAS HENEY."

VIII. Several cases of the lithontriptic power of the muriatic acid, when exhibited in doses of ten to twenty drops or more in a glass of water, three times a day are given by Mr. COPLAND.

IX. Experiments on the external use of the tartarized antimony, by B. HUTCHINSON, surgeon.

In these experiments Mr. Hutchinson observed, that when the palms of the hands were washed with the solution of emetic tartar, it produced a sopo-

rific

rific effect, and increased the secretion of the skin and bladder. The quantity washed in was from five to fifteen grains at bed-time.

By washing in fifteen grains night and morning, for ten days, a most obstinate tertian was cured, but the patient complained of *constant sickness* after the second day of using it.

No mention is made of any eruption being produced by it in this instance; in several others the usual eruption is mentioned, and the production of nausea.

XIII. Contains an excellent account of the Harrogate waters, by Dr. GARNETT, for the analysis of which we are obliged to refer to the volume itself.

(To be continued in our next Number.)

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE discussion of a question, involving in its solution a large portion of the fate of mankind, challenges the attention of every one; and surely the ingenious Dr. Beddoes is entitled to much applause, for the *industry*, which he has exhibited, in his attempts to obviate the fatality of *phthisis*; we ought not, however, to venerate any opinion, though it spring from brilliancy of talent, unless it possess the solid supports of observation and experiment. For several years, I too have attended closely to the origin, progress, and method of affording relief in *phthisis pulmonalis*. My feeling having been almost daily arrested by the melancholy ravages of this disease, I became anxiously solicitous to alleviate its most distressing symptoms. In the prosecution of my enquiries, I have endeavoured to set aside the influence of every preconceived opinion, and to unfetter myself from the tenets of the schools. I can with confidence assert, that my sole ambition has been, to arrive at a knowledge of the truth. I have to lament much that I have not approached nearer to the object of my pursuit.

It is, however, to be expected, that some additional information upon the subject of *phthisis*, should be the fruit of the now prevailing passion for speculation; and there can be no pretence for saying, that the success of the *old practice* ought to supersede the employment of *new remedies*, in the treatment of a disease, which destroys, annually, *eighty thousand* of the inhabitants of this island. My papers on *phthisis* have long been in a state nearly ready for the press, and I have kept them back, that I might be able to appreciate

appreciate the merit of some of the fashionable medicines: the *Digitalis* ranks high in this list.—Upon the supposed action of *Fox-glove*, I shall make no comment; but merely give a brief detail of a few cases, in which I have lately administered it; and if it be consistent with the plan of your undertaking, I have it in contemplation to furnish your repository with additional cases of *phthisis*. In the execution of this design, I shall give a display of those means, which I have found most effectual, in alleviating, *palliatively* or *radically*, the symptoms of the disease.

I am, Gentlemen, with respect,

BRADFORD, YORKSHIRE, *July 9th*, 1799. Your's obediently, GEO. MOSSMAN.

CASE I.

May 19th. J. S. aged 40, previous to his indisposition, was a strong, athletic man. In January last he performed a long journey in a very rainy day, and sat in his wet clothes to a late hour; the following day he was seized with symptoms *pneumonia*. For a fortnight he refused to have medical aid; at the end of that period, however, he was persuaded to lose some *blood*, and afterwards to take an *emetic*; but without any apparent relief. Since that time he has taken no medicine; he is now in a state of considerable emaciation, and seems approaching to the last stage of *phthisis pulmonalis*. His pulse is about 120; and there is very constantly an exacerbation of fever towards night, accompanied with excessive heat & thirst, till a profuse perspiration taking place about two or three o'clock in the morning, produces a temporary solution of an exquisitely formed *hectic*; colliquative sweats and diarrhœa, alternate with each other. His appetite still remains pretty good, more especially in the morning. His cough is almost incessant, and is attended with a purulent expectoration. He has frequently had a slight hæmorrage from his lungs, which was very generally followed by a sensation of much soreness in his chest. He can lie down with ease upon his left side, but if he attempts to lie upon his right side or his back, he is immediately assailed by a sense of suffocation. I enjoined him to live on *milk and eggs exclusively*; and ordered a large *blister* to be applied to the *sternum*. I also prescribed a grain of the *digitalis* to be taken four times a day, with ten drops of the *barytes muriata*.—When his cough was very teazing, he had continual recourse to the use of the *trochisci glycyrrhizæ cum opio*. For several weeks he scrupulously adhered to the regimen, and to the plan of treatment above recommended, without any *permanent* advantage; the *blister* only seemed to relieve the *dyspnœa*, and the *troches* his cough. His pulse, in frequency, became subject to great

great irregularity; on the same day it often beat from 90 to 130 strokes in the minute. From the time of his taking the *digitalis*, he complained of an unusual heaviness and drowsiness; and in ten days afterwards he felt much nausea, and a tendency to vomit.—These were the only striking phenomena which I could perceive during the exhibition of the medicines already mentioned. The progress of the disease was certainly not arrested for a single day. He is now confined to his bed, and it is probable, that a very short period, indeed, will terminate his sufferings. It ought, however, to be observed, that the repeated application of *blisters*, and the occasional use of the *troches*, have very powerfully assisted in smoothing the passage.

CASE II.

May 21st. C. G. a soldier, aged twenty-one, was seized with symptoms of *pneumonia*, about three months ago. He was with his regiment, and what remedies were employed to procure relief, I know not; but when he became my patient, he laboured under every symptom of a well-marked *phthisis pulmonalis*. He was enjoined the *same regimen*, and had the *same remedies*, which are recommended in the preceding case; and with effects almost precisely *similar*;—he died about a week ago.

CASE III.

May 25th. M. B. aged thirty, was safely delivered of a healthy child, about Christmas last, and recovered remarkably well. A few weeks afterwards she was seized with symptoms of *pneumonia*; for which she took little or no medicine. Her pulse is 150;—her other symptoms are strongly characteristic of common cases of confirmed *phthisis*. With the exception of *blistering*, I prescribed for her the same remedies which I employed in the two foregoing cases.—A *diarrhœa* occurred previous to the exhibition of any medicine, and continued for a few days, during which, her pulse sunk from 150 to 120; but whether from the effects of the *diarrhœa*, or from her medicines, I cannot say:—the *digitalis* seemed to produce sickness and nausea. She took it very regularly for three weeks; and at the end of that period, finding no relief, she abandoned the idea of recovery, and refused further medical aid. She is since dead.

CASE IV.

May 25th. M. H. aged twenty-two, was seized with a cough, dyspnœa, and pain in the left side, accompanied with a considerable degree of fever. She was then in the fifth month of pregnancy, and employed no means to obtain relief. The symptoms thus neglected, continued to increase, till every symptom of a well-marked *phthisis* was sufficiently apparent. On the 29th of April she was safely delivered of a healthy child.

During

During the first fortnight she appeared to do extremely well; but at the end of that period, every *phthisical* symptom recurred with additional violence, I prescribed as in case the first. She expressed a very strong desire to live, and for several weeks, with much fortitude and much exactness, she scrupulously adhered to the plan recommended to her; but, except that her cough was in some measure relieved by the *troches*, she found no perceptible effect from her medicine.—She is still living.

CASE V.

June 14th. J. M. aged nineteen, of a *phthisical* habit, has been for two years past, occasionally afflicted with a bad cough, accompanied by a purulent expectoration. After raising a heavy weight yesterday, he was suddenly seized with a vomiting of blood. He continued, at intervals, during the evening and night, to discharge blood, sometimes in the form of dark-coloured *coagula*, and sometimes of the appearance of *pure arterial* blood. I saw him to-day at noon; he complained of extreme weakness, of soreness in his chest, and his breathing was rather difficult; his pulse was feeble, and 140. It was not easy to ascertain the quantity of blood lost, but it must have been from two to four pounds. I prescribed the *digitalis*, in the dose of a grain every two hours, followed by a weak solution of *magnesia vitriolata*. After he had taken a few doses of the medicine, the hæmorrhage returned no more. When I saw him last, (a week after the attack) he appeared to be in a state of convalescence.

(To be continued.)

[*In laying the following Memoir before our Readers, we have not the smallest intention of rendering them any signal information, but they will thereby have an opportunity of comparing the state of Medical Surgery in France, with that of England.*]

A Memoir containing Observations on the Medicinal Properties of Oxygen.

By Cit. FOURNIER, sen. Surgeon of the First Class, to the Armies of the Republic, First Surgeon to the Military Hospital, and Member of the Society of Medicine of Brussells, and of the Lyceum of Arts at Paris.

(Read to the Medical Society of Paris, the 17th Thermidor, 6th Year.)

OCCIDIT QUI NON SERVAT.

CITIZEN ALYON has rendered an important service to the healing art, in establishing, by authentic experiments, the medicinal properties of oxygen.

The

The author has with great ingenuity, explained how this principle of animal existence may be usefully employed in different diseases, in the treatment of which, the means of cure formerly employed were mostly disagreeable to the patient, sometimes uncertain, and liable to produce distressing consequences.

He has explained to those who are not entire strangers to chemical processes, that mercury probably acts in venereal affections only by the oxygenation which it acquires in its different preparations, previously to its being administered.

We already know that, under whatever form mercury is employed, it is indebted for its anti-syphilitic virtue, to the oxygen with which it is combined.

But what we are still ignorant of is, how the oxygen alone can counteract the veneral virus, and other diseases, for the cure of which the specific hitherto used was mercury.

Struck with this remarkable fact, announced by ALYON and GIRTANNER, I wished to be convinced of its reality by a series of experiments. Certain of the safety of this medicine, I did not hesitate to introduce it in my practice; and its success has fully answered my expectation.

Among several observations I have selected, I shall lay before the Society a few which will be found interesting.

Citizen L. about forty years of age, consulted me for relief in pains of the bones, which afflicted him extremely, and prevented him from sleeping. As this man had lived with a woman who was so shockingly affected with the venereal virus, that it had caused her death, I did not doubt that the pains of my patient were the symptoms of this cruel disease. I twice ordered refreshing diluents, and the domestic baths, as preparatives for the mercurial treatment to which I had resolved to submit him. After he had bathed six times, there appeared between the prepuce and the gland two large and deep chancres. The antiphlogistic regimen to the use of which the patient had been accustomed, was probably the reason why the chancres were not attended with great inflammation; but they were nevertheless extremely painful, and gradually increased in size. I prescribed purgatives and proposed mercurial treatment, to which he obstinately refused to submit being apprehensive of experiencing the fate of the woman before alluded to, whose life mercury could not save. In another instance, I would have administered the anti-syphilitic robe of LAFFECTEUR, from which I have witnessed astonishing effects, in cases where mercury had proved abortive. But

excited

excited by an ardent desire of trying whether oxygen was really worthy of the estimation in which it was held by Aylon, &c. I took this opportunity of prescribing it. I daily gave the patient a drachm of pure nitric acid in two pounds of water, and he had only taken this drink eight days, when the chancres, which were broke and had produced an ichorous and abundant suppuration, cleansed, became red, and began to cicatrize.

On the twelfth day the chancres disappeared; the patient was then purged. The pains of the bones still continued, and he was as much troubled with them now as formerly. I increased the dose of the acid to a drachm and a half a day: soon after the pains began to diminish, and the patient was able to move his right arm with ease, which he could not do before. His sleep gradually returned, and by the thirtieth day the cure was completed. The patient took a cathartic, and continued the daily use of the nitric lemonade, which had been increased in strength to two drachms in three pounds of water, since the 25th day. He left off drinking it on the thirty-eighth day, when an abundant salivation took place, which was subdued by a purgative, and twice warm bathing. The patient was then perfectly cured, and has since continued in good health.

Citizen G. twenty-four years of age, of a humid and sanguine constitution, after an impure connection, was infected with a virulent gonorrhœa. This was the first accident of that nature he had met with. The local inflammation was considerable, and consequently accompanied with acute pain. I advised him to drink plentifully of dog-grass and marsh-mallow roots; I also bled him freely, and ordered the warm bath. As the discharge was thick, and mixed with blood, and his urine in small quantity, and voided with difficulty, I prescribed pills composed of Venice soap, camphor, nitre, and rhubarb, and also an anodyne emulsion every evening.

These remedies produced the effect I expected; the pains abated, the discharge became abundant, and acquired a proper colour and consistence.

Some time elapsed before the patient called on me again; and either from his inattention to a proper regimen, or from the disease having acquired a more virulent character, he was afflicted with a considerable inflammation in his eyes, accompanied with a great degree of fever. The violence of this symptom, and the sudden disappearance of the gonorrhœal discharge, impressed me with an idea, that his case was venereal. I adopted baths, bleeding, collyria of zinc; plasters made of bruised lintseed, the whites of eggs, and vitriolated zinc, were applied to the parts affected, as also a decoction of dog-grass, acidulated with tartarit of potass and antimony, and one ounce of

of sulphat of magnesia to each pot. I also applied eight leeches to the lower eye-lids, which were much swelled.

All these means appeared to have a salutary effect; but I had scarcely began to congratulate myself, when the virus, which before was fixed in the eyes, was suddenly translated to the bend of the right knee, which became swelled and painful. I opposed this new Proteus by vegetable diet, once bleeding, baths, purgatives, and emollient and resolvent cataplasms. The swelling and pain now began to decrease, when a violent thunder-storm, which was approaching, excited the curiosity of the patient, who placed himself at a window, to observe the flashing of the lightning.

This imprudence had nearly cost him his life, for suddenly his ophthalmia re-appeared with greater violence than before. I had recourse to the same general means which I had formerly employed with success, and the inflammation again ceased, but the patient became almost blind. The cornea of each eye was dull, and the iris contracted very little, when opposed to candle-light. I ordered a large vesicatory to be applied to the nape of his neck, with a view to prevent the amaurosis, as well as to cause a discharge of the morbific matter, which again threatened to return to the knee.

I now prescribed oxygen (about this time the oxygen had just taken effect on the patient mentioned in the preceding observation). I gave him four scruples in three pounds of water daily. The discharge from the urethra soon returned, but more moderately than formerly, and the suppuration of the vesicatory continued.

The eighth day after the application of the oxygen, a purgative was given. No other symptoms intervened on the knee, and the ophthalmia assumed a convalescent appearance. The cornea of both eyes still continued rather dull, but the action of the iris was restored. On the twentieth day the ophthalmia was entirely cured, but the eye was painfully affected by light. The running from the urethra, which now resembled semen, announced the destruction of the virus.

At this stage of the disease, the patient was ordered to take another cathartic, which was repeated on the thirtieth day, when I conceived him to be cured. He continued the use of the nitric lemonade till the fortieth day, when it was discontinued, as was also the vesicatory. Several laxatives completed the cure, and for a month the patient has enjoyed a perfect state of health.

At the moment I now write, I attend an officer, who has for several years been afflicted with venereal tetters on his upper lip, nose, and forehead; these

tetters appeared in the form of disgusting pustules, and were exceedingly troublesome. Either in consequence of his natural obstinacy, or by the hardships which attend a soldier's life, the patient had unsuccessfully tried various mercurial and other preparations. He at length applied to me; I advised him to drink the nitric lemonade, made with a drachm of acid to two pounds of water, and directed him to wash the tetters every evening with the oxygenated pomatum, described by Alyon. By this treatment, which was scarcely continued twelve days, two purgatives, and several bathings, the eruptions entirely disappeared, and the patient, supposing himself to be cured, had discontinued the medicines for the last ten days; but I advised him to recommence them, apprehensive that the cure was not yet perfect. I may venture to assert, that he will be completely cured, provided he follows my directions for another fortnight—the time I believe to be indispensable to eradicate so inveterate a virus, which had so long resisted the best combination of remedies.

I have already observed, in several venereal cases, the good effects of oxygen, exhibited as an auxiliary to mercury. Several distinguished practitioners of this city, have made successful trials with this remedy; and one of them informed me of the following interesting fact, which is decisively in favour of oxygen.

A young man twenty-two years of age, was attacked from his infancy with a scorbutic humour *(humeur dartreuse)*, over his whole body, his hands and face excepted; and several physicians had unsuccessfully prescribed venesection. The practitioner who communicated this observation to me, after having prepared his patient by general remedies, employed the nitric lemonade, and directed him to rub every evening, a certain part of his body with the oxygenated ointment; after this treatment had been pursued forty days, assisted by purgatives and bathing, the young man was completely cured. Thus has oxygen produced effects in this short lapse of time, which the usual medicines could not accomplish in twenty years.

The following is a fact of a different nature, which is not less interesting:

A very delicate child, tormented with a colic, which produced frequent convulsions, had attained the age of two months, when a severe catarrhal affection deprived its mother of her milk. The infant was fed with spoon-meat, and a variety of panadas which were substituted for its natural aliment. At the end of six days it was seized with hoarseness, which, on account of the frequency, abundance, and crudity of its stools, was deemed alarming. The next day a wet nurse was sent for, in hopes that human milk would be the most efficacious of all remedies. The diarrhœa continued, and the child

child did not appear to suffer pain, but seemed more exhausted at every stool. All the usual remedies were administered without effect. Let it suffice to observe, that the assistance of art was not neglected, when my esteemed friend, Professor Kok, aided me with his advice in the treatment of this infant. On the fifth day all our hopes were at an end, and at five o'clock in the evening, the patient was at the last extremity. It had such a copious stool that I thought it would have expired through exhaustion. All the symptoms of death were manifest in its countenance; it could only just breathe; and it passed the night without being able to suck or swallow any thing; it no longer voided urine. The next morning, Kok and myself conceived the child was at the point of death; the pulse was irregular, slow, debilitated, and almost imperceptible, the belly inflated *(météorisé)* the cornea dim, the eye filled with purulent matter, the face pale and hippocratic, the extremities chilly, and a fetid and gelatinous matter issued from the mouth and nostrils. Kok undertook the melancholy task of announcing to an affectionate mother, that we had no hopes left of saving her infant. She proposed to reanimate the child, who could no longer swallow any thing, by anointing its lips with excellent Muscadel wine; we consented to this: and at that moment an idea struck me, at which I have since had much reason to rejoice.

I hastened to peruse the work of Alyon, on the properties of oxygen; I had read in the collection of the Medical Society of Paris, a memoir by their secretary, Sedillot, junior, in which he gives an account of cases of rheumatism, cured by frictions with acetic ether on the parts affected; and, as I am often afflicted with this tormenting disease, I had provided myself with some of this liquid from Paris (the application of which I had successfully prescribed to a lady contracted by chronic rheumatism). I recollected that acetic ether is one of the pharmaceutical preparations, in which oxygen is in a free state, and consequently, as this ether is of a very sedative and not stupifying quality, it appeared to me to be a proper application for the child, which had just experienced a paroxysm which lasted six minutes; during which, the suspension of the pulse and respiration, induced us to suppose that it was dead. The acetic ether could only restore the almost extinguished irritability, and stimulate the vital principle; and as we apprehended that every minute would be its last, I thought there could be no risk in administering a remedy, which, according to the latest analysis, could not prove hurtful. I put a drachm in the same quantity of Muscadel Wine, and frequently applied this mixture to its mouth and throat with a feather. After the expiration of several hours, I perceived the pulse increasing, and that the child was not insensible of the application, which excited irritability, when

introduced into its mouth, and that it was soon enabled to swallow a few drops of this mixture. I redoubled my assiduity till six o'clock in the evening, during which time the infant swallowed two drachms of the ether, when a happy change took place. It is worthy of remark, that in the space of six days, the effects of the disease had been so violent, that the child had fallen into a complete marasmus. I have already observed that it suffered little, and during twenty-five hours of the paroxysm, it had no convulsions, which may be attributed to the colics which had preceded. In the course of the twenty-five hours it uttered some feeble cries, though not often; it neither had stools nor made urine; but at six o'clock at night it began to cry oftener, and louder; and it had a stool more loose than the former: from these appearances, I inferred that the remedy had taken effect, and began to entertain hope. I put one ounce of syrup of poppies and a drachm of the extract of Peruvian bark into four ounces of strained beef broth, and administered this mixture in a glyster; it immediately ejected one half, and a second injection was given, which it retained twelve hours; the instant the glyster was given, an abundant discharge of urine took place. I immediately ordered the child to be put to bed, and gave it ten drops of the *acetic ether* in a tea-cup full of strong beef-tea. My joy and surprise cannot easily be imagined, when I saw it swallow this mixture! I repeated the drink several times, and its pulse increased gradually; its extremities acquired a gentle degree of heat, which rapidly increased, and at ten o'clock at night, a violent fever was manifest by its pulse, which beat 150 times in a minute; and at this period, a profuse perspiration took place over the whole of its body, particularly the head. I suspended the administration of acetic ether, which having produced the happy change I have just described, could no longer be of utility; and confined myself to the moistening of the throat with beef-tea. At two o'clock in the morning the fever abated, the perspiration ceased, and this crisis was succeeded by sleep. The child did not awake till six o'clock, when the glyster of the preceding evening operated, which was replaced by another of the same composition. At eight o'clock the wet-nurse having presented it the breast, it took it with avidity, but it could suck but little, in consequence of its weak state.

During the two following days, the child had an almost continual sleep, which was interrupted only by the stools, amounting to twelve or thirteen in number. As soon as it had had one, I injected the glyster before mentioned, to which I added the yolk of an egg, with a view of strengthening and nourishing the patient, and of giving tone to the intestines. The breast and a cup of the broth, in which I put some syrup of bark, were taken alternately, from which its little disordered stomach experienced good effects.

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For the last two days, the child has appeared fresh coloured and easy, and as if it had just awoke from a long sleep.

The matter which filled its eyes, and which had dried, caused much pain before it could be removed; notwithstanding which, those organs, to my great astonishment, have remained uninjured.

This child is now four months old, it possesses the strength and intellect of one of six months, and enjoys perfect health. It has never since suffered the smallest indisposition, and is lively and thriving.

Is the preservation of this child to be attributed to Nature alone, or to the oxygen? All that I have above related, induces me to attribute it principally to the latter cause, as I have seen it operate in a sensible manner and to it I decidedly attribute this almost miraculous restoration.

Such are the observations which I respectfully submit to the Medical Society; on this occasion, I have no other ambition than to second the zeal which it constantly employs, for the progress of the healing art, and the good of mankind. My work does not display the ornaments of style and elegance of erudition, it only has the merit of precision, and the most scrupulous adherence to truth. Enthusiasm ought not to form a part in the character of a physician, because it is seldom consistent with truth. It is with a design of rendering homage to the latter, that I shall here give my opinion on the gastric juice, which has been so much extolled as the means of introducing medicinal substances into the human body. In consequence of the invitation given to practitioners by the Society, in its "*Recueil Periodique*," to establish, by experiments, the efficacy of the means proposed by BRERA, I have attempted to administer different remedies by this process. Opium produced no effect. I have given the *(diagredium)* scammony as well as the resin of jallap (of which a dose of 15 grains was a purge) a drachm for each dose, unless the patient was much affected; and I had applied frictions, sometimes to the stomach and sometimes to the abdomen, without success. The antimonial tartar had the same effect, taken at about 6 grains for a dose. The corrosive sublimate, administered in frictions on the extremities of three venereal patients, one of whom had a bubo and chancres at the penis, and the other two had chancres only, had the desired effect.

Thirty grains were sufficient for each time of friction. But, is it by means of the gastric juice that this remedy succeeded? Would it not have had the same effect if it had been introduced into the absorbent vessels, incorporated with hog's lard or any other proper vehicle? This is what I maintain in the affirmative, as the result of my experiments.

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At the time I made these trials at the Military Hospital at Brussels, where I was surgeon in chief, Dr. DUVAL, my colleague at the same hospital, made similar trials among his febrile patients, without better success. He observed that the bark left, during some minutes, a lively colour, accompanied with heat, on the part of the stomach or abdomen to which it had been applied. He seemed to think that squills, given in a triple dose, had in one particular instance increased the quantity of urine.

After having made experiments on the gastric juice of several herbivorous animals, and the human saliva, with no better success, we have rejected that doctrine, the supporters of which are, without doubt, under illusion.

Extract from a Series of Observations communicated to the Society of Medicine at Paris: By Cit. MICHAEL CHRISTOPHER LOMBART, *First Surgeon at Rethel.*

THOUGH several similar observations are to be found in the works of art, the society were of opinion, that the following ought to be published, because medical facts, in general, present particular shades, which in some degree differ from each other. We sometimes also meet with complications, which render an operation either very difficult or unsuccessful, if the surgeon does not instantly distinguish, whether he ought to avail himself of the resources of art or nature. It must be acknowledged that Citizen LOMBART has properly attended to the indications which occurred in the cases of which he gives us an account.

OBSERVATION I. *On the good Effects of Compresses moistened with cold Water, and applied immediately to tumefied Intestines, in the operation for Hernia.*

A woman 35 years of age, suffered during thirteen days from a strangulated abdominal hernia, situated two inches below the umbilicus, and laterally one inch from the *linea alba*; this hernia was of long standing, and succeeded an abscess which took place in the epigastric region. Every means had been unsuccessfully tried to assuage the pain & reduce the parts. A quack who was consulted as the last resource, applied to the tumour a heating amulet, which increased the complication of symptoms. The tumour, which was of an extraordinary size, represented the form of a hat; its surface was covered with *phlyctænæ*; a perpetual hiccup greatly tormented the patient. Such was the state of things, when, on the twelfth day, Citizen Lombart was called in. Finding the patient in a desperate state, he wished to decline his

his assistance when the patient earnestly requested that the operation for hernia might be performed; which he determined to comply with on the following night, being the thirteenth of the disease. He first made an incision from the xiphoip cartilage to the umbilicus, and was obliged to make the crucial incision to discover the intestinal sac; the intestines were extremely inflated; the abdominal aperture through which they passed, much distorted; the edges rather callous; he made incisions above and below, to lessen the contraction; but with all his attempts he could not succeed in reducing the intestinal sac.

Citizen Lombart remained in uncertainty how to accomplish the reduction, when the patient asked for a glass of cold water to allay the hiccup, which was increasing, and did not a little impede its reduction. This demand of the patient struck the operator with the idea, of applying to the intestinal sac compresses moistened with cold water; notwithstanding the length of time the strangulation had continued, there was not the least change discoverable in the intestines. A few moments after this application, a borborygmus announced a disposition in the parts to return to their proper situation. In fact, this reduction was made with great facility, the patient's wound was dressed, and she was confined to the care of Citizen GUNTELOT; the symptoms in a short time abated. Ten days after an abcess took place at one of the corners of the wound, the cause of which was attributed to the stimulating amulet which had been applied a few days before the operation. The tumour was afterwards opened, since which the patient has gradually got better, and, on the twenty-seventh day after the operation, was completely cured.

OBSERVATION II. *Distortion of the abdominial Viscera, and particularly of the Liver, occasioned by the long continued use of Whalebone Stays.*

The female Citizen REMONT, twenty years of age, wore from her infancy, according to the custom then prevalent, a pair of light whalebone stays; she constantly experienced insupportable pains and uneasiness. In vain she complained of the disagreeable sensations she experienced; her parents paid no attention to her distress, and she was compelled to be thus encased till she was nineteen years old, at which time she was married. Her shape, nevertheless, was not in the least deformed. Wishing to take advantage of the liberty which her new state afforded her, she laid aside her whalebone stays, but soon became subject to such violent fainting fits, that she was incapable of taking the least exercise; which symptoms she was subject to almost every evening when she undressed herself; they had continued for several years, the cause of which was attributed to the constraint she had been under in the day time, by being obliged to wear tight-laced stays.

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A physician who was consulted, attributed the cause to the sudden change of her confined dress. He advised the young lady to loosen her stays by degrees; she followed his advice.

Notwithstanding these precautions, she continually experienced a dull pain in the right hypochondrium, which was attributed to the vapours: she had three children, and attained the age of eighty years.

When she was seventy-nine years old her pains became insupportable, and changed their place. A most voluminous tumour settled in the region of the left iliac, the contents of which appeared schirrous: baths, emolients, and solvents were administered: the disease did not make less progress in her bowels. At this time I was consulted, adds Citizen Lombart, and after the recital I heard from the patient, of what she had suffered in the course of her life, through tight clothes, I imagined that the viscera, having been continually in a constrained state, particularly before she arrived at the age of nineteen, might possibly be displaced. I suspected the liver to be the seat of the tumour, and communicated this idea to my partner, who observed I was mistaken, as the liver is generally situated in the right hypochondrium, and the tumour appeared in the left iliac region; which, besides, the patient not having an icteric complexion, one could not reasonably suppose this viscus affected. From that time I did not see the patient, who become yellow in a few days, and shortly after died. I was requested to open her, which I performed in presence of the family-physician of the deceased, and my friend TELINGE, correspondent of the Society.

On opening the abdomen, we found the region usually occupied by the liver deprived of its appendages: the ligaments, which were entangled and not distinguishable, had formed adhesions, the diaphragm appeared depressed, the liver had descended into the pit of the left iliac, and adhered to the viscera; the gall bladder was empty, its partitions met together, the cistic and cholidoc canals apparently obliterated, the duodenum had changed its place, the peritonæum was tuberculous, and intimately connected with the liver; the whole presented an ununiform mass. An incision into this tumour caused a great quantity of pus to be discharged. Having introduced my finger into the opening, I withdrew from thence a very large stone. The whole mass having been separated, I divided it into two parts: we discovered a capsule in which were contained nine biliary calculi, of a cubic form, and different sizes. The fluid was extremely thick, and presented the shape of a gizzard; its internal surface was of a white colour.

OBSERVATION III. *Abscess of the Liver.*

A woman of Bertoncourt, near Rethel, was suddenly attacked with dull pains in the right hypochondrium, and remained two years in this suffering state, without cessation from her rural labours; the pains then became so

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acute, that she was obliged to keep at home; a surgeon who was called in, discovered a tumour, on which he ordered emollients to be applied; the fluctuation being manifest, he made an incision, which caused a discharge of a great deal of pus and some biliari calculi; on the following days the patient discharged, at different times, a great number of concretions of different sizes; the wound soon after cicatrized, and the woman was able to resume her customary occupations.

Six years after, the complaint returned, but with less severity; the surgeon who had formerly attended her being dead, I was consulted. I found a tumour of the size of a hen's egg; I opened it, and a small quantity of serous pus was discharged, together with a biliary calculus of the size and form of a French bean. I used detergent injections; some time after, the ulcer partly cicatrized; but there still remained a little fistulous hole, which at various intervals discharged matter. At length, being assured that no foreign body remained in it, I cauterised the fistula with the lunar caustic, some days after which, the cure was completed.

OBSERVATION IV. *Account of the discharge of an Insect from the Nose.*

Citizen Charles B****, was afflicted in his infancy with violent pains in his head, which were often accompanied with convulsive and debilitating symptoms. These disorders were attributed to the presence of worms in the stomach, or intestines. Vermifuges were prescribed, but without affording any relief. Paroxysms of pain took place at different intervals. The growth of the patient was nevertheless not retarded. When he attained the age of puberty, his parents designed him for the church, but he was not admitted to the degrees, because he was considered as epileptic, on account of the frequent recurrence of violent spasms, to which he was subject, at various times. He preferred the army, and from this new employment seemed to derive real benefit; till the age of thirty-two, he did not experience any violent crisis, but then became in some degree familiarised to his complaint. At the same time he laboured under so severe a nervous disorder, that a door suddenly opened, or shut with force, occasioned the most violent spasms; his mind was so much affected, that the least anxiety or disappointment threw him into convulsions. He consulted me in the year 1790, and informed me of the means he had been advised to adopt till the present time, all of which he had tried without success. I was not more successful than my predecessors in the directions I gave him.

An old woman advised him to take snuff, or some other sternutatory; he complied with her advice, and this remedy occasioned frequent sneezings, after which he discharged from the nose a living insect, a kind of caterpillar,

of a dirty white colour, which had fifteen rings; its legs were covered with hair. Citizen B. has since been totally relieved from his head-ach, but still remains afflicted with nervous symptoms.

I sent this insect to VICQ D'AZIR, who has given it a place in his collection. I have not been informed what use he has made of the observation.

[The French Editor remarks, that he intends to continue the series of observations in his next number.]

Extract of the Notes subjoined to the Translation of Dr. Reid's *Essay, on the nature and treatment of Pulmonary Consumption:—By* F. L. DUMAS, *Professor of the School of Medicine, at Montpelier.*

THOSE subjects who have lungs liable to an excessive irritability, whether natural or acquired, labour under a sort of phthisis, the particular character of which is a spasmodic irritation in the pulmonary organs, or in the membranes which surround them; whence a quick and habitual contraction results, which strains and dries the parts, so as nearly to tear the parenchyma, or which at least hardens them sometimes into scirrhosities, or tubercles, the formation of which is almost generally a prelude to the total decomposition of their substance. This kind of phthisis, peculiar to persons who have long been subject to nervous and convulsive coughs, who experience frequent attacks of the dry asthma, and are habitually exposed to respire metallic, irritable, and corrosive vapours, is indicated by a dry & sonorous cough, which is not followed by a free expectoration. The texture of the skin is closed, gross, and rather contracted, the voice harsh, the respiration constrained, the sensibility increased, the pulse hard, and like the vibrations of a stretched cord; nervous symptoms of vapours are apparent, which promote the continuance of the general symptoms, common in all consumptions. Examples of that species dependent on nervous irritation, are to be found in the works of MORTON, WILLIS, VOGEL, BAGLIVI, &c. Morton, vol. 1. book 3. chap. iii. Willis, Pharmac. Rat. Sec. 1. chap. 6.

Pure or dephlogisticated air, or oxygen gas, recommended by some physicians in the treatment of certain kinds of consumption, would be absolutely deleterious, and productive of dissolution, in the species under consideration. I believe I may assert, upon the authority of experience, that the continual use of such air would introduce into the lungs that acute degree of irritation, which

which often gives rise to tubercles, or to the ulcerous state of which this disease is the result. I have, with some attention, continued the experiments made with this view on animals, and I am convinced that, when submitted for some length of time to the impression of oxygen gas, the lungs become irritated, inflamed, grow red, and suppurate, which is the cause of consumption. I shall now give an account of some experiments I have made on living animals, which no other person ever before attempted.

I took a dog, of middle size, in a perfect state of health, and placed him under a large receiver, from which the atmospheric air was expelled, and which was filled with oxygen gas. I adapted two tubular syphons to the receiver, and had a cock fitted to the tube, which I could open and shut at pleasure. I used one of the syphons to discharge the air impregnated with oxygen gas, as it became foul by the respiration of the animal, the other opened into the receiver, to renew, when requisite, the quantity of oxygen gas which had evaporated, so that by means of my two syphons, I was enabled to keep the air in the receiver pure, and to preserve in it at all times the same quantity of oxygen. My apparatus thus prepared, and the dog put under the receiver, previously filled with oxygen, I let him remain in this atmosphere, which he respired without any addition of air, during the space of six hours. At the expiration of this time, the respiration appeared to be accelerated, and the animal began to show signs of uneasiness. I then withdrew him, and placed him in an atmosphere better adapted to his nature. In the evening I repeated the same experiment, which I did constantly twice a day till the 28th, when his lungs ceased to move with their usual facility. I found it necessary to shorten the time of the experiment, and I could not continue it fifteen days longer without the greatest difficulty. At this time the animal had almost entirely lost the power of breathing and howling; his respiration became sonorous, weak, and painful; the sounds of his voice were hoarse and stifled; his eyes appeared dim and languishing; he suddenly shed a great quantity of hair, particularly from about the breast; he lost his flesh very rapidly; and perceiving in him all the symptoms of an approaching consumption, I resolved to kill him, and open the thorax, to examine the state of his lungs, and ascertain what I had before suspected. The cavity of the breast being laid open, I found its right side filled with an acrid serosity, containing much coagulated blood. The serous humour, when thrown upon live coals, evaporated in the air, except a pellicle which appeared in the form of a bladder. The coagulated blood appeared of a fleshy consistence, similar to that of the pleuritic sarcoma, and was situated near the superior part of the lungs, corresponding with the bronchiæ. The bronchial vessels also appeared distended; the pleura likewise lightly adhered

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to the lungs, particularly in their interior part, which was at the same time caked in all the adjacent parts; this membrane was red, swelled and inflamed. The lungs, which were reddish and intersected with little tears, had acquired a considerable hardness, as happens to those organs which have remained a long time inflamed. I perceived in the bronchiæ a small wound the hard and callous edges of which indicated it would soon have degenerated into an ulcer. The anatomical inspection of those parts, no longer let me doubt that the oxygen had given an irritable impression to the lungs, from whence had resulted all the ordinary symptoms of consumption.

I wished to try the same experiment again, and had fixed upon the time when I was obliged to attend to other occupations, which prevented me from effecting it; but it was my intention to resume it, with variations, as soon as I should have the least leisure. This consumption, depending on an acute irritation of the pulmonary organs, would doubtless be accelerated by an active and more powerful method of exhibiting the gas. Riding, which Sydenham has so much recommended, the active resolvents, the sulphur, brought into notice by Dr. Sims, myrrh, bitter plants, bathing, and kino, are so many poisons, which, in cases of this nature accelerate death, that might be prevented by proper remedies. It is needless to observe, that the use of emetics, or small doses of ipecacuanha, and consequently the method of Dr. Reid, bring on the same dangers, and ought to excite in us similar apprehensions.

If the lungs are afflicted with weakness, or such a deep atony as to be unable to perform their functions, suffocation is to be apprehended, and a collection of matter which forms tubercles, and produces another species of consumption, of which the essential cause will be a radical nervous weakness of the lungs. This languishing organ, becomes at length incapable of acting; the absorption and exhalation which ought to be made by it, are diminished; the blood does not receive the necessary quantity of oxygen, that vivifying principle, that *pabulum vitæ*, which seems destined to unite the principles of the blood, and to repair the elements of the muscular fibres; the sanguification remains imperfect, vitiated, and only exhibits a pale and weak blood, which, not participating in the digestive assimilation, cannot furnish the body with a sufficient degree of nourishment; the limbs grow dry and fall into consumption; the lungs remain inert, and are unable to eject the matter exhaled; a certain quantity of this matter, retained by the defect of a proportionate secretion, accumulates in the lungs, from whence it returns to the general passages of circulation, and occasions a hectic, pulmonary fever. This species of consumption is manifest from a dry and lean state of the body, the dilatation of the cellular membranes, a pale-

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ness, debility, hoarseness of voice, softness of the skin, frequent and difficult expectoration, an œdematous state of the extremities, lassitude, languor, enervation of the whole body, &c.

Hereditary consumptions commonly have symptoms similar to the latter species, and nothing contributes to produce them so much as respiring for a long time in a thick, gloomy air, loaded with miasmata, or vitiated by the combination of some deleterious gas. I have begun a series of experiments on this subject, from which I can at present only produce those which confirm the effect of the carbonic acid gas on the lungs, which leave no doubt of the existence and nature of the consumption which it occasions.

I placed two dogs, under two receivers, filled with carbonic acid gas, and contrived in such a manner that I could introduce, when necessary, a certain quantity of pure air, so as to make it the longer respirable, and likewise to prolong the pernicious impression on the organs of the two animals. They remained under these receivers till they began to shew signs of uneasiness, and I then only withdrew them that I might again submit them, at a future time, to the effects of the deleterious gas. I alternately placed and withdrew them several times in the same day, and repeated the same experiments alternately every day, during the space of six weeks. These animals became by degrees incapable of respiring such an atmosphere. One of them, whose lungs would not receive the deleterious gas, died under an experiment. The other I killed, as soon as he manifested signs of weakness. I observed, before their death, that they both experienced a difficulty of respiration, a weak and hoarse voice, foamed at the mouth, and their whole body appeared considerably emaciated. I opened the body of the first, and examined particularly the organs of the chest. I found the lungs adhering to the pleura of the left side; the other parts of the lungs which remained free were filled with a lymphatic and serous matter, in which floated several shreds of gelatinous, or rather membranous substances. The lungs were covered with black spots; they were of a pulpous texture; their size had decreased so that they were scarcely equal to those of an animal just born. I perceived clots of blood deposited at the orfice of the pulmonary vessels: the other cavities were perfectly sound.

The lungs of the second animal only exhibited a multiplicity of adherences, and I clearly perceived that I had let him perish before the gas had sufficiently operated. I intend to repeat my experiments with azotic gas.

The method of Dr. Reid, which is capable of giving a tonic impression to the lungs, would in this species of consumption, possess all the advantages which are derived from other renovating, and strengthening remedies.

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An Historical View of Surgery, in the Sixteenth Century.

[Extracted from the original German of Professor CURTIUS SPRENGEL'S "*History of Medicine, founded on authentic Documents:*"* Vol. III. Sect. X. p. 457, & seq.]

§. 1. THE art of surgery is unquestionably a branch of medicine, and its vicissitudes must therefore, in every respect, be similar to those changes which medicine has successively undergone: this observation is amply confirmed by the events which took place in the sixteenth century, after the revival of all the sciences. The first surgeons of this century were almost unanimously blind followers of *Abu'l Kasem*, and of *Guy de Chauliac*; they dreaded chirurgical operations, and endeavoured to supply their want of dexterity by increasing the number of cataplasms and ointments. A few of the more expert surgeons occasionally attempted difficult operations, but their learned brethren could not be easily convinced of the advantages attending them. The Gothic taste still prevailed in the construction of chirurgical instruments, which were so complicated and artificial, that the principal difficulties were thus rather aggravated than diminished.

§ 2. Innumerable instances might be produced, from which it would appear, that the learned surgeons of this century very seldom attempted to perform difficult operations; and that these were generally intrusted to ignorant barbers, or itinerant pretenders. A few of the most striking facts will sufficiently illustrate this assertion. When King Matthias, of Hungary, was wounded in a battle against the Moldavians, in 1464, the arrow remained so closely fastened in the wound, that none of the royal surgeons could extract it. The King therefore issued a proclamation, in which he offered riches and honours to the surgeon who would repair to his court, and heal the wound.

Four years elapsed before any adventurer appeared. At length, *John of Dockenburg*, a surgeon from Alsatia, ventured to undertake this task; he travelled to Hungary, saved the King, and was loaded with extraordinary rewards.

The most celebrated physicians and surgeons of Italy, such as *Joh. de Vigo*, *Joh. Bapt. Sylvaticus*, and others, left the great operations of lithotomy, trepanning, and the extraction of the cataract, to itinerant operators; and among these we find an Italian family named *Norsini*, of Milan, particularly celebrated for a century past, on account of their successful operations for the stone. Even in the fifteenth century, an operator of that family made a journey to France, where he taught his art to *Germain Colot*,

* See the Account we have given of this important work in our first Volume, p. 83.

Colot, a surgeon of that country.—This ingenious pupil impatiently waited for an opportunity of performing his first operation. At length, in 1474, such an opportunity occurred, when a criminal of Meudon (others say of Bagnolet), for robberies committed in the woods, was condemned to die. Happily for the art of surgery, this delinquent was afflicted with the stone; but the historians do not mention whether it was in the kidneys, or in the bladder; it is, however, probable that it was in the latter.

The French surgeons represented to King Louis XI. that, if this experiment on the criminal were permitted, and should terminate successfully, it would be the means of saving the lives of many unfortunate individuals, and delivering them from their torments. The King granted the request, and Colot performed this famous operation so successfully, that the convict was restored in a fortnight, and consequently obtained a full pardon.

But what method the courageous Colot adopted in this operation, we cannot learn from the imperfect accounts given of it by his contemporary writers, *Troyes*, in his "*Chronicle Scandaleuse*;" *Comines*, in his "*Memoires*;" and *Villaret* and *Garnier*, in their "*Histori de la France*," vol. xviii. p. 124.—It is, however, reasonable to suppose, that he employed the high operation, because he mentions, among other circumstances, the reduction of the intestines and the suture of the abdomen.

John Lange, who had studied in Italy, and likewise benefited by the instructions of *Joh. de Vigo*, declares, that he had never seen the trepan applied by this celebrated surgeon. On his return to Germany, he caused an instrument to be made, to which he gave the pompous name of *trepanum abaptiston*, and exhibited it in an assembly of German surgeons and physicians. These, full of astonisment, exclaimed, "Langi Doctor! frustra quæris in Germania abaptistæ; non enim chirurgorum instrumenta nobiscum, sed campanæ et pueri baptizantur." One of the company facetiously remarked, that even chirurgical instruments might, with more propriety be baptized in Rome, where his holiness the Pope had fixed his residence.

§ 3. Several branches of surgery, however, were particularly cultivated, and thus gradually arrived at a more improved state. Of this description is chiefly the treatment of *gun-shot wounds*, which could not be derived from the Arabians and Saracens, but which was a new and original effort of this century; and hence the theory and treatment of these wounds were liable to many subsequent changes.

Hieron. Brawnschweig, surgeon at Strasburg, towards the end of the fifteenth century, treated gun-shot wounds in a manner exactly similar to that

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of wounds arising from poison. He introduced a tent made of bacon into the wound, and administered the theriaca internally, with a view to expel the virus. Joh. de Vigo endeavoured to explain the danger attending gun-shot wounds, partly from the round figure of the bullet, partly from the (apparent) searing of the part, which it was supposed always took place, and partly from the poisonous qualities of the bullet and the powder.

According to this erroneous opinion, he proposed two distinct remedies; first, to moisten the wound, to alleviate the effects of combustion; and second, to dry, and, as it were, exsiccate the virus. Vigo previously cauterised the gun-shot wound with an intention to destroy the poison; or he applied the Egyptian ointment, and sometimes very hot oil. After this he directed a liniment of fresh butter, in order to resolve the scab formed over the wound; he also recommends a digestive ointment, composed of the oil of turpentine, and the yolk of eggs, to assuage the pain.

Alphons. Ferri, of Faenza, formerly surgeon at Naples, and afterwards physician to Pope Paul III. likewise maintained that gun-shot wounds were of a poisonous nature; an opinion which he had conceived from having observed the sudden effect of contusion produced by the passage of a bullet through the air, which frequently occasions sudden death, and which, in its fatal effects, is similar to mephitic vapours. He likewise treated gun-shot wounds with a caustic of his own invention, which consisted of corrosive sublimate, vitriol, and litharge. Although he was the first who considered the extraction of the bullet as indispensable to the cure of gun-shot wounds, yet he did not enlarge the wound at all, but extracted the bullet with an awkwardly-contrived instrument, which he called *Alphonsinum*. He further maintained, that the bullet may even be left in the body, without danger, as there are examples that it has remained there for twenty years, without detriment. His advice of keeping gun-shot wounds very clean is little to the purpose, as it obviously proves that he did not understand the distinction between pus and sanies.

By the endeavours of *Paré* and *Maggi*, the theory as well as the treatment of gun-shot wounds were much improved. It is uncertain which of these two reformers we are principally indebted for these improvements. *Paré* himself owns that he is under very great obligations to the Italian surgeons, and hence it has been justly conjectured that Maggi must have been his teacher.

It was this ingenious practitioner who, by actual experiments, succeeded in controverting the erroneous opinion, that gun-shot wounds are connected with combustion: "The bullets," says he, "are not hot when expelled from

from the barrel of a gun; they do not set the wadding on fire, and hence, their burning effect is merely chimerical. Nor is there any poison in gun-powder, as none of its constituent parts possess a poisonous property." Both the theory and practice relative to gun-shot wounds, have been considerably improved by this excellent surgeon: he extended the wound by *dilatatoria*, usually prepared of the gentian-root, and he carefully extracted bullets, as well as small shot.

He generally applied mild remedies, especially the oil of roses; he severely censured the frequent cleansing of wounds; and if bones be fractured, he does not advise to extract every splinter, but rather to apply the expulsive bandage. Maggi likewise recommended amputation in all those cases where sphacelus is the consequence of a wounded artery. In such a case, he made the incision in the healthy part, and caused parts of the integuments to hang down over the cutaneous muscles, in order to cover the stump with them afterwards.

§. 4. Paré endeavoured to introduce in France the treatment of gun-shot wounds, established by Maggi, in Italy. He, at the same time, confuted the opinion of the poisonous nature of gun-shot wounds, together with the idea that they ought to be treated in a manner similar to burns; while he deprecated the use of hot oil, formerly recommended by Vigo, and proposed, in its place, the very opposite, namely, the suppurating remedies prescribed by Magi. In hydrophic swellings, that frequently accompany gun-shot wounds, Paré particularly recommends the expulsive ligature, and also the Egyptian ointment. A celebrated Italian surgeon, *Job. Bapt. Carcano Leone*, of Milan, Professor in Pavia, likewise defended the theory maintained by Maggi.

Botalli, who wrote a treatise on gun-shot wounds, controverted the opinion, that they should be treated like injuries arising from the external application of poison, or from burns; and he consequently treated them as mere contusions. Above all, he extracted the bullets, but left the splinters of bone in the wound, till they were extruded by the expulsive ligature. In the writings of *Fallopius*, we also find an ample detail of the ideas of Maggi and Paré.—*Felix Wurz*, an excellent German surgeon, justly deprecated the numerous artificial instruments then used for the extraction of bullets; he condemned the setons, or strings anointed with lard, to which the pretended poisonous matter was supposed to adhere, and censured the use of all fat substances and ointments for burns in the cure of gun-shot wounds. He observed in every respect the antiphlogistic regimen, and applied externally honey, and dilatatoria made of gum tragacanth.—We

meet with similar principles in *Guilemeau*, who insists particularly on the dilatation of the wound, and the speedy extraction of the bullet.—*Fran. Ranchin*, chancellor, at Montpelier, modified, in a slight degree, the idea conceived by Botalli; since he considered gun-shot wounds as simple wounds which are *complicated* with contusions, and contended that they were not to be treated as *simple* contusions.

§. 5. The induration of the prostrate gland; the warts in the urethra; and the application of bougies against this complaint, excited great attention about the middle of the sixteenth century, particularly in Spain.—*Philipp*, a surgeon of Lisbon, pretended to be the inventer of bougies, and travelled through all Europe, with a view to acquire riches by their application. Indeed, *Franc. Diaz*, Professor at Alcala de Henares, seriously considers him as the inventor, but, improperly calls *Philipp* an apothecary, and farther informs us, that a Portuguese merchant, *Alonzo Diaz*, had likewise travelled in the character of a charlatan, and applied these bougies under the assumed name of *Romano*. Yet this assertion was contradicted by *Amatus*, of Portugal, who assures us, that he had been well acquainted with surgeon Philipp, whom he had taught the application of bougies in Lisbon, in 1541, being the same year in which the Emperor undertook the expedition against Tunis; and for the truth of this fact, he produces the evidence of three Portuguese contemporaries; at the same time he ingenuously confesses that he himself is indebted for the knowledge of this remedy to his teacher, Prof. *Aldarette*.

This narrative possesses the greatest share of probability, so that Amatus ought, at least, to be considrred as the chief promoter of this remedy.

Andr. Laguna, of Segovia a learned and very experienced physician who, in the Spanish war in Flanders, and other campaigns, had made many valuable observations, was one of the first who wrote on that disease, and its new remedy, a treatise entitled "*Andr. Lacunæ methodus cognoscendi et extirpandi excrescentes in versicæ collo carunculas*," 12mo. Romæ, 1551. *Portal*, the French medical historian, however, is much mistaken, when he maintains that this essay of Laguna appeared so early as the year 1535. Nor was the work of another writer on the same subject, "*Ferrus de caruncula in Uffenbach, thesaur. chirurg.*" published earlier than the year 1551. The latter ascribes the induration of the prostrate gland, to the deposition or collection of mucus, suppuration, and gonorrhœa; he applies first emollients in injections, afterwards bougies with verdigrease, frequently even arsenic with unslacked lime, and lastly healing and cicatrizing remedies.

Christ. de Vega, in his work, "*De curatione caruncularum*," 4to. Salamant, 1552,

1552, generally follows the prescriptions of Ferri; but *Amatus Lusitanus*, in his "*Curat. medicin. cent.*" iv. cur. 19, p. 337, properly limits and defines the cases in which strong caustics might be applied, and seriously speaks of the fatal consequences attending the use of white lead, which Laguna had recommended for injections.

Franc. Diaz, in his treatise on the same subject, published at Madrid, in 1588, in the Spanish language, likewise advises the indiscriminate use of caustics, and the uninterrupted application of bougies, in order to prevent any new concretions: and in cases where the usual *specillum cereum*, or wax taper, was insufficient, he recommends the use of leaden rods, or triangular needles, for the extirpation of warts.

§ 6. The doctrine of *lithotomy* was considerably improved in this century, by the invention of two different methods of operating, namely, the *great*, and the *high operation*. It has already been mentioned, that Germain Colot undertook a successful operation for the stone, in the fifteenth century, and probably by the high operation: but it does not appear that learned surgeons had imitated this method, till an obscure practitioner, at Cremona, *Joh. de Romani*, in 1525, began to adopt what is commonly called the high operation: he taught it to *Mariano Santo de Burletta*, a surgeon at Naples, who described the particulars of it in a separate treatise, published at Venice, in 1543, wherein he professes to have been a pupil of Joh. de Romani. It is probable that previous to this time no other method of operating was practised than that known under the name of the smaller apparatus, which can be employed only on children under fourteen years of age. In some rare instances which are related by *Benivieni* and *Christ. de Vega*, particularly in women, the stone had been found in the urethra itself, in which case it could be more easily extracted. But, since that period, the passage was cleared by the application of the gorget, by means of which the forceps could be introduced into the bladder. *Mariano Santo* made use of the following apparatus: he first employed a curved sound, which he introduced into the uretha so as to direct the point to the left side; he expressly cautioned the operator against the incision into the perinæum, and is therefore unjustly censured for having attempted the incision in the middle. His sound was excavated, and he performed the incision in the direction of the groove; then introduced the sound, and along with it the conductors, and afterwards the gorget, which, according to its original construction, terminated in a blunt point; and lastly, he extracted the stone with the forceps, and removed the remaining particles of it, as well as the gravel or sand, by means of the lithotomical spoon. By the application of the blunt dilator, the parts were necessarily lacerated, and the wound occasioned by this laceration

ration could not be healed without great difficulty. Hence *Le Dran* endeavoured to improve upon this method, especially by making an incision through the prostrate gland and the bladder with his guarded knife (*couteau en rondache*); and the immortal *Schmucker*, of Berlin, was uncommonly successful in using the great apparatus for lithotomy in that improved state.

Mariano Santo communicated his method to *Ottavian de Villa*, who practised surgery at Rome, but afterwards travelled in the character of an operator. Among other countries, he visited France, where he became acquainted with *Laurent Colot* (probably a descendant of Germain Colot), who was instructed by him in his peculiar manner of operating. By his successful operations, Laurent soon acquired great reputation; in consequence of which Henry II. of France called him to his court, and patients from most countries in Europe resorted to Paris, in order to obtain relief from his skilful hand. But our lithotomist carefully concealed his art as a secret, so that it exclusively became the inheritance of his sons. Paré, in his "*Oeuvres*," liv. xx. ch. 8. p. 477, cites two instances, demonstrative of the fortunate success of their operations. Philip Colot, who was either a son or a nephew of Laurent, adopted two assistants, namely, *Severin Pineau*, and *Gyrant*, because he was no longer able to perform the operations. Pineau received orders from the King to instruct ten other surgeons in this useful art; but the royal mandate was not complied with. It is further asserted, that he published a description of his method in a particular work, but it has never come to light. At length, a later descendant of this family, *Franc. Colot*, described the whole of the operation in a pamphlet, entitled "*Traité de l'operation de la taille*," p. 74, et seq.

[To be continued in our next Number.]

A concise History of the principal Discoveries in Anatomy.

[Extracted from the Original German, of Prof. CURT. SPRENGEL'S "*History of Medicine*," Vol. III. Sect XI. p. 503, and fol.]

§ 1. NO century has ever been so productive of great and interesting discoveries; in none has the knowledge of the human body increased so rapidly; and there never was a time in which so great a number of the most enlightened minds were emulous to improve anatomy, that highly important and necessary branch of human knowledge, as during the 16th century, the period of which we here treat.

Convinced of the importance of that department, Prof. SPRENGEL avows that he has, for several years, devoted a principal share of his attention to this

this branch of medical history; that he has during that time, pursued the most industrious study of the anatomical writers of the sixteenth century; and hence he concludes, that this section of his work cannot fail to be highly interesting to the scientific reader. But in order to combine brevity with a perspicuous arrangement, the learned Professor previously gives the literary accounts of the most celebrated anatomists of the sixteenth century, and afterwards states their different discoveries, in scientific order.

§ 2. Among the anatomists of that century, *Versalius* is perhaps the most illustrious, or at least the most celebrated, and unquestionably the first who powerfully opposed inveterate prejudices, as well as that implicit adherence to *Galen*, while he discovered, and, without hesitation, exposed the errors of the Greek author. Hence originated an important epocha in medical science; and it will appear in the course of this inquiry, from various individual instances, that the influence of his reformation, on his contemporaries, as well as the subsequent writers, was considerable and permanent. The anatomists who lived previous to his time, made indeed several valuable discoveries, and partly described nature as she really is, without imitating the erroneous representation of Galen, but they still considered it as an unwarrantable boldness, to contradict that great, and in their opinion, incomparable writer. Under such unfavourable circumstances, this science could make but little progress, till the immortal Vesalius appeared, who successfully broke the fetters of prejudice, and above all things earnestly recommended the study of nature.

Gabriel Zerbi is the earliest anatomist of the sixteenth century, and his work "*Anatomia corporis humani:* fol. Venet. 1502," is written throughout in the manner of *Mondini*, insomuch that it is scarcely conceivable, how the pre-eminent performance of Vesalius could appear in the short interval of forty years after that inelegant work. Zerbi was a native of Verona, and filled the academical chair for some time at Verona, and afterwards at Rome. Having been guilty of a criminal action, he was obliged to fly to the Turkish dominions, where he met with an unfortunate catastrophe. Having performed a palliative cure on a bashaw, he was pursued, apprehended, and cut to pieces by the servants of the despot.

Alexander Achilini was attached as much as Zerbi to the method and the prejudicies of Mondini, while he combined with them an intolerable scholastic verbosity. He was professor at Bologna, and is known in medical history by his disputes with *Ponpanazzi*, in which he professed the principles of *Averrhoës*. His book entitled "*Achillini annotationes anatomicæ in Mundinum.*" fol. Bonon. 1522, contains however, a variety of interesting observations, together with ample proofs that the author has diligently dissected

dissected human bodies. The same remark applies to *Nicolaus Massa* whose work "*Anatomiæ liber introductorius,*" 4to. Venet. 1559, is not destitute of original observations, while it likewise affords instances to prove the author's adherence to the prevailing prejudices of the age.

Nor is *Joh. Winter of Andernach*, an author of great merit, and he has according to the testimony of his pupil, Vesalius*, little, if at all, applied himself to the study of nature. In his work entitled, "*Anatomicarum Institutionum,*" lib. iv. 8vo. Basil. 1536, some discoveries are recorded, which he certainly has not made.

Andr. Laguna, of whom we have already made honourable mention in the fifth sect. of the preceding History of Surgery, is the author of an anatomical manual, entitled "*Andr. Lacunæ anatomica methodus,*" 8vo. Paris. 1535 a work written in a strange metaphorical style, yet not entirely void of original facts and remarks.

§. 3. *Jacob Berengar de Carpi* deserves to be recorded as a worthy predecessor of Vesalius. He was professor at Bologna, from the year 1502 to 1527; and it is related of him as a remarkable fact, that he gave the first anatomical demonstrations on the body of a hog, in the house of Albert Pio, Lord of Carpi, and that he had subsequently dissected upwards of one hundred human subjects. He stands also charged with having performed dissections on living human bodies; a charge which the vulgar are apt to bring against every zealous anatomist. His great & numerous discoveries justly obtained the distinguished approbation of *Fallopia*, one of the most competent judges who appreciated their value in his "*Observationes Anantomicæ*" p 365.

Jacob du Bois, or *Sylvius*, the teacher of Vesalius, has likewise made many important discoveries, although he was involved in violent disputes with his pupil: by some authors (*Riolan. anthropogr.* lib. 1. c. 5. p. 29,) he is considered as the first restorer of anatomy in France, because he dissected human bodies instead of those hogs, in order to give his anatomical demonstrations from the former. He was probably the inventor of injections, as he first mentions them in his "*Isagogue Anatomica,*" p. 66. But his great predilection for the ancient writers misled him to the most palpable errors. In general, he was an accurate observer; but whatever Galen had differently described, he considered as a deviation from the natural state, and frequently had recourse to the absurd idea, that human nature was degenerated, and that therefore many things were different found from what they were when Galen

* "Tot. mihi modo sectiones infligi cupio, quod illum in homine aut in alio brute (prætertuam in mensa) tentantem vidi."—*Vesal. de radic. chyr. epist. p.* 675.

Galen described them. Of his injustice to Vesalius we shall find in the progress of this inquiry several remarkable instances.

§ 4. The great and comprehensive mind of *Andreas Vesalius*, whose name no friend of anatomy will pronounce without veneration, is an ornament of the German nation, although he was born at Brussels. He studied in Lowen and Paris, under Sylvius, where he frequently, with no small danger, gratified his insatiable desire of anatomizing. He afterwards served as physician in the Imperial army, but soon retired to Italy, and began, first at Padua, to teach anatomy with uncommon reputation, so that he had, at times, five hundred pupils. He also resided at Bologna and Pisa, till he published his large and immortal work, in consequence of which, he was called to the court of the Emperor CHARLES V.— He was likewise appointed first physician to PHILIP II. his son and successor to the imperial crown; and among other successful cures, he healed Don Carlos of a dangerous wound in the head. At length, Vesalius travelled into Palestine, and died on his return, after having been shipwrecked on the island of Zanthe.

The greatest merit of Vesalius indisputably consists in his criticisms on Galen's assertions; and although he has been censured for having sometimes purposely mis-interpreted the text, he has nevertheless, in most instances successfully disclosed the errors of Galen, and shewn how inconsistently former anatomists had proceeded, in blindly following the precepts of that author. It were much to be wished, however, that the reproaches with which he loads the Greek physician, for having placed too much reliance on the dissections of animals, might not be equally applicable to Vesalius, for we shall find in the sequel, that his observations are frequently liable to similar objections.

Vesalius acquired another great advantage over his predecessors, by having, with the assistance of the celebrated artists, *Tizian*, and *John of Calkar*, furnished the first accurate and finished anatomical representations drawn from nature. Yet he found frequent cause of complaint against those artists, because the delineation of the parts of the human body had not for them sufficient interest. It has been said, that his were the first faithful copies made from nature; for the drawings which *Leonardo da Vinci* had executed for *Marc. Ant. della Torre*, were not published, but scattered after the death of the latter. Nor have the plates been preserved which the immortal *Michael Angelo Buonarotti*, a great adept in anatomy had engraved with his own hand.

§ 5.

§ 5. The attention which the work of Vesalius excited, was comfortable to the expecations formed of this magnificent performance. The succeeding anatomists now endeavoured either to defend the authority and supposed infallibility of Galen—they proceeded on the road of discovery pointed out by Vesalius—or they were blind imitators and copyists of what he and his great predecessors had stated in their works.

Among the most zealous partisans of Galen's anatomical system, we find principally *Franc. Puteus*, of Vercelli, who published, in 1562, his "*Apologia pro Galeno*, 8vo. Venet." in which he studiously and earnestly endeavours to prove, that Galen had actually dissected human bodies. He at the same time expresses the singular wish, that no discoveries whatever might be published, which tend to diminish the authority of his beloved ancients; but that all such pretended discoveries should be deposited in a public edifice, as was the case in the temple of Cos, in order to ascertain their respective merits, by an accurate and impartial investigation *. He is probably not always in the wrong, when he, in a variety of instances, disputes the accuracy of representation in the plates of Vesalius; yet the blame in such cases attaches more justly to the artist than to the author. Vesalius defended himself against *Putues*, under the assumed name of *Gabr. Cuneus*; but this apology has not obtained the approbation of impartial judges, because this great writer too frequently repeats his arguments in that essay. He likewise complains of the enmity he experienced from *Joh. Dryander*, professor at Marburg, who made Modern's Manual the text-book in his anatomical lectures, and was a faithful follower of this inferior writer. Dryander began his academical instructions in 1535, since which period public dissections have been performed in that university. The representations of the parts of the human body which he annexed to this work, entitled "*Anatomiæ pars prior.*" 4to. Marb. 1537, are as rough and unfinished as the drawings published in the work of *Lewis Letasseur (Jassæus)*, of Chalons-Marne, whose compendium consists chiefly of extracts from the writings from Galen.

Charles Etienne, of the celebrated family of the *Stephani*, and who was himself a director of a printing-office, and professor of anatomy at Paris, has

* If all *modern* professors of anatomy were compelled to submit their discoveries and improvements to public scrutiny before they be permitted to claim their share of merit in new or *renewed* discoveries,—it would be an excellent means of preventing many unnecessary disputes, as well as useless verbosity in their lectures and performances; and the time thus wasted might be beneficially employed in *more luminous* demonstrations. W.

has indeed made many useful discoveries, and several interesting observations; but his adherence to Galen frequently prevented him from discovering the truth, and he was consequently unacquainted with various particulars ascertained prior to his time. The drawings given in his work, under the title "*Stephanus de dissectione partium corp. hum.*" Fol. Paris. 1546, were vindicated in a French treatise on the origin and progress of Surgery, by *Stephen de la Riviere*.

§ 6. *Bartholom. Eustachius*, of Sanseverino near Salerno, Professor in Rome, and first physician to Cardinal d'Urbino, whimsically combined the most profound anatomical knowledge with the most implicit adherence to the principles of Galen. It is but too obvious from his writings, how frequently his submission to Galen revolted against reason and experience, which, it is to be regretted, were but too often slighted. But notwithstanding this unfavourable circumstance, Eustachius has acquired great and permanent merit by uniting the comparative anatomy of animals with that of the human species; a subject which has been carried to a high degree of perfection in his excellent writings, called "*Eustachii Opuscula.*" 8vo. Ludg. Bat. 1707. His plates "*De renum structura*," c. 16. p. 44. which were engraved during his life time, in the year 1552, but were considered as lost for a century and a half, till the Pope at length made a present of them to his physician, *Lansici*, who first published them at Rome, in 1714, are lasting monuments of his anatomical knowledge and skill. They were subsequently republished at Rome, in 1740, by a surgeon named *Cajetan Petrioli*, who edited them with a jargon of unintelligible "*Riflessioni;*"—and soon afterwards the world was presented with the excellent and classical edition of these plates, published by *Albinus*, at Leyden, in 1744 and 1761; and the Commentaries, by *Martin*, printed at Edinburgh, 8vo. 1740.—The intention of Eustachius, in the elaborate publication of his anatomical tables, has been very accurately ascertained both by Martin, and the great physiologist Haller, namely that he did not wish to represent all the parts of the human body in their natural order, but had purposely exhibited his own delineations in such a manner as to enable anatomists to correct by them the assertions of Vesalius, and at the same time to represent the discoveries peculiar to Eustachius in a more conspicuous light. These tables frequently afford the best documents for deciding the controversies then especially prevailing; and it is remarkable, as has already been noticed by Albinus, that most of the drawings are taken from young subjects. But there is contained in them an inexhaustible stock of new discoveries and observations, the most important of which will be hereafter recorded.

§ 7. Several anatomists learnt from Vesalius the free method of investigating old prejudices, and consequently again endeavoured to improve upon, and to supply the deficiencies in the observations made by this great writer, whether in point of accuracy in the description of parts, or in the precision of the concomitant explanations; many of his successors, however, did not treat him with the deference due to his talents, as they wished to acquire reputation by undervaluing his merits: while others observed in the writings that degree of delicacy which the greatness of his mind, as well as the integrity of his intentions justly demanded, and consequently rectified his errors, and improved upon his ideas, with modest and philosophic reserve. Among the latter we may principally place *Joh. Bapt. Cannani*, Professor in Ferrara.

It is much to be regretted that of his work on the muscles, an outline only has been transmitted to posterity, the drawings, of which were executed by the celebrated artist *Hieron. Carpensis*. Of all medical works this is perhaps the scarcest; and Prof. Sprengel availed himself of the copy extant in the Electoral library at Dresden *, from which he has extracted the most important observations; as will appear in the sequel of the present inquiry.

Another author, named *Joh. Phil. Ingrassias*, in a work intitled "*Ingrassias in Galeni libr. de ossibus commentar.*" fol. Panorm. 1603, improved upon the discoveries of Vesalius in osteology, and treated on the bones of the human body with an accuracy and attention to the smallest minutiæ, which affords almost complete satisfaction.—But the egostic *Realdus Columbus*, of Cremona, a pupil of Vesalius, whom he succeeded in the academical chair, at Padua, though he afterwards resided at Rome, did not treat his great master with becoming deference. His work "*De re anatomica*," lib. xv. 8vo. Francof. 1593, is a testimony of his unbounded egotism, a desire of innovation, and neglect of simple truth; while it must be allowed that he has made many valuable discoveries, and that, from his great experience, having dissected sometimes fourteen subjects in the course of

* This work is entitled: "Muscolorum humani corporis picturata dissectio, per *Joh. Bapt. Cannanum*, Ferrariensem Medicum, in Barthol. Nigrifoli, Ferrar. patricii, gratiam nunc primum in lucem edita est."—There is no year nor place of printing mentioned in the title-page; the whole is comprised in a few sheets text, and twenty-seven plates in quarto; and on the title-page are written the words: *Sum Andreæ Aurifabri Vratislav. Doct. 1545 Veneris*" ---Besides *Haller*, no modern anatomist or medical historian has inspected his work; and it is supposed, that there exist only three copies of it.---Prof. Sprengel publicly acknowledges his obligations to the Aulic Counsellor *Adelung*, the great German philologist, and First Librarian at Dresden, by whose liberality he obtained the loan of that scarce book.

of one year, he was eminently qualified to become the commentator of Galen and Vesalius.—In the dissections of living animals, he first made use of dogs in preference to hogs, which were usually employed by his predecessors.

A man of a different character, and more splendid talents than either Vesalius or Eustachius, was *Gabriel Fallopia*, who combined the most profound erudition with the most amiable modesty and impartiality; he was thoroughly acquainted with the structure of the human body; his style is manly and didactic, equally remote from verbosity and obscurity; in short, he was a man whose illustrious example had been productive of so many beneficial consequences, that our historian, Professor Sprengel, on account of all these superior qualifications, is inclined to pronounce Fallopia the first anatomist of the sixteenth century. He was a native of Modena; had studied in Padua, under Vesalius; afterwards obtained a prebendary in Modena, from whence he went upon extensive travels into France and Greece, and successively filled the anatomical chairs of Ferrara, Pisa, and Padua. From a passage in his work, entitled, "*De tumore præternatur*," c. xiv. p. 632. it appears that the anatomists of those times, when they were in want of subjects, applied to the government of the country, with a request to obtain the bodies of criminals, whom, in such cases, the anatomists destroyed, as Fallopia says, *in their own way*, that is, by a proper dose of *opium*, and then undertook the dissection.

§ 8. The individual discoveries by which *Jul. Cæsar Aranzi* is known in the anatomical world, we shall have occasion to point out more minutely in the sequel: he wrote a work, entitled, "*Arantius de humano fœtu cum observationibus*," 4to. Venet. 1595. He, as well as *Constantin Varoli*, Professor at Bologna, and Physician to the Pope, investigated more minutely the discoveries of *Vesalius*, and has furnished us with many useful remarks. His work, entitled "*De nervis opticis epistola*;" 8vo. Batav. 1573, contains abundant proofs of this assertion; and he was the first who has, more minutely than his predecessors, examined the formation of the brain, together with the insertions of the nerves.—In like manner did *Joh. Bapt. Corcano Leone*, Professor at Pavia, endeavour to correct the occasional mistakes committed by Vesalius and Fallopia, in his treatise, "*Antomiæ*," *libr.* ii. 8vo. Ticini, 1574, where he particularly complains, that anatomists too frequently attempt to apply the results drawn from the dissections of animals, to the appearances noticed in the human body.

The name of *Volcher Koyter*, of Groeningen, deserves an honourable place in the history of anatomy, on account of his work published in 1574,

1574, at Nurnberg, under the title "*Coiteri externarum et internarum corporis humani partium tabulæ atque anatomicæ exercitationes observationesque variæ.*" He had studied under Fallopia, Eustachius, Rondelet, and Aldrovandi; prosecuted his anatomical inquiries for several years, at Nurnberg, where he cultivated comparative anatomy with uncommon ardour and success, after having been previously engaged as physician in the war against the French, and has transmitted to posterity many excellent and valuable observations on particular parts of the human body. With similar regard, we must mention *Saloman Alberti*, of Naumberg, Professor at Wittenberg, who is known by an useful compendium, entitled, "*Historia plerarumque partium humani corporis,*" 8vo. Witteb. 1601; a work which is not destitute of interesting observations.

Lastly, *Hieronymus Fabricius*, of Aquapendente, deserves to be recorded in the list of eminent anatomical observers. He was a worthy pupil and successor of Fallopia, whose great example he followed, in explaining, from the comparative anatomy of man and animals, the functions of the human body. In his excellent work, entitled, "*Fabricii opera omnia anatomica,*" fol. Lips. 1687, he has presented us with many important discoveries.

§ 9. Among the less eminent promoters of anatomical study, or those who are chiefly reputed as compilers and imitators, *Joh. Valverde de Hamusco* deserves the first place; he wrote a work on the anatomy of the human body, in the Spanish language; which was printed in 1560, folio, at Rome, where it was likewise translated into Italian. This large book is, with a few exceptions, chiefly to be considered as an extract from the writings of Vesalius.

An antomical compendium, not unlike the last mentioned, was published by *Guido Guidi*, a native of Florence, who caused the plates of Vesalius to be re-engraved, and described the parts throughout in conformity to this Model. Similar works have been transmitted to us by *Felix Plater*,* and *Casper Baubin*,† Professors at Basle. The latter justly claims the additional merit of having collected all synonimous anatomical terms, and invented new and appropriate names for the parts discovered in the human body: By this useful work, much confusion has been prevented which would have been inevitable, if one anatomist had continued to call a muscle the first, which another called the second. Baubin, however,

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* *De partium corporis humani structuara et vsu.* fol. Fasil. 1583.

† *Institutiones anatomicæ.* 8vo. Basil. 1592.—*Ejusd.* Theatrum anatomicum, 4to. Francof. 1621.

ever, has made no peculiar discoveries; nay, he even claimed *Varoli's* cuts representing the brain, as his original design, though he had not the least title to their relative merit.

Job. Posthius, of Gemmersheim, in the Palatinate, a pupil of *Rondelet* and *Joubert*, and afterwards physician to the Bishop of Wurzburg, and the elector Palatine, published some supplements to the Manual of Columbus, which have been annexed to the edition of this work published by Professor Sprengel.

Two other, but very indifferent anatomical writers of this century, should be mentioned, namely, *Archangelo Piccolhuomini*, * of Ferrara, and *Andr. Du Laurens*,† of Arles. The former was Professor at Rome, and lost his reputation by neglecting the discoveries of his predecessors, making consequently many erroneous observations, giving incorrect drawings of the parts he had observed, and introducing much confusion in anatomical science. Du Laurens was an extremely unaccomplished man; yet, notwithstanding his ignorance, he was made Chancellor of the University of Montpellier,‡ first physician to the court of France, and Dean of the Medical Faculty at Paris. His work below quoted, is a compound of superstitious, misconceived, and ill-applied principles, while it bears striking evidence, that he has not made proper use of the great discoveries then extant, of his predecessors as well as his contemporaries.

[*In our next Number we shall resume this historical sketch, and communicate the most important discoveries themselves, in systematic order.*]

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* *Piccolhuomini anatomica prælectiones*, fol. Rom. 1586.

† *Laurentii historia anatomica*, 8vo. Francof. 1602.

‡ *Primirose*, in his Treatise, "*De vulgi erroribus*," lib. i. c. 2. p. 4. relates of him, that the University above-mentioned would not acknowledge him as their chancellor, till he had obtained the immatriculation, and defended as many public theses as were prescribed by the various degrees necessary to the appointment to that elevated situation.

HINTS AND IMPROVEMENTS
IN THE PRACTICE OF
MEDICINE AND SURGERY.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I AM happy in having it in my power to communicate another instance of the efficacy of the *nitrat of silver*, in the cure of *epilepsy**; and I make no apology for presenting '*one solitary case*,' as I think every particular, however minute, respecting the cure of this formidable disease, is worthy of attention. The following are extracts from more copious notes on the case.

May 21st, 1799, A. W. a woman, thirty-six years of age, of a strong, robust habit, has been for four years affected with fits, which, though at first less frequent, have for some time past been scarcely absent for two days together, and yesterday she had three very severe fits. Her general health is tolerably good, except that her appetite is impaired. As, according to her account, a variety of medicines had been tried without success, I resolved immediately to begin the use of the *nitrat of silver*, of which she was ordered to take half a grain, twice a day, in the form of a pill.

24th. Had a fit yesterday, as severe as usual: feels no uneasiness from the pills—Continues the pills, but the dose increased to a grain and a half a day.

30th. Has had no fit: no uneasiness from the pills: complains of costiveness.—Continues the pills; and the belly kept open by the use of the common pill.

June 10. Catamenia have this day appeared—says that formerly the fits were more frequent and severe at that period: no return of the fits; appetite much improved.—Continue.

28th. Has had no return of the fits. Has this day returned to the country, to all appearance perfectly cured; but she is to continue the use of the medicine for some time.

Should there be any relapse, or if any other cases occur, where I have an opportunity of employing the medicines, I will not fail to communicate to you the result.

I am, Gentlemen,
Your obedient Servant,
PAT. MUDIE.

ARBROATH, SCOTLAND.

Historical Facts relative to the Cure of Consumption.

In our first volume, p. 290, and foll. and 384, we have announced a new method of treating pulmonary consumption, which was proposed first by Drs. DRAKE and FOWLER; we have also given a concise account of the principles, or the rationale, on which this method was founded, and expressed some doubts, whether the *digitalis* acted as a specific remedy in these cases, or merely produced the effects common to other mild emetices.

We

* See our Journal, No. II. p. 184.

We are still inclined to embrace the latter mode of accounting for its action on the arterial system, and in justice to a sensible writer, FRANCIS FULLER, the author of the "*Medicina Gymnastica*, printed in 1705, we think it our duty to quote a passage from this work which, although not strictly in point, and perhaps involving erroneous principles, evidently points out the method of treating pulmonary consumption in a manner nearly similar to that lately proposed by Drs. Drake and Fowler, and seconded by Drs. BEDDOES, MOSSMAN, and other modern practitioners.

"From these considerations," says FULLER, "of the great safety with which we bear vomiting, though it seems so troublesome while it lasts, I am convinced that it may be accounted for after the same manner as gymnastic effects are; besides that the (temporary or momentary) rising of the pulse upon stimulating and irritating the fibres of the stomach, and the excessive pressure and shock of the glands of several parts with the other phenomena of vomiting, show *that it does partake of the nature of an exercise*: and it is a great happiness for the individual, that the Author of Nature has allotted such secondary uses of the stomach, diaphragm, and other parts employed in vomiting, that they should not only serve to throw up what is disagreeable, but *strengthen* the whole economy in that very act. And here it will be allowed, that the irritation of the ventricle does rise and strengthen much; and I cannot but think I may venture to propose it as worthy the consideration of the best judges of these matters, whether, when we use emetics, we ought to rest our expectations upon a few momentary efforts, when we see nature will bear the carrying on of the same measures so much longer; that is, whether it would not be more expedient, in some cases, to give our safe and gentle emetics in lesser quantities than we do, viz. *so as to make a person sick, but not to a degree sufficient to make him throw up the contents of his stomach*; and when that quantity of the medicine has passed off after that manner, like an alterative, to repeat the same dose, and to continue on that sickness *for several hours*, without raising it to that degree, as to force the person to vomit above once or twice in all the time. This, I say, I think, is worth consideration, and may be *of singular advantage in some cases of consumption*, and in hysteric cases, when we do not give vomits to cleanse the stomach only. For, by this means, we can alleviate nature very much, and procure a just *diaphoresis*, when perhaps, by the best of cordials, we may only create a colliquation, and after this manner the springs will be wound up more gradually; when, if the emetic passes off with strong efforts and quick, after the usual manner, we give nature only a fillip, the effects of which are soon over.—I would not be here understood as if I would put this in practice; I do not pretend to authority sufficient for such *innovations*; I only presume to offer these things by way of problem; and one of my stature may sometimes happen to start a *hint* which those who are taller in wisdom and understanding may cultivate and improve to perfection."

The same author, in a preceding part of his work aforementioned, treats more at large of *Consumption*; and though his diagnosis, prognosis, and method of cure, are equally imperfect, yet he justly censures the copious use of balsamics and other unctuous internal medicines, which were then much in vogue, while he strongly recommends the use of the *colts-foot*, *cynogloss*, *liquorice*, (without the addition of sugar) and the *comfreys*.—On a future occasion, we intend to resume this important subject, which appears to us far from being exhausted. We shall here cite only two other passages, from which it will appear that consumption, about a century ago, was perhaps as common and fatal as it is at present; and that equitation, first recommended by the illustrious SYDENHAM, was then considered as the almost only specific in that dreadful disease.

"I might now proceed farther," says Fuller, "to consider in what degree of this distemper riding will be beneficial, whether any thing is to be expected from it, in the second and last state of it; but this would be to

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run out beyond my design of brevity; I shall only take notice that it is no rare thing to meet with consumptions, without any fever, or any reason to believe an ulcer in the lungs, or perhaps so much as tubercles, but a continual hectic, and a precipitate waste of nature by the direful acrimony and ill quality of the serum, as Dr. Benet, in his "*Theatrum Tabidorum*," observes, page 109—"Tabidorum languor sine pulmonum aut visceris cujuslibet corruptelâ tacitâ vi obrepens Anglis infestissimus est, et nisi primis obediveret remediis (quod rarissime evenit) funestus." In this case I cannot but be of opinion, that riding, well managed, would be serviceable, though undertaken very late, if there is any tolerable measure of strength left to put it in practice.

"I must here again repeat, that when I speak of riding, I understand the habit of riding, the want of which distinction has made it ineffectual to many a patient; he that, in this distemper, above all others, rides for his health must be like a Tartar, in a manner always on horseback, and then, from a weak condition, he may come to the strength of a Tartar. He that would have his life for a prey, must hunt after it, and when once he finds his enemy give way, must not leave off, but follow his blow, till he subdue him beyond the possibility of a return. He that carries this resolution with him, will, I doubt not, experience the happy effects of the good old direction, *recipe caballum*; he will find that the English pad is the most noble medium to be made use of for a recovery from a distemper, which we, in this nation, have but too much reason, by way of eminence, to style *English*."

On the Use of the Belladonna, in Cases of Mania.

In the sixth number of the "*Journal der Erfindungen*," &c. printed at Gotha, we meet with two cases communicated by Mr. Kaeufer, surgeon at Neugardt, in Pomerania, who gives a favourable account of the speedy and good effects of the belladonna, in that species of mental derangement which is frequently the consequence of epilepsy. He does not, however, mean to insinuate, that this remedy will be of service in all similar cases; but he maintains that in the following two cases it has manifestly been attended with beneficial effects; on which account he recommends it to the attention of practitioners.

Case I.—A lady, fifty-six years of age, was first attacked with epileptic fits, when her menstruation ceased, at the age of forty-eight; but as the paroxysms were of short duration, and did not return oftener than once in three months, the advice of several physicians whom she had consulted, as well as their prescriptions, were not regularly attended to; after a violent attack of epilepsy, which was followed by all the symptoms of insanity, Mr. Kæufer was called in: he found her complaining of pain about the pit of the stomach, and the tongue entirely covered with mucus. These symptoms induced him to prescribe emetics, which were from time to time repeated, as they always evacuated much mucus and bile. In the intervals she was directed to take a weak solution of tartarum tartarisatum for her common drink; and with a similar intention antimonium tartarisatum dissolved in water was added to her beverage. These medicines produced a diarrhœa, in which large quantities of black, pitch-like, and very offensive feces were evacuated. At the same time, the head was bathed in cold water, and the feet were once a day placed in a decoction of mustard seed; but this method of cure, though continued for three weeks, was not attended with any good effects. The author then had recourse to the use of camphor, which is strongly recommended in such cases by Mutzel and Locher: this likewise aggravated the disorder, and the patient became still more delirious. After having continued the last remedy, together with bathing the head and feet in the manner before stated, Mr. Kæufer resolved upon trying

trying the *belladonna*, which has been frequently and successfully used by MUNCH (the German Willis), who has lately written, and published several volumes on the powerful and beneficial effects of this substance, particularly in cases of mania.

Mr. Kæuffer administered *thirteen grains* of the leaves of belladonna, reduced to powder; a dose which produced a profound sleep of thirty-six hours, the patient having had scarcely any sleep during the preceding four weeks. This uninterrupted long sleep, in which she was insensible of being removed from one bed to another, was rather alarming; so that at length the eye-lids were forcibly opened, and while the patient was moderately shaken, a candle was held to the eyes, both pupils of which were much dilated; this expedient, however, had the desired effect of awakening her. During the first half hour after her profound sleep, she spoke rationally, but soon again relapsed into fits of insanity, and uttered incoherent language.

After having taken a second dose, consisting of *ten grains* of the belladonna, she again fell asleep (it is not stated for what length of time); and after awakening, she found herself in the complete possession of her intellectual powers, and soon enabled to leave bed.—Six months after this recovery, the patient was again attacked with epileptic fits, accompanied with symptoms of mania; but one dose of ten grains of the belladonna was then sufficient to remove the disease, and she has continued well since that period.

CASE II.—Another lady, forty-five years of age, who had likewise been afflicted for several years with epileptic fits, was in a similar manner deprived of her understanding, after a violent paroxysm. Three doses of the belladonna, each containing ten grains, and administered in the space of thirty-six hours, restored her senses; although emetics, purgatives, and cold baths had been previously used, without affording any relief. The sleep of this patient, however, did not continue long, as a profuse perspiration succeeded, which, in the present instance, appeared to be critical.

It is with some regret we must, on this occasion, observe to our readers, that medical cases, in general, are so imperfectly stated in foreign Journals, that we seldom meet with accurate pathological descriptions: the illustrious examples of Hippocrates and Sydenham are, alas! every day more neglected: the diagnosis, that *essential* part of medical knowledge, is at present in so despicable a state, that the indications of cure appear to be derived from the shelves of an apothecary's shop, or the scraps of memorandums and common-place books, rather than from an accurate and methodical inquiry into the nature and seat of diseases, the peculiar constitution of patients, their habits, temperaments, and the particular circumstances connected with the origin of the affection.—Although we are well convinced of the difficulties which present themselves to the practitioner, in forming just and correct indications, when he is called in, as is generally the case, on a sudden emergency, to a patient dangerously circumstanced; although we know, that it is often difficult to institute, in the first and second attempt, such an inquiry into all the particulars of the case, as will lead him to a complete knowledge of the disease; yet we are firmly persuaded, *that the present is exactly the time*, which renders it highly desirable and necessary, that some more effectual and systematic means ought to be adopted, in order to check those deviations from the Hippocratical method of inquiry, and to remedy the baneful effects which they will and must ultimately produce, in the practical department of medicine.

With this intention we have already, in our first Volume, p. 180, inserted a proposal for improving the practice of medicine, by the introduction of Clinical Tables; and as there appears to be but one voice respecting the

obvious utility of a *methodical* description of diseases, we shall endeavour, at some future opportunity, to furnish the *junior* part of our readers with a systematic view of the different particulars to which the medical practitioner ought to direct his attention in the examination of patients, as well as in forming a just and accurate diagnosis of diseases. W.

Cæsarean Operation.

We are sorry to announce as an article of Medical Intelligence, another unsuccessful case of the Cæsarean Operation, which has been lately performed in the Lying-in Hospital at Manchester. We had occasion in our former Numbers to take notice, that the propriety of performing this operation had again become the subject of discussion in that place, and that the controversy appeared to be conducted with a degree of personal asperity. On this account we were unwilling to enter into the merits of the case, leaving the matter where it stood before. We felt the more disposed to do this, because there is not any instance recorded within our knowledge in this country, in which the Cæsarian Section has not proved fatal to the mother. With a view therefore to the preservation of the two lives, it has in this country invariably failed; and we have understood that where the woman's life was otherwise not endangered, it has been generally determined to lessen the bulk of the child's head *.

The circumstances which have come to our knowledge respecting this unfortunate operation are, that the woman had been delivered in former labours by the crotchet, several times; at the latter end of the last month she was again taken in labour, and removed into the Manchester Lying-in Hospital, where the operation was performed by Mr. Wood, in the presence of the other medical and chirurgical attendants. The child was extracted alive. During two days succeeding to the operation, hopes were entertained of the mother surviving, but on the third she died.

It is impossible, considering the nature of the operation, the violence done to the constitution by a large penetrating wound through the parites of the abdomen and the uterus, to attribute her death to any other cause; we must suppose that this operation was undertaken with the best intentions, but its failure ought to be recorded, that in future it may not be repeated, except under circumstances where the life of the woman could not be preserved by any other mode of delivery, unless it should be considered (which we believe has never been the prevailing sentiment in England) that the life of the child ought to be preserved at the expence of the life of the mother.

We should be glad to be favoured with a more particular account of this case. As the woman died, the body was most probably examined after death, and the dimensions of the pelvis have been distinctly ascertained, so as to determine whether she could have been delivered in any other way.

We should be also desirous of information, whether her deformity had existed from her birth, or had been occasioned by rickets.

Miscellaneous Facts and Remarks.

We have the satisfaction to announce to our readers, that the experiments lately made on the external use of tartarized antimony, by Mr. Hutchinson (of which we have taken notice in a preceding part of this work), are

* Dr. Ozborn's Essays on the Practice of Midwifery.

are fully confirmed by several of our medical friends, who have prescribed a solution of emetic tartar, in the same proportion as directed by Mr. H. On wetting the palms of the hands with a sponge dipped in the solution, drying them at the fire, and repeating the lotion, or friction, the effect was almost immediate, so that the patient soon fell into a profound sleep.

As the beneficial and extensive consequences that are likely to result from this important discovery, must interest every medical practitioner, on account of the superior advantages this remedy possesses, over the *internal* use of opiates, which so frequently are productive of mischief, in plethoric and irritable individuals, as well as in every instance where the primæ viæ are either already loaded with, or yet liable to obstructions,—we earnestly solicit farther communications on this interesting subject. We hope that our obliging correspondents will direct their attention principally to those cases of mania, incipient phthisis, hypochondriasis, hysterics, &c. where the nervous system is, as it were, unhinged, insomuch that the introduction of medicines by the stomach appears to be counteracted, and their usual effects frustrated, by the irregular action, or preternatural re-action of the nerves.

In the '*Journal der Erfindungen, &c.*' No. 6, we meet with a letter from Dr. Consbruch, of Bielefeld, who assures us that, in *fistulous ulcers*, arising from a scrofulous cause, he cannot recommend a remedy more fectual, and affording more permanent relief, than the common red snail of the gardens, (*Helix pomatia Linn.*) externally applied alive, to the ulcerated part, and repeated once a day. The Doctor mentions three cases in which the snail thus used was attended with the most desirable effects, by healing ulcers of that description in the course of ten days or a fortnight: he also states that this simple remedy has long been employed by the common people of Germany, with the best success, in a similar manner, externally, on tetters and other scorbutic eruptions. The manner in which the healing powers of the snail operate on external ulcerations, Dr. Consbruch endeavours to explain from the gentle stimulating, agglutinating properties of animal jelly; and he farther observes that similar remedies have formerly been recommended by physicians in various diseases of the skin, by directing patients to use a decoction of calve's feet.

In the "*Annales de Chemie*," No. 89, p. 214, M. Heber, of Berlin, affirms, that he has been enabled to obtain a very efficacious tincture of antimony, by mixing with alkohol the liquid tartar, digested in vitrified antimony. To this article the French editor subjoins the following curious remark:—"When we see remedies so violent, and, at the same time, so uncertain in their preparation, daily reproduced under new forms, and admitted into the Materia Medica, we cannot form a very favourable opinion of the philosophy which has hitherto enlightened that science."

Brugnatelli, the Italian chemist, remarks in the same Journal, No. 86, that he has for some time employed, with great success, the acidulated carbonate of lime, in calculous affections.

MEDICAL AND PHYSICAL

INTELLIGENCE.

(Original and Selected.)

IN the 87th Number of the "Annales de Chemie," we met with a curious paper by Cit. WELLER, *on some particular matters discovered in animal substances, when treated by the nitric acid.* Cit. W. having made an experiment with the nitric acid on silk, with a view to expel the oxalic acid, was surprized at the end of the process, when he did not find the smallest particle of it, but obtained an unknown salt, of a soft nature, and the colour of gold, which, on being touched with a piece of burning charcoal, exploded like gunpowder. The following is an account of the whole process.

On one part of silk, he poured six parts of the common nitric acid, to which he added a small quantity of concentrated nitric acid. The mixture was left standing for two days, and then distilled. He mixed what had passed into the receiver with what remained in the retort, and put the whole on a filter. The oxalic acid crystallized sooner than he wished, and he again put the whole into the retort, together with the water which had been used to cleanse the filter. He made one part of the water pass over by distillation, and attempted to crystallize the residuum, but did not succeed.

He then put the residuum into the retort, with what was left in the receiver, and distilled it again. At length, having several times repeated the same series of operations, he obtained an acid liquor, containing small granulated crystals, and reduced nearly to the weight of the silk employed.

This liquor, when submitted to different experiments, did not afford the smallest trace of the oxalic acid; it was yellow, and left a stain of that colour upon the fingers; it communicated to white silk a beautiful yellow, which was not affected by washing it in water.

To saturate this liquor, he mixed some chalk with it, and finished the saturation by the addition of lime; on examining it again, he poured on it some alcohol. An apparently gummy matter was separated from it, which was kept separate. The alcohol was spread over the water and evaporated. A yellow substance remained, with the solutions of nitrat and muriat of lime. Having at length decomposed these salts by the carbonate of potass and separated the carbonate of lime, the filtered liquor was emptied into a receiver, and placed in a sand bath. The next day he found gilt crystals adhering to the sides of the receiver as fine as silk, which detonated like gun-powder, and which, if properly managed, would have produced the report of a musket. The smoke of this explosion resembled that of burnt resin.

This gilt salt was soluble in water and alcohol; and it crystallized in a cold temperature.

The oxygenated muriatic acid, poured on the solution, destroyed the yellow colour, and rendered it of a milky appearance.

The sulphuric acid being poured on the crystals, afforded the smell of nitric acid. The muriatic acid occasioned a precipitate of small whitish and micacious crystals, volatile in fire, and emitting a smoke of a bitter taste. This smoke was inflammable, and burnt like the essential oils.

He made experiments on new silk with the nitric acid, and after having obtained

obtained by different trials, some crystals of the oxalic acid, he poured some of the weak nitric acid upon the residuum, which thickened to the consistence of honey; and after having somewhat heated the mixture, to dissolve the whole of it, he let it rest for two days. He then found more of the oxalic acid crystals, and some other granulated crystals of a yellowish colour, extremely bitter, and without the least acidity, which dissolved the saliva, and left yellow spots on the tongue. They were volatilized by fire, and not affected by the concentrated nitric acid, which only discoloured them; but plunging them in water was sufficient to make the colour return.

After having saturated with potass a small portion of the nitric acid, combined with this substance, he evaporated the mixture, and found that the residuum took fire like the silky salt before-mentioned. Hence the author imagined, that this last compound was a triple salt, composed of nitrat of potass, combined with the yellow substance, which he called *animal bitter*.

The crystals of this yellow bitter, when viewed sideways, appeared like octaeders, the two opposite ends of which were truncated; there then remained square rectangular plates, the edges of which were cut by a plane on two sides. As animal substances become yellow by bringing them in contact with the nitrid acid, he endeavoured to draw the bitter from raw beef, but found it combined with another substance, unchangeable, like the former, by the nitric acid. This combination was soluble in the concentrated nitric acid, and was separated by water in the form of a yellow powder, which retained its colour when exposed te the air, and might, perhaps, be useful for painting.

What led him to presume that the yellow powder alluded to was composed of the bitter and another new substance was, that by dipping a sponge in the nitric acid, he obtained this latter substance, which was colourless, soluble in the concentrated nitric acid, the same as the preceding powder and was precipitated by water like the former; he also found that the bitter was particularly eager to combine with animal substances, and by what means its colours were fixed.

The author here observes, that each of the experiments were only made once; and not knowing to what particular circumstances of his pursuit he should attribute these new results he preferred detailing the whole.

He concludes with remarking, that the bile, perhaps owes its colour and bitterness to what he calls *animal bitter*.

Cit. Brugnatelli, in a letter to Van Mons, inserted in the 87th Number of the 'Annales de Chimie," informs us that he has lately obtained a great quantity of a *peculiar resin, by distilling the nitric acid with indigo*. The solution of this new substance in alkohol has a deep yellow colour, which stains the skin and nails, and cannot be discharged by water. Brugnatelli calls this substance the indigoferous resin; and adds that it may be useful in some of the arts, especially as about one half of the indigo may thus be converted into resin.

In another part of his letter, Brugnatelli states, that he has caused the mercury in the thermometer to sink to thirty degrees below the freezing point, by a mixture of the muriat of lime with snow. If the cold should become more intense, he hopes to be enabled to apply this artificial cold to the most important purposes.

On the *inflammation of Ethers by means of Acids*, the same author communicates the following experiment:—Having poured upon two ounces of the

the purest alkohol an equal quantity of the nitric acid, and added, two minutes after, the same proportion of the common sulphuric acid, at two different times, there first arose from this mixture a white vapour, which was succeeded by a very lively ignition, similar to that which takes place after pouring nitric acid on spirits of turpentine. At the same time a red vapour was evolved with nitrous gas, and the copious fumes were condensed by the cold of the atmosphere. These fumes filled the laboratory with an odour not unlike that arising from ether.

He repeated this experiment in close vessels; and, in order to succeed more completely, he introduced into a tubulated retort, two ounces of the purest alkohol, and the same quantity of the nitric acid, having adapted to the retort two receivers with long orifices. After closing the apertures, he covered the receivers with cloths dipped in cold water, the temperature of which was only one degree above zero. He then introduced the sulphuric acid into the retort, constructed so that not the smallest bubble of gas could escape. The effervescence and combustion were very great; after which the first receiver contained a portion of the original mixture, which had been expelled from the retort by the violent effervescence: in the second he found the nitrous ether, which was slightly acid; and on the surface of this liquor a greenish oil was formed, which emitted a very agreeable aromatic odour.

On pouring the sulphuric acid upon nitrous ether, an effervescence took place, similar to that which arises from the decomposition of an alkaline carbonat, by means of a mineral acid. The ether obtained from sulphuric acid, when employed instead of the alkohol used in the first experiment, produced a violent combustion. Brugnatelli intends to continue these experiments, and to communicate the result of them to the public.

In the 87th Number of the "Annales de Chimie" are inserted some observations on the muriatic acid, being the result of various experiments made by Cit. TASSAERT, with a view to effect the decomposition of that substance.

The author was induced to undertake these experiments, by reading a quotation from a work published by M. GIRTANNER, in which he remarks, "that the muriatic acid abounds in the mineral kingdom; in sea-water it is found combined with lime, magnesia, and soda, as well as rock-salt, and with soda alone. Hitherto the constituent parts of this acid were unknown, and it is only from analogy we conjecture that oxygen forms a part in its composition; but I have at length succeeded in decomposing it into hydrogen and oxygen." From a series of eighteen experiments, which Girtanner made with different substances, to effect the decomposition of the acid, he gives the following result, namely, "that water bears the same relation to the muriatic acid which air does to the nitric acid; and it may be readily conceived why the former is so abundantly contained in sea-water. The muriatic acid cannot exist, otherwise than in a gaseous state, in the temperature, and under the pressure of atmospheric air: and in order to condense it, we are obliged to employ water with which it readily combines."

Tassaert asserts, that Girtanner has too hastily formed these conclusions, and that he has thus been led into error; for he first observed that he had obtained the muriatic acid deprived of water, and at the end of his experiments he assures us, that this acid can exist only in a gaseous state, unless it be combined with water.

After detailing several experiments made by him in the laboratory of the Mineral School, Tassaert endeavours to refute some of those made by Girtanner,

Girtanner, and concludes with the following remark, "that we ought still to consider the muriatic acid as a simple body, as we have not yet discovered the means of decomposing it."

Dr. CARRADORI supposes it no longer doubtful, that nocturnal birds of prey digest vegetable substances. It appears from his experiments, that such birds may be kept alive and nourished on vegetable food, although they seem to have a natural aversion to it; hence Carradori endeavours to explode the erroneous opinion, that the gastric juice of these birds was homogeneous only with animal substances.

This assertion, as well as the experiments of Carradori, that carnivorous animals receive nourishment from plants, derives additional evidence from the discovery made by FOURCROY, relative to the existence of gluten, albumen, and jelly, in vegetable bodies.—See the "*Annales de Chimie*," No. 86, p. 171.

The same author communicates some new experiments and observations on the respiration of frogs and fish, from which he concludes that aquatic frogs are under the necessity of respiring, in order to preserve their life. He observes, that these animals, if kept under water, lived much longer when the vessels containing them were left open, than when they were shut; and that their existence was long or short, in proportion to the extent of the water in which they were taken. If the water was covered with a thin surface of oil, they lived but a short time; and when placed in pure oil, they died in forty minutes.

The author also wished to ascertain, how far water is necessary to support the life of these animals. He remarks that frogs immersed to the neck in water, died in one third less time than those which were kept dry.

When fish were inclosed in the receiver, which was in part filled with air, it was observed, that they did not consume any of this elastic fluid. *Ibid.* No. 86.

As BERGMAN, and most other chemists, have considered *the oxalic acid as a re-agent on lime*. BRUGNATELLI has endeavoured to shew the error of that opinion, by several experiments, in which the presence of lime has been ascertained by all other known re-agents, the oxalic acid excepted.

In a mixture of lime water with a solution of the muriat of barytes, the oxalic acid did not produce the least precipitation; but lime water yielded a precipitate on mixing this solution with the oxalic acid:—the same was observed with the nitrat of barytes.

The acidulated phosphat of lime, obtained by the decomposition of bones in the sulphuric acid, readily imparted in its base to the oxalic acid; but upon adding a small quantity of sulphuric acid to this acidulated salt, a portion of lime was precipitated in the form of sulphat, and the remainder of this earth had not the least attraction for the oxalic acid: notwithstanding which, the potass and ammoniac afforded an abundant precipitate.

The nitrat of lime was precipitated by the oxalic acid; but this acidulated sulphat, or even with an excess of the acid did not undergo any change.—The acidulated muriat of lime, as well as the acidulated tartarit of lime, gave similar results; and the same took place with the acidulated sulphat of lime, although the alkalies separated the lime from all these salts.

Several other acidulated salts of the same earth were not in the least acted upon by the oxalic acid. *Idid.*

Dr.

Dr CARRADORI, in his 15th volume of the "*Annali di Chimica,*" gives a description of a very convenient apparatus for impregnating liquids with the carbonic acid; and we have only to regret that he has not furnished us with a more perfect and satisfactory account: This apparatus consists of a cask bound with iron hoops, and large enough to contain about four pailfuls; no more than two thirds of that vessel should be filled, and a communication established between it and a glass bottle, which contains powdered marble and sulphuric acid. An aperture should be made in the upper end of the cask, into which a curved tube is introduced, to carry off the superabundant gas. The author assures us, that with this apparatus a person may in less than half an hour, saturate any quantity of water in proportion to the carbonic acid disengaged.

VAN MONS, who has extracted this article from the aforementioned work of BRUGNATELLI, observes on this occasion, that several other methods have been lately proposed for the saturation of water with alkalies, and the carbonic acid; but that an essential improvement might be made on the apparatus proposed by the indefatigable chemist of Pavia, namely, by conveying the decomposing acid on the carbonate of lime, by a slow instillation; which might be effected by passing the communicating tube transversely over a funnel adjusted to the mouth of the receiver. By this contrivance, a regular and gradual disengagement of the gas will take place, none of it will be lost, and the access of atmospheric air prevented; which, by mixing with the gas disengaged, necessarily retards the saturation.

It is worthy of remark, that the difficulty of procuring, in Italy, glass vessels provided with more than one neck, first induced the author to adopt the apparatus here described. The saturation may be greatly facilitated by employing a simple gasometer in conducting this process. *Ibid.*

In a Memoir of DESCEMET *on the irritability inherent in the stamina of the flowers of the sorrel-thorn (Pepine-vinette)*, we meet with the following remark, "that this irritability by which the stamina, on being slightly touched, incline nearly two inches, appears to be destined by Nature for the purpose of promoting the act of generation. *Ibid.*

PIERRE SMITH has, in the 94th volume of the Literary Journal of Naples, communicated some experiments which lead to the conclusion, that the muscular parts of living animals, when wounded or stimulated, have the faculty of separating *a humour similar in its effects to the gastric juice*, and acting on animal and vegetable substances in the same manner as this juice does on the aliment taken into the stomach.

The author imagines, that the chyle is a solution of vegetable and animal substances in the gastric juice; and that the pus is a species of chyle, composed of the same juice and animal substance in a sphacelated state. His proofs in support of these assertions, are uniformly founded on the property which this sub-cutaneous humour possesses of coagulating milk and dissolving animal and vegetable substances. Dr. CARRADORI however is of opinion, that these proofs, being deduced from properties common to a variety of bodies, and particularly sweat, are not satisfactory: and he rationally remarks on the supposition, if the juice alluded to possess all the properties attributed to it by M. Smith, that animals ought to derive nourishment from the introduction of alimentary substances under the skin.—"I have preserved," says he, "for several days, the life of a robust man (who, in consequence of a wound in the throat, could not take any nourishment,) by causing

causing different parts of the body to be rubbed with a sponge dipped alternately in wine and strong broth." *Ibid.*

M. Von Mussin-Puschkin has requested M. Von Crell, the editor of the German "Annals of Chemistry," to make some experiments on what he called the combination of the muriatic with the sulphuric acid; from which he promises himself very interesting results. The French editors of the "Annales de Chemie," remark on this subject, that they have formerly complied with a similar request of the learned President of Petersburg, and found that the two acids did not manifest any new properties by their union; but, when the mixture was made with the acids in a concentrated state, the sulphuric acid, on account of its uncommon attraction for water, displaced and expelled the muriatic gas which was condensed by its dissolution in this liquid. When equal parts of the two acids were used, and the mixture was made with the whole mixture at once, the effervescence became so strong, and the disengagement of gas so considerable and instantaneous, that the liquor overflowed the highest vessels, and not the smallest trace of the muriatic acid could be discovered in the mixture. A small quantity of caloric only was disengaged during this process, by which it is manifest, that the base of the muriatic gas consumes, in a great measure, that which is disengaged from the water, by the sulphuric acid. *Ibid.* No. 88.

Professor Lowitz thought it practicable to reduce, by partial and gradual disoxygenation, such vegetable acids as contain much oxygen, to the state of those which are less oxygenated: he hoped, by the same means, to convert the acetous acid into the oxalic, and the latter into the tartarous acid, &c. With this intention he boiled the acetous acid concentrated by cold, with phosphorous, but did not succeed in the experiment.

M. Mussin made similar experiments, but with no better success. It appeared that the acids parted only with a portion of their oxygen to phosphorus, in order to re-absorb it from the atmosphere. This obstacle, however, it would not be very difficult to surmount, but that the disoxygenation could not be attended with the transition of the vegetable acid through its different modifications hitherto known: for the particular states of its composition do not depend less on the different proportions of its component elementary parts, than on those of its oxygen. Hence the acetous acid, by the addition of a new portion of oxygen, or by the action of concentrated sulphuric acid, undergoes a change in the proportion of its elementary principles, hydrogen and carbon; and it is not changed into a more oxygenated acid, but into a new acid, which ought to be distinguished in the nomenclature, by a particular name. *Ibid.*

Kasteleyn has lately observed that, in a solution made of the muriat of potass and the carbonat of soda, one or the other of these salts may be crystallized at pleasure, according to the temperature in which the lixivium is kept. Below 15° of Réaumur, the muriat forms crystals; above that temperature, the carbonat crystallizes.

The author remarks, that he has already shown, that the acids of these two salts change their bases in different temperatures. *Ibid.* No. 89.

M. Hulsenkamp has lately published a Latin dissertation on ether, obtained from the sulphuric acid; of which the following is an extract:

Professor Driessen, of Groninguer, having made experiments on ether by treating it with the nitric acid, to discover the presence of the sulphuric acid, after the manner of Scheele, obtained a considerable quantity of crystals of the oxalic acid. Hence he concluded, that the precipitate which the Swedish chemist found formed in this ether, by means of the nitrat of barytes, was not the sulphat, but the oxalite of that earth. This observation confirms what he (Hulsenkamp) had formerly remarked on the possibility of converting the whole of a given quantity of alcohol, into oxalic oxyd by distilling this liquor several times over with the nitric acid, though the oxyd was mixed with a small quantity of nitric and acetous acid.

The French editor observes, that if Scheele is mistaken in his method of demonstrating the presence of the sulphuric acid, or rather of sulphur imperfectly oxygenated in ether, M. Hulsenkamp has likewise been deceived in his turn, and is far less excusable, as he has mistaken the precipitate, formed during the inflammation of a mixture of ether, alcohol, and a solution of the nitrat of barytes, for the real sulphat of barytes. This precipitate should rather have been called the carbonat of that earth, formed from the nitrat of barytes, from which the acid is decomposed into its principles, while it yields its oxygen to the hydrogen and carbon of the ether and the alcohol. The acid which resulted from the oxygenation of the carbon of these liquids, by uniting with the precipitated barytes, rendered this substance insoluble in water.

In an extract from a Latin dissertation on various chemical and pharmaceutical preparations, by M. Tiebol, we find the following experiment worthy of notice:—The author precipitated, with the muriat of mercury, the whole quantity of that metal contained in a solution made by the nitric acid. Three parts of mercury, and one and a half parts of pure aqua-fortis, were gradually heated to the boiling point, in a tubulated retort, on the top of which he had fixed a thermometer. After two hours and a half, twenty parts of water were added to this solution, which was then precipitated with a lixivium made of the muriat of soda. M. Tiebol examined the superintendant liquid by the test of the ammonia, and did not obtain any precipitate. The muriat, however, which was formed in this process, weighed 0,06 less than the mercury employed.

Kasteleyn has also made the curious observation, that the martial flowers of ammoniac, though very pale, when exposed to the rays of the sun, acquire a deep orange colour, which they lose again in the shade. Enclosed in a phial, after they have attracted the rays of light, these flowers retain all the vivacity of colour before acquired: the effect in these cases appears to be produced by the alternate disoxydation and re-oxydation of the iron. *Ibid.*

M. Wurser gives an account of the œconomical employment of nitric acid in Pickel's manufactory at Wurtzburg; where the manner of re-oxygenating this acid, when decomposed by copper, attracted the whole of his attention. The nitrous gas disengaged in the solution of copper is introduced into receivers containing water and filings of that metal. This gas, by its contact with atmospheric air, is re-oxygenated, dissolved by the water, and again decomposed by the copper. *Ibid.*

The same chemist makes the following remark on the preparation of *Hahneman's soluble mercury*. "It is immaterial whether the mercury is precipitated by the ammoniac, or by either the vegetable or mineral alkali, or even by lime.

lime. The result, after washing and edulcorating the solution, is uniformly an oxyd of a dark-brown colour, or mercury in an almost reduced state.

The great point to be attended to, is, to have a certain criterion for the comparison of colour. As the mercurial preparation is much used in Germany, Kasteleyn advises the operator, not to expose mercurial preparations to the disoxygenating influence of light. *Ibid.*

LEONHARDI, the German translator of Macquer's Chemical Dictionary, has lately published an essay "*On the reconciliation between the theories of phlogiston and oxygen.*" VAN MONS remarks on this occasion "that this is a puerile attempt at a mixed theory, behind which the German chemists have entrenched themselves after their defeat.*" *Ibid.*

Prof. BERGMAN, of Leyden, has lately discovered *a test for ascertaining whether cotton be adulterated with an admixture of wool;* by submitting it to the action of oxygenated muriatic acid, which bleaches the cotton, while it imparts a yellow tinge to the wool. By similar means he has been enabled to distinguish, with accuracy, the *medullary substance* of the brain from that of the *nerves*, and trace the latter even to their most hidden origins. *Ibid.*

As the solution of *caoutchouc*, or elastic gum, is an object equally deserving the attention of the chemist and the medical practitioner, we shall extract a few passages relative to this subject, from Saint FOND'S "*Travels into England and Scotland, &c.*" of which an English translation has lately been published.—The author, in a conversation with CAVALLO, applied to that learned philosopher for an explanation respecting an article inserted in Macquer's Chemical Dictionary, which has given occasion to several strictures that appeared on the assertions of that celebrated chemist, relative to the method of dissolving elastic gum in ether.

It is certain, said Saint Fond, that vitriolic ether, as it is usually prepared, does not disolve elastic gum. But on the death of Macquer, of whose chemical cabinet I became the purchaser, I found three small decanters, in one of which there was elastic gum, perfectly dissolved in ether. The other two decanters contained some likewise, which appeared to be partly dissolved; but it was precipitated to the bottom, in a state a little thicker than turpentine, and was found incapable of mixing with the ether in the bottle. That which contained the elastic gum in a state of perfect solution, had a lable with this inscription, in the hand writing of Macquer: *Elastic gum dissolved in ether, sent from London.*" I mentioned this, to be informed whether you know any one in London who has employed ether in dissolving caoutchouc, & what were the ingredients used in addition to it, or the preparation which it received.

"You could not have addressed yourself," replied Cavallo, "to one who is able to procure a more complete answer to your questions than myself. We shall go this morning to visit the workshops of some artists; and as the person who discovered the process for dissolving elastic gum is in our way, we shall give him a call; hence your wishes shall be very soon gratified."

I accepted his offer, and in about an hour afterwards we went to the house of Mr. WINCH, an apothecary, who received us politely, and told me that he was the person who had addressed to Macquer at Paris, a bottle of elastic gum well dissolved in ether, and that in a letter to the French chemist, he assured

* We humbly advise Cit. Van Mons to make himself better acquainted with the latest chemical writings of GREN, RICHTER, GOTTLING, HERMBSTADT, &c. the original, and he will, we doubt not, there learn, that this defeat is not greater than that which one hypothesis may boast over another.

assured him that the ether did not contain the smallest mixture. Macquer, who found the elastic gum in perfect union with ether, of which the transparency was not in the least altered, and who, on examining the ether, found it totally free from any extraneous substance, sincerely believed that pure ether was the real solvent; and notwithstanding his succeeding but imperfectly himself, though he employed the best ether, he probably persuaded himself that what he used was still insufficiently rectified.

"I did not, indeed," said Mr. Winch, "send him an account of the process which I used, but it is nevertheless true, that the ether is unmixed, and that the whole depends on a very simple preparation.

"Cavallo, who is the friend of Mr. Winch, said, that he intended to perform the experiment the next day, at his own house, and that I should be a witness of it. It consists in the following process:--A pound of good vitriolic ether is taken, and put into a bottle, capable of containing about four pounds of any common liquid. On this ether are poured two pounds of pure water; the bottle is then stopped, held with the mouth downwards, and strongly shaken in order to mix the two liquors. On discontinuing the shaking, the ether soon swims uppermost; the bottle is still held in the same position, and cautiously opened, keeping the thumb on the mouth of it. The water is by this means easily let off, and collected in a vessel below. The same operation is repeated two or three times, with new quantities of water, until the sixteen ounces of ether are reduced to about five ounces. It is this purified remainder that is found to be the most perfect solvent of elastic gum, which is thrown into the ether, after being cut into small pieces. It begins to swell in a very short time; the ether penetrates it, and appears to act slowly on it at first; but at the end of five hours, or longer, the liquor is saturated, and remains transparent. If there be a surplus of elastic gum, it subsides to the bottom, which on being taken out of the bottle, may be moulded into any form, and will preserve its elasticity.

"To shew how the part which is completely dissolved is to be applied to use, I shall describe the method employed by Cavallo, to form a tube of elastic gum.

"A small cylinder of pipe clay is first prepared, of the diameter and length of the intended tube. It is not necessary to bake it, but simply to let it dry.

"The ether, saturated with gum, is poured into a case of glass, or tin, which should be a little longer than the clay cylinder; this is filled up to the brim.

"The operator then plunges the whole length of the clay pipe into the ether, withdraws it suddenly, lets it remain for an instant in the air, replunges it anew, and repeats the operation in proportion to the intended thickness of the tube; for each immersion and evaporation produces a small coating.

"This being done, the clay cylinder, covered with elastic gum, is plunged into a vessel of water; the mould of clay is there speedily dissolved, and the gum remains in the state of a perfect tube.

"This method of dissolving and using elastic gum is ingenious, and in one respect resembles that employed by the natives of America, who form all their works in elastic gum, on moulds of clay. It may be objected, that the process with ether is too expensive. The objection holds good with respect to ordinary purposes; but the elastic gum has been so usefully employed in surgery and some other arts, that there are circumstances in which expence ought to be of no consideration. The process for making ether is besides so simplified, that it is not half so dear as it was formerly.

"I should

"I should not forget to mention that the water used in purifying the ether ought to be preserved, because a part of the ether mixed with it may be recovered by distillation."

Good Bougies and Catheters have long been a desideratum, in the treatment of strictures in the urethra, and for evacuating the urinary bladder. W. SMYTH, of Tavistock-street, Covent Garden, has lately discovered a metallic composition, which unites the flexible property of lead to the white lustre of silver. From this excellent composition, Mr. Smyth manufactures his "*Metallic Bougies, solid and hollow, as well as his flexible metallic Catheters, for males and females.*" He recommends them with a degree of modesty, deserving much praise, *for the cure of strictures only*; while he very properly remarks, that a *temperate regimen* ought to be observed during their use. For want of room we refer the reader to the printed directions given by the inventor.

We understand from a Correspondent, that there is now preparing for the press, at Edinburgh, a work entitled, "*A free and impartial inquiry into the present state of medical knowledge; together with a comparative view of the systems of Cullen, Brown, and Darwin, comprehending a body of information respecting the rise and progress of the healing art, from its earliest dawn, down to the present time.*"—By ALEX. CAMPBELL, Esq. author of "An Introduction to the History of Poetry in Scotland," &c.

We have not been deficient in inquiries among our friends, respecting the success, or failure, of the *Metallic Tractors*, but have not hitherto been so fortunate, as to obtain any satisfactory account on either side. We shall therefore be much obliged to any of our Correspondents, who will favour us with authentic information on the subject.

In the "*Journal der Erfindungen*," No. 6, we find a short account of the extraordinary effects of the *Extractum Taxi*, which has lately been introduced into practice by several physicians in France. The best account of this remedy, as well as an accurate chemical analysis of it, and several remarkable facts establishing its medicinal virtues, have been given by Dr. LODER, in his Inaugural Dissertation, entitled, "*De Taxo baccata, Linn.*" 4to. 1794—According to this writer, the extractum taxi is a narcotic remedy, and should be given, in doses from one to two grains, dissolved either in water or spirits. The dose may be gradually increased, whence this powerful remedy has proved uncommonly efficacious in curing obstinate tertians (after the *material cause* was removed, says the humoral pathologist) rheumatisms, epilepsy, and amenorrhœa. All these assertions are corroborated by histories of cases, and it is to be hoped that repeated experiments will confirm the efficacy of this new remedy.

CRITICAL

CRITICAL RETROSPECT

OF

MEDICAL AND PHYSICAL LITERATURE.

[FOREIGN AND DOMESTIC.]

Remarks on ſome of the Opinions of the late Mr. JOHN HUNTER, *reſpecting the Venereal Diſeaſe; in a Letter to* JOSEPH ADAMS, *M.D.* *by* HENRY CLUTTERBUCK, *Surgeon.* 8vo. pp. 72. 1s. 6d. *London.* Booſey.

THE author states the opinions of Mr. Hunter, which he proposes to examine in this manner, viz.

"The following, I believe, are the chief points of Dr. Hunter's doctrine of the venereal diſeaſe.

"1. That the venereal poiſon, being taken into the ſyſtem, becomes univerſally diffuſed, and contaminates, at once, all the parts which are ſuſceptible of the venereal action; and that it is ſoon afterwards expelled the ſyſtem, along with ſome or other of the excretions.

"2. That the parts contaminated do not immediately go into venereal action; but that they acquire a new ſtate or condition, and which is termed by him, a *diſpoſition to take on the venereal action.*

"3. That *diſpoſition* once formed into a part, neceſſarily goes on, at ſome future period, to *action.*

"4. That mercury cures *venereal action,* but does not remove the *diſpoſition* previouſly formed, and which is not yet come into action.

"5. That although mercury does not deſtroy the diſpoſition already formed, yet that it prevents it from forming.

"6. That although the diſpoſition continues, it does not go into action during the uſe of mercury.

"7. That the action having once taken place, goes on increaſing without wearing itſelf out.

"8. That parts once cured never become again contaminated from the ſame ſtock of infection.

"9. That the matter of the ſecondary ulcers is not infectious.

"10. That the venereal action is as ſoon deſtroyed in a large chancre as in a ſmall one, the mercury acting equally in all its parts.

"Theſe are the outlines of a doctrine, which, by its ingenuity and originality, has deſervedly attracted a very conſiderable ſhare of the public attention, and laid the foundation of a practice, in many reſpects different from that which had before generally prevailed."

The first opinion which our author examines is, the distinction between *disposition* to venereal action, and the *action itself.* If this opinion had been merely connected with the speculative pathology of syphilis, it would probably have passed unnoticed; but when the very important practical inference is drawn from it, by so high an authority as that of Mr. Hunter, *viz. that it is the actual disease alone which is curable, and not the disposition,* it becomes of importance to inquire into its truth.

Mr. Clutterbuck combats this opinion, on the ground that the contamination produced by the poison, called *disposition,* is actual disease, though not obviously syphilis: and since diseases are mostly cured in their commencement, or during their formation, that when formed, he would conclude *a priori,*

priori, that the *disposition* is at least as curable as the disease. This, however, is only opposing opinion to opinion. Mr. Clutterbuck next proceeds to state the arguments and experiments which support his side of the question. Our limits do not permit us to give long extracts, but the following argument appears to us to carry much weight with it.

The parts of the body successsively attacked are commonly in this order; viz. the throat, the skin, the bones. Now as all these are allowed by Mr. Hunter to be contaminated at the same time when the virus is absorbed, it ought to follow that each of these parts will in every instance become affected, which is contrary to experience: for, according to Mr. Hunter's doctrine, if the patient applies mercury on the appearance of a venereal sore throat, while there are no other symptoms, he can only expect to cure the throat, but the blotches and nodes being only suspended for a time, will certainly appear afterwards, when the mercurial action ceases. As this, however, is far from being always the case, we must infer that mercury cures the *disposition* to blotches and nodes, as well as the ulcers of the throat.

In a subsequent part of the pamphlet, Mr. Clutterbuck adduces several facts in opposition to Mr. Hunter, respecting the innocence of the matter of secondary ulcers; the disease wearing itself out, &c.

The work contains a number of instructive cases, and many practical observations on the treatment of lues, well worthy the attention of practitioners.

A Case of Diabetes, with an historical sketch of that disease. By THOMAS GIRDELSTONE, *M. D.* 8vo. 112. pp. (Price three shillings) 1799. *London*, Robinsons.

In the preface to this work, the author acknowledges the obligations he owes to Dr. Rollo, and Mr. Cruikshanks, for the annexed case of Diabetes.

"But," says he, "amidst the multiplicity of the correspondents of Dr. Rollo, he seems, by his publication on diabetes, to have overlooked some parts of my letters to him, concerning my former patient Capt. M. and certainly did not rightly understand in what manner Capt. M. had been for three months under the care of a surgeon and physician, *without the circumstance of increased urine being known* to them; it is but justice to Mr. Penrice, the surgeon, and myself, that that part of the retrospect of Capt. M.'s case, which has been omitted by Dr. Rollo, should precede the detail of my present diabetic case." p. ii.

Subsequent to this intimation Dr. Girdelstone gives a concise statement of the treatment adopted by Mr. Penrice, as well as himself, together with the preceding symptoms, and the gradual progress of the disease, in the case of Capt. M. Our limits do not admit our inserting the interesting particulars stated in the preface relative to the afore-mentioned case, as well as that of another patient, who was likewise cured by the strict adherence to animal diet.

The author has given an historical sketch of diabetes, together with an account of the various remedies prescribed by physicians, from Aræteus, Galen, and Avicenna, down to the present day. He has interspersed this sketch with a variety of classical and apposite quotations. After having reviewed the theories of this disease, maintained by ancient and modern practitioners, particularly those of Doctors Cullen, Home, Rollo, Rutherford, and Bree, he gives the following diagnosis:

"Though the etymology of the word diabetes may admit of every immoderate discharge of urine being called diabetes, yet, by the definitions of a number of writers, it seems to be justifiable to reject all those cases of immoderate

derate discharge of urine, as diabetes, which are not accompanied with thirst, and to state the diagnostics of this disease to be great thirst and shrinking, and dryness of the skin, with increase of saccharine or insipid-tasted urine. A great quantity of urine in diabetes is often observed, when the thirst, shrinking, and even saccharine urine have been detected. And, as there is reason to believe, that the *phymosis* * is often the only symptom which has excited the attention of the patient, that symptom, with the sensation of heat in the urethra, on making urine, ought to be noticed in the nosological definition of this disease." pp. 52 and 53.

Dr. Girdelstone concludes with a "Postcript," which we deem of sufficient importance to lay before our readers: "Since these sheets were printing, my friend, Dr. Lubbock, has detected two more cases of diabetes, by the affection of the prepuce. One of these patients was first an out-patient, and afterwards an in-one, in the Norwich hospital. This patient was of about fifty years of age, and naturally of a lean habit: his gums were sore, his prepuce affected, his urine sweet, and its quantity, alternating with a discharge by the bowels, varied from ten pints in the twenty four hours to half a pint. Dr. Lubbock put the patient upon a diet of animal decoction, cold meat and milk, and gave him small does of opium, which plan mitigated the diabetic symptoms. The Doctor tried also the hepatized ammonia, without being able to discover from it any advantage. He also, at my request, ordered this patient one day a diet of river fish, and the next day a whiting, or sea-fish. But, contrary to the observations of my patient, very little alteration was observed from the first day's diet: and on the second day of eating the fish, the quantity of urine was diminished. The patient on the second day had a motion extraordinary, so that probably the diabetic symptoms were rather increased than diminished; though they were not so evidently increased by this diet, as in my patient. Dr. L. had intended to have omitted the milk in this patient's diet, and more rigidly to have confined him to animal food. But the temptation of drink, at the late Norwich Election, caused the patient to desert from the hospital, and prevented Dr. L. from being able to extend his experiments on this patient, or to learn any thing more about him. Dr. L. found in this case, as he had done in two former diabetic patients, that no sort of external application would relieve the phymosis, but that it was always more or less severe, as the other diabetic symptoms were increased or diminished."—pp. 111 and 112.

Practical Observations on the Cure of Wounds and Ulcers on the Legs, without rest; illustrated with Cases:---By THOMAS WHATELY, Member of the Corporation of Surgeons of London. 8vo. 352 pp. (Price 7s.) *London.* Cadell and Davies; Johnson; Callow.

We do not hesitate to recommend a work, which not only possesses much intrinsic merit, but has an additional claim to our notice, from the benevolent intention of the author. It is within our knowledge, the first publication dedicated to the President, Vice-Presidents, and Members of the

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* Not long since (remarks the author), conversing with my friend Dr. Lubbock, of Norwich, he informed me that a person had called upon him to be relieved from a phymosis, which had troubled him for a few weeks, and for which he had been previously under the direction of a medical gentleman for some time; that, upon finding the phymosis did not yield to the applications commonly useful in such cases, Dr. Lubbock began to suspect it was connected with the diabetic diathesis, and upon inquiry found that the patient discharged eight pints of urine in twenty-four hours, sweet to the taste, and readily passing into the vinious fermentation; he was in apparent health, and had made no complaint of general disease:—— And it is with Dr. Lubbock's permission that this fact is published.

the Society for the relief of the Widows and Orphans of medical Men, in London and its Vicinity. The author hopes that, by exposing in a variety of instances, the want of uniformity, and consequently the want of success, in the prevailing method of treating ulcerated legs, he may contribute something to the ease and comfort of mankind; and solicits permission to appropriate the profits of this publication to that humane institution, the design of which is to raise a fund of 10,000 *l.* for the distressed families of our unfortunate brethren.

The following extracts from our author's Preface, will unfold his principles, as well as the practice he has adopted, and sufficiently enable the reader to judge of his merit.

"The efficacy of pressure (says he) in counteracting the effects of the dependent posture, was indeed known to the father of English surgery; and the use of the laced stocking was recommended by him for this purpose; nor can there be any doubt, that the good effects of it in his hands were very manifest. His ideas, however, seem not to have been much regarded by succeeding surgeons. We find but little said by the writers on surgery, on the effects of pressure in the cure of ulcers on the lower extremities, previous to the appearance of Dr. Underwood's treatise. Yet I am aware, that there always have been practitioners who were acquainted with the importance of this mode of treatment, and have adopted it in their practice. I had, myself, an opportunity of seeing the extraordinary success attending it, during my apprenticeship in the country. It is matter of fact, however, that the practice is very far from being general. Even in one of the latest publications on the subject, and this too by a surgeon of the first eminence, the effect of pressure is not much relied upon for the cure of these complaints. It is indeed there stated, in several passages, not only that no benefit is derived from compression in several species of these ulcers, but that many ulcers are rendered worse, more painful, and more unhealthy in their appearance by its use*. That there are certain conditions of an ulcer, which will not bear compression, I have allowed, and have endeavoured to point out the proper treatment, to bring on a fit state for the application of that pressure; but that an experienced surgeon should pass over so slightly this most essential part of the cure, and even speak of it as *frequently* injurious, is a circumstance hardly to be attributed to any other cause than that of a careless and ineffectual application of the bandages. For my own part, having now been for twenty years constantly in the habit of treating a very large number of these cases, I can speak so confidently of the good effects of pressure, properly applied, that I can venture to affirm, that he who doubts its efficacy, has never given it a fair trial.

"In the cases which are added to this Essay, very little variety of dressing was used; the cure was almost always trusted principally to the pressure made on the limb, under the exceptions particularly specified in the work. My success has been so uniform, that I cannot but be anxious to see this practice become established, and generally followed. Nothing but a conviction, that in promoting this end, I am really doing an important service to my fellow creatures, could have induced me to appear before the tribunal of the public, conscious as I am of my incompetency as a writer. But may I not hope, that the plain tale of a practical man will be heard, though not told with the graces of elegant language?

"In whatever manner this attempt be received, I cannot doubt but that the

* See Home on Ulcers of the Legs.

the practice here recommended must, in the end, prevail, notwithstanding it has this great obstacle to contend with, that surgeons must condescend, for the most part, to apply the bandages with their own hands. The clumsy and ineffectual manner in which this business is too frequently done, can never be expected to produce the desired effect. I am certain that if the necessary pains be taken, according to the directions here laid down, such effects will uniformly follow, as must convince the unprejudiced mind, that to have recourse to the operation of tying varicose veins, and the application of a great variety of remedies, can be *very rarely*, most probably *never* necessary. I can safely declare, that all such cases as are described by Mr. Home * to be cured by this operation, have readily yielded under the proper management of pressure alone.

"Since these papers were preparing for the press, I have seen with pleasure Mr. Baynton's new method of treating these complaints. Every thing that is there said on the efficacy of his method, may be considered as confirming the doctrine laid down in the following pages. His mode, however, of making the pressure with adhesive plaster, appears to me inconvenient, and on several accounts objectionable. I have no doubt but that the proper application of compresses and flannel rollers, would, in every case recorded by him, have produced similar good effects. The instances of success by his method, after the supposed failure by the roller, I can only attribute to this, that the pressure made by the plasters was applied by his own hands, whereas that with the roller was, probably, as is usual, so made that the effect intended by it could not possibly have been obtained. No surgeon, who will not be at the trouble of applying them himself, can be a judge of what may be effected by the proper management of the roller and compresses."

The volume before us is divided into ten distinct chapters, in which the ingenious author respectively treats of the difficulties attending the cure of wounds and ulcers on the legs; of the nature, treatment, and cure, peculiar to local wounds and ulcers, and such as are connected with diseases of the constitution; of erysipelatous inflammation after wounds and ulcers of the legs; of the treatment of carious ulcers, &c.— After having ably commented upon the different methods of curing wounds and ulcers of the legs, namely, with and without rest; and likewise explained the method of preventing relapses; he has added *one hundred and sixty-seven* short cases, all of which appear to have terminated successfully, while the patients were permitted to walk about, and pursue their usual occupations.

In a 'Note' subjoined to these cases, Mr. Whately observes, "that about *one hundred and twenty* of these patients are *now* living, and perfectly well. About twenty of the remaining number are dead; and twenty-seven are removed to fresh places of abode."

For the information of those readers who are not already in possession of this useful book, we shall here insert the formula of the calamine cerate, which the author has generally used, as it is not made according to the London Dispensatory. He observes, however, that this cerate is more apt to grow rancid than the common calamine cerate, and on that account is not so eligible for plaster; but, with this exception, it is a better composition, and less liable to evaporate than the latter. The following is the formula alluded to:

"Take

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* See Home on Ulcers of the Legs.

"Take of fresh hog's lard, three pounds:
Fresh litharge plaster, one pound and a half;
Calamine prepared, one pound.
"Mix them together according to art, into a calamine cerate.

"To this formula I shall add another for making cerate, which nearly resembles the ungentum tripharmacum of the old Dispensatory, but being less oily, it makes a much more adhesive plaster. It should be spread on rag, or silk, as an external covering to the dressing on lint, where a tow plaster cannot be conveniently used; as in wounds of the face or hands, a bubo, or any other sore, where an external plaster cannot be readily retained in its situation by a bandage. This plaster is likewise so mild that it never irritates the skin. I have found it also a very useful plaster in fractures. The following is the formula;

"Take of fresh litharge plaster, one pound;
Fresh hog's lard, six ounces;
Vinegar, four ounces;
"Mix them together according to art, into an ointment."

Besides those before-mentioned, the author has annexed nine other "Cases of carious ulcers on the legs," accompanied with a coloured plate, and ample explanations. These cases also convey much novel and interesting matter, especially relative to the *internal* exfoliation of bones, and are well deserving the attention of every chirurgical practitioner.

We cannot conclude our account of this practical work, without making the reader acquainted with the hints and directions contained in the '*Postcript*,' which appear to us so precise and useful, that we shall quote them in the author's own words; for the additional reason, as he here likewise replies to the objections made against the application of the roller, by Mr. BAYNTON, of whose Essay, on the same subject, we propose to give some accounts in the next article.

"Although," says Mr. Whately, "there are many observations made in the body of the foregoing work respecting the proper method of applying the roller and compresses, it perhaps may not be unacceptable to the younger part of the profession to add a few more particulars on so important a matter.

"I have said, that the flannel rollers should be four inches wide, to allow for shrinking in washing; by which I would have it understood, that when they are made of that width, they are a little too wide; especially for those whose legs are small. The best width for a flannel roller designed for those who have slender legs, is three inches; but for those whose legs are of a large size, they should be always three inches and a half in width. They must therefore be torn at first a little wider, that they may be of their proper width when repeatedly washed. It will likewise be found, that rollers made of fine, soft, and open flannel, will answer much better than those made of coarse or hard flannel.

"For those who have full-sized legs, the length of six yards is but just sufficient to answer all the purposes intended by a roller; but in those who have very small legs, five yards is a sufficient length. Care should be taken that the rollers be washed in very hot water, and they should be hung up to dry immediately on being washed. If these precautions be not attended to, repeated washing them will, in some kinds of flannel, make them as narrow as tape, by which they will be rendered almost useless. They should be often washed, as they are much softer, and of course sit easier, when quite clean, than when they are soiled."

Descriptive

[To be resumed in our next Number]

Descriptive Account of a new Method of treating old Ulcers of the Legs: By THOMAS BAYNTON, Surgeon, of Bristol. The second edition, enlarged, corrected, and considerably improved. 8vo. 152. pp. 1799. *London*, Hurst.

In our first volume, pp. 186 and fol. we have duly noticed the first edition of MR. BAYNTON's Essay on this subject, and have given the outline of his method of treating old ulcers of the legs, by bringing the edges of ulcers nearer together by means of adhesive plasters, and added a general account of the circumstances and reflections which induced him to adopt the essential and successful improvement in that department of chirurgical practice. At present, therefore, we shall furnish our readers with a more minute description of the method peculiar to the author.

"I shall now endeavour," says he, "to describe the means whereby these advantages are obtained; and as it will be perceived that there is little more in the materials recommended than surgeons have been long in the habit of using, it must also be perceived that the difference in the effects are to be ascribed to the *manner* in which those materials are applied. Success therefore depending upon the *mode* of their application, I shall be more particular in my description of *it* than perhaps may to many appear necessary; but being convinced that almost every thing which can be desired may be obtained in such cases, if the principles are kept in view, and a proper application of the means persevered in, I hope by the fulness of my description to spare those who adopt the plan, the inconveniences and disappointments which may be experienced, if the steadiest attention does not direct its application.

"The parts should be first cleared of the hair sometimes found in considerable quantities upon the legs, by means of a razor, that none of the discharges, by being retained, may become acrid and inflame the skin, and that the dressings may be removed with ease at each time of their renewal, which in some cases where the discharges are very profuse, and the ulcers very irritable, may perhaps be necessary twice in the twenty-four hours, but which I have in every instance been only under the necessity of performing once in that space of time.

"The plaster should be prepared by slowly melting, in an iron ladle, a sufficient quantity of litharge plaster diachylon, which if too brittle when cold to adhere, may be rendered adhesive by melting half a drachm of resin with every ounce of the plaster; when melted, it should be stirred till it begins to cool, and then spread thinly upon slips of smooth porous calico of a convenient length and breadth, by sweeping it quickly from the end held by the left hand of the person who spreads it, to the other, held firmly by another person, with the common elastic spatula used by the apothecaries: the uneven edges must be taken off, and the pieces cut into slips about two inches in breadth, and of a length that will, after being passed round the limb, leave an end of about four or five inches. The middle of the piece so prepared, is to be applied to the sound part of the limb opposite to the inferior part of the ulcer, so that the lower edge of the plaster may be placed about an inch below the lower edge of the sore, and the ends drawn over the ulcer with as much gradual extension as the patient can well bear; other slips are to be secured in the same way, each above and in contact with the other, until the whole surface of the sore and the limb are completely covered, at least one inch below, and two or three above the diseased part.

"The whole of the leg should then be equally defended with pieces of soft calico three or four times doubled, and a bandage of the same about three inches in breath, and four or five yards in length, or rather as much as will be sufficient to support the limb from the toes to the knee, should be applied

applied as smoothly as can be possibly performed by the surgeon, and with as much firmness as can be borne by the patient, being passed first round the leg at the ancle joint, then as many times round the foot as will cover and support every part of it except the toes, and afterwards up the limb till it reaches the knee, observing that each turn of the bandage should have its lower edge so placed as to be about an inch above the lower edge of the fold next below."

After having given an ingenious explanation of the *modus operandi* of this new method of curing inveterate ulcers of the legs, the author examines the different opinions of other practitioners, which appear to him more or less unsatisfactory, and corroborates the mode of practice he has adopted with eighteen successful cases.

We find the testimonies of Messrs. Everard Home, Thomas Henry, William Simmons, R. Sandford, and Thomas Shute, all of whom have, in public and private practice, introduced the use of adhesive plasters to ulcerated legs. Mr. Home, in particular, allows that it is one of the greatest improvements which has been made in that branch of surgery; and in many cases of private patients; and that its success has answered his most sanguine expectation. Mr. H. however, principally alludes to cases of *long standing*; for in those he found it the most effectual: there are many ulcers too irritable to admit of it, and these of course require a different mode of treatment.

We do not pretend to decide, whether Mr. Whateley's method of employing rollers, or Mr. Baynton's practice of using strips of adhesive plasters, in general, deserves the preference: we are rather inclined to think that each of these methods has its peculiar advantages, which must be ascertained by the judicious practitioner, according to the particular cases and constitutions of the patient.

[*Want of room has obliged us to discontinue the quotations from Mr. Baynton's treatise, in the present Number, but we shall display that deficiency in our next.*]

POPULAR OR DOMESTIC MEDICINE.

A Table of symptoms, pointing out such as distinguish one disease from another; as well as those which shew the degree of danger in each disease. To which are added, Observations on the excessive indulgence of Children; particularly intended to shew its injurious effects on their Health, and the difficulties it occasions in their treatment during sickness.---By JAMES PARKINSON.

These two supplements, though apparently distinct from each other, are intended as additional parts to the author's work, we have mentioned with merited praise in the third Number of our first volume, p. 310, and of which we have given a farther account in the fifth Number of the same Volume, pp. 497 and 498. We have therefore nothing more to add, than our wishes, that his humane and well directed labours may be attended with that degree of public approbation, to which they appear to us fully and justly entitled.

An Essay on the most rational means of preserving health; and of attaining to an advanced age:—To which are added anecdotes of Longevity. 112 pp. 12mo.. Price three shillings, *London*, Wallis, 1799.

This small compilation is obviously made with a good intention; as it contains a considerable variety of useful precepts, the authorities for which are carefully mentioned. Although it contain neither original, nor *always punctually applicable* rules and reflections, yet the whole is interspersed with much entertaining and dietetic information.

Medicine preservative et curative, &c.---*On the prevention and cure of diseases by medicines; or, a treatise on health and the practice of medicine: for the use of young practitioners, and every person regardful of health.* By Nicolas Francis Rougnon, 2 vols. 8vo. 500 pp. *Besancon*, Couché; and *Paris*. Maquignon.

Although we are long accustomed to see alluring title-pages, used by many authors with a similar intention, as the sagacious inn-keeper exposes a handsomely painted sign to attract the attention of passengers; yet in this instance, we are obliged to make an honourable exception. The aged Professor communicates to the world, in this work, the fruit of his observation and experience during fifty years medical practice; a circumstance which seldom occurs in the modern annals of medicine.

In treating of each disorder, the author has followed the most natural division, according to the different organs and parts of the body, the derangement or affection of which produces the disease. He concisely enumerates the means of prevention, in regard to the patient's situation, temperament, age, sex, &c. It is an additional merit in the author of this treatise, that he, unlike many writers of the present day, gives only such *facts*, under the head of *practical truths*, as have borne the test of time and experience.

THE VETERINARY ART.

Tableaux comparatifs de l'Anatomie, &c.---*Comparative Tables of the Anatomy of the domestic animals used in Agriculture, as Horses, Asses, Mules, Black Cattle, Sheep, Goats, Hogs, Dogs and Cats; arranged according to a systematic classification, with a view to facilitate that branch of study to beginners.* By J. Girard, Professor of Anatomy in the Veterinary School of Alfort. *Paris*, Huzard.

The author begins with pointing out the different branches of science which are necessary accomplishments to a veterinary practitioner; of these anatomy is the most important, and ought to be diligently studied, as far as it relates to the physical organization of all useful animals. He then proceeds to examine the several organic parts of the different mammalia, enumerated in the title, and divides them into four orders which he terms *monodactyles, bidactyles, regular quadridactyles*, and *irregular quadridactyles*.---The whole is arranged in a perspicuous and accurate manner, so that it may be considered a valuable elementary treatise.

Observations sur un écoulement spermatique involuntaire dans un cheval.--On a case of an involuntary spermatic running in horses, with inquiries and remarks on the authors who have written on that disorder. By C. Huzard. 8vo. *Paris.*

The author gives here a distinct account of this debilitating disease in that noble animal, the horse; together with the observations and remedies suggested by other writers on this subject; he differs from them principally by employing caustics, where all others recommend astringements and corroborants.

MEDICAL HISTORY.

Memoirs of Medicine; including a Sketch of Medical History, from the earliest accounts to the Eighteenth Century. By Richard Walker, Esq. Apothecary to the Prince of Wales, *London*, 1799, (five shillings) Johnson.

The author commences this work with a general outline of the history of medicine,

medicine, from the earliest ages, prior to the era of the Greeks, and he makes some good remarks on the state of medicine among that celebrated people. He extends his research far beyond the time of Hippocrates, gives a short biography of that illustrious character, and pays due tribute to his genius, as well as to his enlightened and liberal sentiments. After several interesting memoirs respecting the practititioners of Greece, he states concisely the discoveries of Erasistratus and Herophilus, relative to the sensibility and power of the brain and nerves. His account of the origin of the medical sect, called Methodists, is curious; he proceeds (in chronological order) to take a short view of the different medical revolutions which have happened in different quarters of the globe, and after paying deserved homage to his countrymen, Harvey, Sydenham, and others, he concludes the subject with a reference to "the present state of medicine in England;" the account of which is extremely concise, as it scarcely fills eight pages. Although this little work possesses much merit, and deserves to be recommended to the medical tyro, especially since the History of Medicine is too much neglected by a certain class of readers, who wish for nothing but '*new facts* and *improvements*;' yet we apprehend, that the style in which it is written will be deemed rather too florid by the plurality of readers. Lastly, we ought to mention that this work is dedicated to the Prince of Wales.

New Medical Publications in July.

A Deſcriptive Account of a new method of treating old ulcers of the legs: By THOMAS BAYNTON, Surgeon, of Briſtol, 8vo. ſecond edition. *Hurſt.*

A Caſe of Diabetes, with an Hiſtorical Sketch of that Diſeaſe: By THOMAS GIRDELSTONE, M.D. 8vo. Three Shillings. *Robinſons.*

Practical Obſervations on the Cure of Wounds and Ulcers on the Legs, *without reſt.* By THOMAS WHATELY, Surgeon. 8vo. Seven Shillings. *Cadell and Davies.*

Remarks on ſome of the Opinions of the late Mr. John Hunter, reſpecting the Venereal Diſeaſe: By HENRY CLUTTERBUCK, Surgeon. 8vo. One Shilling and Sixpence. *Booſey.*

An Eſſay on Medical Electricity, demonſtrating its effects, particularly in Female Complaints: with Obſervations on the Inefficacy of *Metallic Tractors.* 8vo. Three Shillings and Sixpence. *Allen.*

NEW MEDICAL PUBLICATIONS IN GERMANY.

Annalen der Arzneymittellehre.—Annals of the Materia Medica: By J. J. ROEMER, M.D. Vol. 2d. *Leipzeg.* Schaefer.

Verſuch einer Zeichenlehre, &c.—An Attempt to eſtabliſh a Syſtematic Diagnoſis in the Obſtetric Art: By C. F. ELIAS, M.D. 8vo. 152 pp. *Marburg.* New Academical Library.

Medicinifche Fragmente, &c—Medical Fragments derived from experience: By J. G. F. HENNING, M.D. 8vo. 400 pp. *Zerbſt.* Fuchſel.

Beytræge zur gerichtlichen Arzneykunde, &c.—Contributions to Medical Juriſprudence: By T. G. A. ROOSE, Prof. 8vo. In Numbers. *Braunſchweig.* Acad. Library.

Chemifche Receptirkunſt, &c.—The Art of writing chemico-medical preſcriptions; or a Pocket-book for medical practitioners, who, in preſcribing medicines, wiſh to avoid the errors ariſing from improper chemical combinations in pharmacy: By J. B. TROMMSDORFF, Prof. of Chemiſtry, and Apothecary at Erfurt. Second edition, improved and enlarged. 8vo. 350. pp. *Erfurt.* Bayer and Maring.

TO CORRESPONDENTS.

We have received a letter dated July 6th, and signed W. R. Medicus, which contains such *extraordinary* information on the subject of inoculating the Cow-pox, as cannot be published without the real name of its author. The new method of communicating the variolous matter; the sudden eruption which took place within 48 or 50 hours from the period of communicating the infection; and the very unprecedented mortality among the first patients, are circumstances so novel and striking, that we cannot venture to lay them before our readers, without more substantial authority.

The paper with the motto "*Scire tuumhihil est sine anatomia,*" we shall have no objection to insert in our next Number, if the industrious author will abridge it, or at least allow us to omit the "Cursory Observations:" as his cases are sufficiently interesting, without introductory matter.

The communication on the subject of Quackery, signed S. M. July 12th, has been necessarily delayed, on account of its supposed libellous tendency, but will be given in our next.

We also acknowledge the letter we have received from a Correspondent, at Birmingham, who signs W. B. July 15th.—As it however contains a medical case which occurred many years ago, we shall consider, whether we can with propriety insert it in a future number.

The remarkable Case of *Hydrocephalus internus*, communicated by Mr. I. H. dated July 16th, came too late for the present, but shall certainly appear in our next Number.

The "Observations on the animal nature and properties of vital power," by R. K. dated July 17th, likewise arrived too late:—we have not had leisure to consider the merits of that essay, as it is on a subject which, though abstruse, is interesting for the plurality of medical readers.

The valuable cases of inoculation for the Cow-pox, transmitted to us by our Correspondent at Manchester, will appear in the next number, for want of room in the present.

We are likewise obliged to a Correspodent at Stockport, who has favoured us with a letter respecting the use of musk and salt of hartshorn, in gangrenes and mortifications; a medicine originally proposed by Dr. Darbey—the particulars of which the reader will find in Mr. Simmons's Letter, in this Number.

ERRATA IN VOL. I.

No. iv. p. 359, l. 9, for "oil" read, "*fixed oils.*"
No. iv. p. 359, l. 10, for "wasting" read, "*washing off.*"
No. iv. p. 359, l. 24, for "uncombined" read, "*unaltered.*"
No. v. p. 418, l. 28, for "professional" read, "*professorial chair.*"
No. v. p. 419, l. 35, for "1699" read, "1669."
No. v. p. 419, l. 1, for "ingenious" read "*ingenuous*"
No. v. p. 419, l. 36, near the bottom, in the last line of the Latin quotation, from Thruston, read "quumque interim aliorum scripta de eadem recdita, vel merita suntivel ambierunt."
No. v. p. 421, l. 2, dele the word "it," before denotes.
No. v. p. 421, l. 5, for "is well known," read, "*are* well known."